DEMONSTRATING THE APPLICATION OF HEALTH PSYCHOLOGY TO MULTIPLE AREAS OF PROFESSIONAL PRACTICE

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ABSTRACT

This portfolio details work undertaken towards fulfilment of the five competencies forming the Professional Doctorate in Health Psychology. The Trainee worked across a range of settings, both in private practice and within the NHS. Competencies were fulfilled both within and outside of these roles and demonstrate how Health Psychology can be applied across a wide range of settings. Though this collection of pieces may not necessarily work harmoniously, it is a demonstration of how health psychology can be applied across a number of domains. Competencies were fulfilled as follows:

Professional practice. For the first 18 months, the Trainee worked as a Product Owner and then Engagement Lead for a small organisation providing co-created digital interventions in response to public health challenges. In the final year, the Trainee worked as an Assistant Psychologist in a Community Mental Health Team. The professional practice competence was fulfilled by working across both positions in accordance with relevant codes of conduct. This is evidenced through a Practice Log and detailed Reflective Commentary at the end of this portfolio.

Teaching and training. The Trainee evidenced a number of face-to-face and online teaching experiences to advance knowledge in health psychology concepts, providing a reflective diary and a case study of a five-part teaching series.

Consultancy. The Trainee sought work externally for the purpose of engaging in consultancy with NHS Innovation Agency. A contract and end-of-consultancy report was produced and a detailed case study has been provided detailing the process.

Behaviour change interventions. The Trainee has produced case studies detailing two behaviour change interventions delivered; a one-to-one, face-to-face sleep hygiene intervention; and an online intervention to increase fruit and vegetable intake.

Research. The Trainee produced three original pieces of research, contributing to the evidence base in each area: A systematic review exploring the effect of walking interventions on anxiety, a multi-method study investigating the impact of lockdown on women engaged in team sport, and a readability analysis on online migraine information.

DECLARATION

No portion of the work referred to in the thesis has been submitted in support of an application for another degree or qualification of this or any other university or other institute of learning.

ACKNOWLEDGEMENTS

First and foremost, I would like to express my gratitude to my first supervisor, Dr Mark Forshaw, for supporting me from the application process right to the end. Thank you for taking the time to listen to my concerns, understanding my strengths and weaknesses, and providing guidance and reassurance. There were times that coming into a meeting with you I felt at breaking point, and you helped to organise my thoughts and provide reassurance that I was headed in the right direction. You offered me enough help and feedback to feel supported whilst giving the space for me to work autonomously and to progress as a practitioner.

To Dr Tara Kidd, my second supervisor, thank you for taking the time to provide truly helpful feedback that in no doubt assisted me to “level up” the quality of my work. In addition, I would like to thank Dr Helen Poole, for providing supervision and support for my qualitative research, and for helping me to provide a paper I was proud of, to Carolyn Benny, who took the time to help me “figure out” systematic reviews, and to the rest of the team at LJMU who provided valuable teaching sessions on the course.

To Dave and John at Damibu, for listening to me and seeing a place for Health Psychology in the world of technology. Without your faith and support, I wouldn’t have been able to start this journey. And to the team at Moss House and Mersey Care. Thank you for sharing your knowledge and offering me countless opportunities to develop.

A big thank you to my January 2019 cohort, in particular Lucy G, Louise, Tracy and Sara. I learned so much from all of you, and it was nice to know we were all on the same journey. Thank you to my family and friends, for offering a space to listen and encouraging me at many stages throughout this journey, and for helping out whenever they could. To Lucy H, our catch ups always provided a great space for reflection, and I truly appreciate the guidance you offered as a graduate from the course.

Finally, I couldn’t finish this letter without thanking my partner and family. To my family, for their unwavering support and space to talk, and especially my mum, who read through thousands of words and provided such helpful feedback. To Gareth, you have been my rock throughout the last few years, and I can’t begin to thank you for your patience and everlasting support you’ve given me in this time. You gave me space when I needed it, offered me valuable feedback, reassured me when I wasn’t sure I could progress, and made sacrifices for which I will always be grateful.

DETAILS OF PLACEMENTS AND OUTSOURCING

This section details responsibilities and opportunities in the three placements (two paid, one unpaid) over the course of the doctorate:

January 2019 – July 2021: Damibu Ltd

Damibu is a small digital technology organisation which works with public sector organisations to provide digital solutions. Throughout my placement, I had the opportunity to work on multiple projects but my main role was as a Product Owner for CATCH ("Common Approach to Children's Health"- a health information app aimed at parents of under-fives aimed at improving appropriate NHS service usage). Though the intervention had already been created on my appointment, I worked with professionals in this sector to tailor the health information to the area, and to encourage uptake by parents. Working as a health professional in the digital field, I helped Damibu to bridge the gap between them as self-confessed "tech geeks" and the public sector workforce. During my time here, my role transformed into engagement and I had the opportunity to conduct co-creation sessions with health and social care professionals, charities and members of the public (target audience) to understand barriers and facilitators to behaviour change with a view to developing digital solutions. Additionally, I worked within business development and used my knowledge of health psychology and understanding of what digital could do to develop proposals for research and in response to funding calls from multiple public sector organisations.

January 2021 – October 2021: NSPCC

I commenced training as a Volunteer Counsellor for Childline in January 2021, which finished in March 2021. Training took a person-centred approach, using aspects from the Theory of Planned Behaviour, motivational interviewing and solution focused therapy to provide acute psychological interventions to young people calling and contacting the service online. After training, I worked one 3.5-hour shift one evening a week, which was closely supervised by Staff Counsellors. This placement offered me my first opportunity to work in a clinical context.

August 2021 – July 2021: Mersey Care NHS Foundation Trust

In July 2021 I secured my first Assistant Psychologist role in a community mental health team, working with patients with severe and enduring mental illness. The main responsibilities of this role were the delivery of emotional coping skills psychoeducational sessions, both as a group and on a one-to-one basis. Additionally, I have had opportunity to partake in service evaluation, peer support and the delivery of other low-level psychotherapeutic interventions, including motivational interviewing, formulation and the development of an evidence-based behaviour change intervention (as evidenced in case study).

PRESENTATION OF COMPETENCIES

Competencies are presented in the following order:

1. Planning Training in Health Psychology
2. Teaching and Training
3. Consultancy
4. Behaviour Change Interventions
5. Research
6. Reflection in Health Psychology

Appendices for each piece of work are attached on its conclusion.

1. PLANNING TRAINING IN HEALTH PSYCHOLOGY

This section contains four pieces of work: a Plan of Training Gantt Chart and SWOT Analysis and Critical Commentary which were completed on commencement of the Professional Doctorate course in February 2019; and a second version of the Plan of Training which was produced following a leave of absence from the programme (Dec 2019 – June 2020). This version has been updated as opportunities have changed.

1.1 Plan of Training Version One: Jan 2019 – Dec 2020

Core unit of Competency – Generic Professional Competence

Learning outcomes covered	Area of work in which unit will be covered	Supporting evidence to be compiled for this unit of competence (with further detail if necessary).
8003.1 – Conduct an oral defence of their work, demonstrating ownership, reflection and understanding commensurate with mature and safe independent professional practice 8003.2 – Conduct ethically sound work in health psychology at professional practice level 8003.3 – Reflect on their skills, practice and professional development 8003.4 – Reflect on their reflections 8002.12 - Work with clients, respecting them, respecting professional boundaries and laws and	I will ensure time is set aside to understand the Society's Code of Conduct, Ethics and the HCPC's Standards of Conduct, Performance and ethics (8002.12, 8003.2) and I will apply these guidelines to every aspect of my role. I will ensure anonymity and confidentiality of all individuals involved in my work unless otherwise agreed. I will attend regular progress meetings with my workplace supervisor to run through the Practice log. This will ensure both mine and the company's needs are being met and to understand ongoing requirements within my role. I will also maintain regular contact with my university supervisor and ensure that any feedback is reflected and acted upon. [8003.2, 8003.3] As the nature of my role heavily involves communication and collaboration with a wide range of people outside of my placement, including health professionals, business professionals and the general public across different localities, I will regularly adapt my communication to maintain positive professional relationships. I already have a good understanding of structures of healthcare	Practice Log of training - I will keep an ongoing Practice Log in which I will make regular entries, no less than once per week, depending on the relevance of the work undertaken each day. [8002.12, 8003.2, 8003.3, 8003.4] Regular Practice Diary - I will keep a Practice Diary in which I will record and reflect on any professional and relevant personal experiences.[8002.12, 8003.2, 8003.3, 8003.4] Reflective report on personal and professional development [8002.12, 8003.2, 8003.3, 8003.4] Viva voce examination [8003.1]

codes of conduct ,and reflecting on the experience in a structured fashion	providers as part of my role and will use this to adapt my practice. [8002.12, 8003.2] In outsourcing further work in my volunteer role and Hospital settings I will ensure effective collaborative relationships with multi-disciplinary teams (See teaching/ training competency for further detail) [8002.12, 8003.2] I will independently manage time each month to read and digest emerging evidence and to identify any upcoming opportunities for further professional development. I often get the opportunity to attend NHS-led events in innovation and research in healthcare and I will continue to attend and actively participate in these. [8002.12, 8003.2, 8003.3, 8003.4] Work undertaken in relation to other competencies will be subjected to ongoing reflection which will be used to consistently adapt my research and delivery style to meet the needs of the target audience. [8002.12, 8003.2, 8003.3, 8003.4]	

Core unit of Competency – Psychological Interventions

Learning outcomes covered	Area of work in which unit will be covered	Supporting evidence to be compiled for this unit of competence (with further detail if necessary).
8002.10 - Assess, formulate, intervene and evaluate in a formal behaviour change intervention with an individual client where the intervention is delivered face to face 8002.11- Assess, formulate, intervene and evaluate in a formal behaviour change intervention where the intervention is delivered in a group, online, or other alternative mode	I could use training sessions with a Health Trainer service I volunteer with to provide a psychological intervention for the health trainers and community wellbeing volunteers involved within the company. Providing professionals with the tools to enable behaviour change and to feel competent in doing so could not only benefit service users but could also benefit the wellbeing and job satisfaction of themselves. [8002.10, 8002.11] I have spoken to management in a Health Trainer Service who have provided me with a number of opportunities to provide psychological interventions for prospective users in my capacity as a Community Wellbeing Volunteer. These include: a walking intervention with staff at HM Passport Office, working with patients of an asthma clinic and a group to address social isolation to be held in a large South Liverpool Health Centre [8002.10, 8002.11] For the one-to-one intervention I have made contact with a local gym. It approaches health and wellbeing holistically and inclusively, providing accessible services and therapy services. I am hoping to collaborate with the gym and its existing services to provide one-to-one interventions to members or	Case Study of a psychological intervention for an individual client [8002.10, 8002.11] Case Study of a psychological intervention for group client (Health Trainers) [8002.10, 8002.11] Reflective reports [8002.10, 8002.11] Viva voce examination [8002.10, 8002.11, 8003.1]

	would-be members to impact on unwanted health behaviours. [8002.10, 8002.11] Should this not be possible I intend to approach a local GP to suggest the provision of a “behaviour change clinic”, to provide patients with the tools to carry out doctors’ advice. [8002.7, 8002.8, 8002.9, 8002.10, 8002.11]	

Core unit of Competency – Research

Learning outcomes covered	Area of work in which unit will be covered	Supporting evidence to be compiled for this unit of competence (with further detail if necessary).
8002.1 - Demonstrate skills in conceptualisation, design, development, implementation and analysis of a study to investigate a pertinent research question in Health Psychology 8002.2- Review systematically a substantial body of knowledge in an area of Health Psychology 8002.3 - Create and interpret new knowledge through original research or advanced scholarship in Health Psychology	I will carry out a systematic review exploring how mobile phone apps influence health behaviour change in parents and expecting parents to support the app I am responsible for promoting to health professionals (see appendix a) [8002.2] My placement provider has links with an academic health science network for the north west (as mentioned in teaching/ training competency). I have been made aware of funding around wellbeing as a critical component of discharge and I am in discussions to potentially undertake a research project in line with this. [8002.1, 8002.3] I may be able to undertake an empirical study based on the group psychological intervention with the Health Trainer Service as mentioned on the previous page [80002.1, 80002.3, 80002.10, 80002.11] I have the opportunity to undertake a piece of research to evaluate the impact of a wellbeing worker providing a social prescribing programme which involves 66 patients in a Liverpool GP surgery (This would link into consultancy work) [8002.1, 8002.3]	Systematic review [8002.2] Empirical papers x 2 [8002.1, 8002.3] Ethics approvals [8003.2] Viva voce examination [8003.1]

	My interests lie in physical activity and stress management and I would like to develop and carry out a research project relating to one of these areas should I have the opportunity. [8002.1, 8002.3]	

Core unit of Competency – Consultancy

Learning outcomes covered	Area of work in which unit will be covered	Supporting evidence to be compiled for this unit of competence (with further detail if necessary).
8002.7- Assess requests for consultancy and establish the needs of a client group 8002.8- Plan, manage, monitor and evaluate consultancy in Health Psychology at the forefront of professional practice 8002.9 - Formulate recommendations to clients based on evidence collected and disseminate information effectively to clients on the process and outcomes of consultancy	I have approached/ am working through a number of opportunities for a consultancy role, though nothing is set in stone as of yet. I have explained these opportunities more in depth over other competencies (research, psychological interventions and teaching/ training) but have summarised these below [8002.7, 8002.8, 8002.9]: A piece of research to evaluate the impact of a wellbeing worker providing a social prescribing programme which involves 66 patients in a Liverpool GP [8002.7, 8002.8, 8002.9, 8002.1, 8002.3] A potential piece of research on wellbeing as a critical component of discharge with the Innovation Agency [8002.1, 8002.3, 8002.7, 8002.8, 8002.9] A potential opportunity to provide some training f or the Innovation Agency to improve the spread and adoption of new advances in healthcare. [8002.4, 8002.5, 8002.6, 8002.7, 8002.8, 8002.9]	Case Study [8002.7, 8002.8, 8002.9] Contract and working agreement conditions document [8002.7, 8002.8] Viva voce examination [8003.1]

	Working with a local GP to provide behaviour change interventions to patients struggling to comply with doctor advice [8002.10, 8002.11, 8002.7, 8002.8, 8002.9] A training session with physiotherapists at Alder Hey based on encouraging health behaviours of children and their parents (to be delivered in May 2019). [8002.4, 8002.6, 8002.7, 8002.8, 8002.9]	

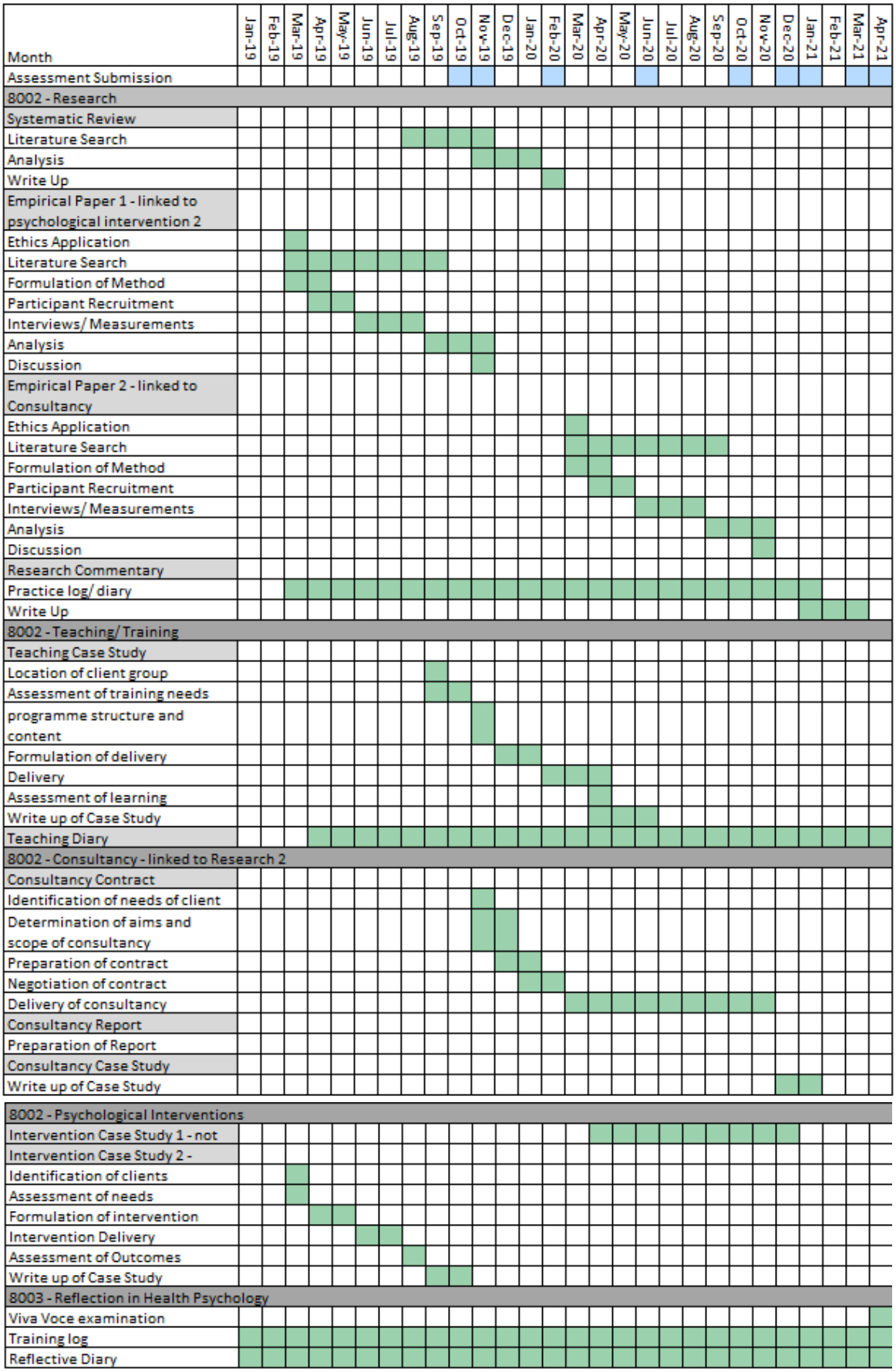
Core unit of Competency – Teaching/ Training

Learning outcomes covered	Area of work in which unit will be covered	Supporting evidence to be compiled for this unit of competence
8002.4- Demonstrate the systematic acquisition and understanding of teaching skills and professional practice 8002.5- Plan, deliver and critically evaluate a training programme for the development of new knowledge, applications or understanding in Health Psychology 8002.6- Carry out teaching to contribute to the development of new knowledge, applications or understandings of Health Psychology	I am in discussions within my role as a Community Wellbeing Volunteer at a local authority- commissioned Health Trainer Service to create and deliver training sessions to their team of 6-10 Health Trainers and potentially Community Wellbeing Volunteers. Sessions will be based around encouraging health behaviour change in their service users. The service is currently rooted in the Theory of Planned Behaviour and I intend to base sessions around this theory, though I will utilise other evidence- based techniques of behaviour change, such as self-determination theory. [8002.4, 8002.5, 8002.6] Five one-hour sessions will be created following discussions with management and will be approved prior to delivery. Regular feedback will be sought throughout each session to mould both the current and subsequent sessions and to evaluate the training once all sessions have been delivered. Sessions will include a section on the impact of digital health, such as mobile apps, on health behaviour change in line with the nature of my placement [8002.4, 8002.5, 8002.6]	Teaching and training Case Study [8002.4, 8002.5, 8002.6] Teaching Diary [8002.4, 8002.5, 8002.6, 8003.3, 8003.4] Viva voce examination [8003.1]

	Additionally, I have the opportunity to provide an hour long session to the physiotherapy team at Alder Hey Hospital as part of a monthly rota for departmental in-service trainings. [8002.4, 8002.6] Finally, my placement provider has links with an academic health science network for the north west who provide a coaching academy for health and social care professionals. The academy aims to improve the spread and adoption of new advances in healthcare and I am in discussion to potentially provide some training as a part of this. [8002.4, 8002.5, 8002.6, 8002.7, 8002.8, 8002.9]	

1.2 Gantt chart for Plan of Training v.1

The below chart highlights when I intend to complete each piece of work over the time span of the professional doctorate.



1.3 SWOT Analysis and Critical Commentary for Plan of Training v.1

SWOT Analysis

Table 1: Summary of strengths, weaknesses, opportunities and threats to the plan of training

	Positive	Negative
Internal	**STRENGTHS** - Conscientiousness - Naturally highly reflective - Interpersonal skills - Comfortable in approaching potential opportunities - I am passionate about health behaviour change - Strong support network - Experience in research processes	**WEAKNESSES** - Can sometimes be over-reflective and harsh on myself - Perfectionism - Relatively little experience in quantitative research - Lack of clinical experience - Lack of experience in ethics approval
External	**OPPORTUNITIES** - Placement provider is supportive of the doctorate - Have good connections through place of work, friends and family - Opportunities to work with a wide range of specialities - Volunteer work can open up opportunities for attaining competencies	**THREATS** - Many of my competencies rely on external persons - Lack of support from a psychologist in role. - Work is NHS commissioned and so relevant contracts cannot be renewed

Critical Commentary

As can be seen from the above summary, I have considered my strengths, weaknesses, opportunities and threats throughout the process of planning my training. This is not only to address the feasibility of my plans but also to consider any eventualities or feelings that I may come across whilst carrying out the work that I should be prepared to address. I will run through each for the four areas of the chart and reflect on how they could impact on my experiences over the course of the two years.

For context, I have provided brief descriptions of my main placement role as a Health Promoter for a health app developer and of my role as a Community Wellbeing Volunteer for a Health Trainer service:

Health Promoter (Placement) - I act as a Health Promoter for a mobile phone app aimed at parents and carers of under-fives. I regularly meet with groups of health and social care professionals to train them in the app so they feel confident in recommending it to their patients/ clients. I also act as the first point of contact for commissioners and hold regular meetings with them and write up reports based on the app's performance. I use encounters to consider the needs and expectations of different localities and to recommend changes and content for the app.

Community Wellbeing Volunteer - I volunteer for a Health Trainer service commissioned by Liverpool City Council. I attend community events to inform members of the public of the service and to produce basic health messages. I have also co-facilitated a community well-being consultation to address social isolation and have discussed developing psychological interventions as mentioned in the Plan of Training.

Internal Factors – Strengths and Weaknesses

My current role as a Health Promoter sees me regularly meeting with a wide range of health and business professionals, giving presentations, leading discussions and taking a role in board meetings. This interaction across a number of disciplines has only strengthened my interpersonal skills and ability to build rapport, through understanding that different professions and people have different values and use different "languages". Although this skill is valuable across all competencies, I know that it will help me most when creating psychological interventions, teaching and training and meeting with clients for consultancy purposes.

Approaching new people and creating new professional relationships on a regular basis has also helped me to become more adept at facing and approaching opportunities that are presented to me. Where I used to shy away from social situations with strangers, I now know how important it is to make these connections and will often step outside of my comfort zone to further my career. Reflecting back on previous first-meetings and knowing that the majority of the time I relax within a couple of minutes helps me to convince myself that it is always the right thing to do. I believe that this is a strength for not only consultancy but all of my competencies as I stand in a role where these opportunities are not always presented to me on a daily basis.

I find it of utmost importance to find a purpose in life, and I spent a long time deliberating about what ignited a fire within me when it came to choosing my career. As someone who is naturally indecisive, I have often flitted between desired professions, researching and making small steps to change career whenever I had more than a thought. However, I always knew in the back of my mind that these past choices were not where I wanted to be. I enjoy learning new things and helping people and feeling the effects of healthy behaviours on my own energy and mood led me to research in this general area. Finding the MSc was a turning point and I can honestly say that I feel a vocational pull towards Health Psychology. I have personally noticed that it's obvious when someone is passionate and it positively reflects on their work ethic and their ability to make people listen. This is supported by literature; a systematic review carried out by Ruiz-Alfonso & León (2016) found dedication to be commonly shared with passion, suggesting that an individual is more likely to engage and spend more time practicing their activity. I am aware that achieving the set competencies across the two years will be challenging but I understand that in order to remain motivated I need to remember that everything is moving me forwards towards my goal.

Conscientious is a word that has been used to describe my work ethic for as long as I can remember. As someone who takes my obligations seriously, I believe that this trait will act as a strength throughout the doctorate. Conscientiousness has been linked with better academic performance (Poropat 2014) and, although it isn't linked to job performance in roles requiring higher cognitive ability (Shaffer & Postlethwaite, 2013), I'm confident that it will help me to meet

requirements expected of me by the university, the British Psychological Society (BPS) and the Health and Care Professions Council (HCPC), in that I will always strive to respect professional boundaries and laws and codes of conduct whilst remaining reliable throughout all professional encounters. Maintaining reflection throughout will act as a reminder to be vigilant to these procedures.

I have always thought that reflection was one of my strengths. I've received positive feedback on every reflective piece I've completed and will often spend time thinking about both positive and negative experiences afterwards, contemplating how things would have gone differently if minor changes were made. In this sense, I am confident that this skill can help me across all five competencies. However, I am aware that I do have a tendency to ruminate and reflect negatively upon experiences that often don't deserve more than ten seconds of thought. This can be counter-productive and can impact on my resilience and sensitivity. This is supported in literature, which has linked rumination to higher levels of fatigue, emotional exhaustion and anxiety when working (Flaxman et al., 2012). I am hoping that consciously reflecting throughout the doctorate will help me to achieve a balance between positive and negative thinking, and will enable me to understand why constant negativity and catastrophic thoughts could be maladaptive in the provision of psychological services to clients. In this sense, professional development, and the practice diary in particular, is possibly of the highest personal value to me.

Another trait that could be viewed in this way is perfectionism. Though some may see perfectionism as a strength (Stoeber & Kersting, 2007), I would consider my perfectionism to, at times, become maladaptive to my wellbeing as I often take more time ruminating about whether the work I undertake will be good enough, leaving me feeling anxious and dejected around deadlines. Further reading in an attempt to understand and reflect on this issue to stop it from impacting me through the plan revealed that socially prescribed perfectionists are more likely to adopt performance-avoidance goals (Neumeister, 2004). Such goals focus on avoiding appearing incompetent relevant to one's peers (Neumeister & Finch, 2006). It's an issue I've reflected on previously and I have already noted this behaviour in deciding on how to fulfil my competencies. I feel that understanding why I am procrastinating and worrying may in itself be enough motivation to progress through the competencies and in particular writing up the relevant academic pieces. Failing this, I know that I need to access my support network more regularly for confirmation that the work I am doing is of a high enough standard.

I feel lucky to be able to say that I have a strong support network, in work, academia and in my personal life. I have people who I know I am able to turn to and be open with no matter how big or small my problem is and, looking back on past experiences, I think that it has benefitted all areas of my life and has helped me to push myself to succeed academically. Social Facilitation theory examines the consequences upon a person's behaviour which stems from the presence of others (Zajonc, 1965) and the physical presence of others alone should increase motivation (Sanders, 1981; Zajonc, 1965). In having my support network with me every step of the way, I am motivated to succeed through hard work.

In completing undergraduate and Masters degrees in psychology, I have had several opportunities to develop and refine my skills in research. Though they can be long processes, I genuinely enjoy sitting down and reviewing the literature, particularly when it is surrounding an area that I am passionate about. Being knowledgeable about the whole process will of course be a strength for the research competence, but knowing that I am happy to spend time researching fully will help me to strengthen work in all competencies.

Qualitative research has always come more naturally to me than quantitative. I feel more competent at and excited about exploring the thoughts behind people's opinions in a way that can't be reached through quantitative research. This means that I've always leant towards qualitative methods when planning research and both my undergraduate dissertation and Masters empirical project have reflected this. Although this means that my qualitative skills have improved, my quantitative skills are not as strong as they could be. This can be nerve-wracking and I often feel incapable when presented with a potential piece of quantitative research. However, I know that it's important to face your fears and although I know I will still favour qualitative research, I am confident that I have enough academic experience, support and problem solving skills that I could feasibly carry out a piece of quantitative research if I had the opportunity to do so, I would just have to approach it slowly and do more background work throughout.

Another aspect of research that I am not wholly comfortable with is the ethics process. I sought ethical approval for my undergraduate dissertation but my MSc empirical project was a side project to an existing PhD and had already received ethical approval. I therefore haven't had to go through the process for around eight years. As it such an important part of the research process and is vital to comply with BPS guidelines, I know that I may have to seek support and find examples of previous applications to become more at ease with the process. This is even more pertinent as my consultancy could require obtaining NHS ethical approval, which I have heard is a more stringent and convoluted process.

Though I have years of experience working with members of the general public in retail and community engagement in my current role, I have never worked with individuals in a clinical capacity. To me, this lack of clinical experience means that I haven't ever had to deal with people who have placed themselves in a vulnerable position by seeking help. This could put me at a disadvantage in that I may not know what to expect when recruiting and undertaking psychological interventions or delivering interactive training sessions. In order to ensure that I am able to provide my services at a suitable standard, I need to be conscious of bringing learnings from other life experiences and using these to actively reflect in action (Schön, 1987). For example, as their oldest sibling, my younger sisters will often come to me when they're struggling with work or difficult personal circumstances and I am happy to talk them through positives and negatives to motivate them to find a solution. I am of course also able to simply listen and lend a shoulder to cry on and I am therefore able to understand when it is best to offer a resolution and when it is better to step back and just be there. I believe this to be a vital skill in providing an empathetic service to clients. Additionally, I have a strong academic background in psychology and understand models and concepts that explain why an individual acts and reacts the way that they do. In bringing these areas together I'm confident that I will thrive in a clinical environment. However, I know that I do

need to be aware that people will act differently around strangers and of my own sensitivity as explained previously.

External Factors – Opportunities and Threats

My employer and workplace supervisor have shown support and enthusiasm for my commencement on the professional doctorate. They are aware of the many opportunities employing me as a Health Psychologist in training can have upon both the quality of their work and their reputation as a health app developer. From the start, management have been particularly supportive of career development and will always encourage employees to take on further training to develop personally and professionally. This environment often makes me feel appreciated and valued as an important member of the team. Looking in to this further, I found that supervisor autonomy support can lead to increased work satisfaction, organisational identification and job performance (Gillet et al., 2013). In having an employer who actively encourages continued professional development, thus fostering competence, I feel more comfortable searching for competencies that I can complete as part of my job role as well as outside of it.

In spite of this support being available to me, I am very aware that I am the only person with a psychology background working in my company. In this sense, I do not have a supervisor who I can approach when I am facing challenges in role that may impact on successful completion of competencies. This has been one of my greatest worries in commencing on the doctorate and one that has often made me second guess the compatibility of my role with some competencies, including psychological interventions and teaching and training. Reflecting on my worries, though I know that they are warranted in some way, all this means is that I have had to be creative and resourceful in sourcing other opportunities. My company is at the forefront of digital innovation in Liverpool. It provides a consultancy service for NHS and public sector bodies and is actively supported by NHS organisations. They are therefore well connected and have provided me with many links to outsource consultancy roles and other opportunities for practicing my skills across a wide range of specialities across the NHS and public sector.

On top of this, I have utilised family connections to outsource further development opportunities, including the provision of training sessions to physiotherapists, and further potential prospects of working with clinical psychologists in a Hospital setting as mentioned in the Plan of Training. Additionally, my volunteer placement has provided me with several opportunities to formulate and provide psychological interventions across Liverpool. They are wholly supportive of any work and are actively encouraging any related research that can help to show their impact on the community. In being given a fairly open proposal, I will be able to explore both health behaviours that I have had some experience in researching and have garnered an interest (physical activity and stress) and others that I am eager to explore, such as medication adherence in asthma patients. However, as nothing is set in stone and thus there are no relevant deadlines, I know that I will have to use my initiative and move things forward through communicating effectively with management and other Community Wellbeing Volunteers that would be involved in the process.

Another threat identified in development of the Plan of Training is that, as my employer is by nature a small consultancy business, it relies on winning bids, receiving new consultancy requests and

being re-commissioned by existing clients. There is therefore the small possibility that a) the project associated with my existing role will cease to exist and, b) the company does not receive any new commissions that health psychology can be applied to. Although I don't think that this will happen over the course of the doctorate, it is an eventuality that I do need to consider and it is something I do worry about every now and again. Job insecurity has been linked to stress (Gaunt et al, 2007, De Witte et al., 2012) and whilst I do not regularly feel job insecurity, I need to be aware of this, particularly during quieter times when clients may become less responsive (i.e. Christmas, summer school holidays) and regularly reflect on why I perceive this insecurity and if it is warranted. In this way, I could protect myself from any negative impacts upon my job performance and health. Should the worst manifest, as mentioned throughout this commentary, I have measures in place that will enable me to fulfil competencies, such as my volunteering role and other connections to outside sources.

Conclusion

After conducting the SWOT analysis and considering the impact of my perceived strengths, weaknesses, opportunities and threats alongside my plan of training, I feel better equipped to deal with the challenges faced through the doctorate. I'm confident that I have been able to identify any problem areas and put in the appropriate measures to counteract them if necessary. Conversely I also feel able to work to my strengths and take advantage of the opportunities I am provided.

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1.4 Plan of Training Version Two: Jun 2020 – Sep 2022

Core unit of Competency – Generic Professional Competence

Learning outcomes covered	**Area of work in which unit will be covered**	**Supporting evidence to be compiled for this unit of competence (with further detail if necessary).**
8003.1 – Conduct an oral defence of their work, demonstrating ownership, reflection and understanding commensurate with mature and safe independent professional practice 8003.2 – Conduct ethically sound work in health psychology at professional practice level 8003.3 – Reflect on their skills, practice and professional development 8003.4 – Reflect on their reflections 8002.12 - Work with clients, respecting them, respecting professional boundaries and laws and codes of	I will ensure time is set aside to understand the Society's Code of Conduct, Ethics and the HCPC's Standards of Conduct, Performance and ethics (8002.12, 8003.2) and I will apply these guidelines to every aspect of my role. I will ensure anonymity and confidentiality of all individuals involved in my work unless otherwise agreed. I will attend regular progress meetings with my workplace supervisor to run through the Practice log. This will ensure both mine and the company's needs are being met and to understand ongoing requirements within my role. I will also maintain regular contact with my university supervisor and ensure that any feedback is reflected and acted upon. [8003.2, 8003.3] As the nature of my role heavily involves communication and collaboration with a wide range of people outside of my placement, including health professionals, business professionals and the general public across different localities, I will regularly adapt my communication to maintain positive professional relationships. I already have a good understanding of structures of healthcare	Practice Log of training - I will keep an ongoing Practice Log in which I will make regular entries, no less than once per week, depending on the relevance of the work undertaken each day. [8002.12, 8003.2, 8003.3, 8003.4] Regular Practice Diary - I will keep a Practice Diary in which I will record and reflect on any professional and relevant personal experiences. [8002.12, 8003.2, 8003.3, 8003.4] Reflective report on personal and professional development [8002.12, 8003.2, 8003.3, 8003.4] Viva voce examination [8003.1]

conduct ,and reflecting on the experience in a structured fashion	providers as part of my role and will use this to adapt my practice. [8002.12, 8003.2] In outsourcing further work in my volunteer role and Hospital settings I will ensure effective collaborative relationships with multi-disciplinary teams (See teaching/ training competency for further detail) [8002.12, 8003.2] I will independently manage time each month to read and digest emerging evidence and to identify any upcoming opportunities for further professional development. I often get the opportunity to attend NHS-led events in innovation and research in healthcare and I will continue to attend and actively participate in these. [8002.12, 8003.2, 8003.3, 8003.4] Work undertaken in relation to other competencies will be subjected to ongoing reflection which will be used to consistently adapt my research and delivery style to meet the needs of the target audience. [8002.12, 8003.2, 8003.3, 8003.4] **Update 10/2021 –** new placement secured, working as an Assistant Psychologist in a community mental health team. This allows effective collaboration with multi-disciplinary teams and regular face to face and online clinical work with individuals and groups [8002.12, 8003.2].	

Core unit of Competency – Psychological Interventions

Learning outcomes covered	Area of work in which unit will be covered	Supporting evidence to be compiled for this unit of competence (with further detail if necessary).
8002.10 - Assess, formulate, intervene and evaluate in a formal behaviour change intervention with an individual client where the intervention is delivered face to face 8002.11- Assess, formulate, intervene and evaluate in a formal behaviour change intervention where the intervention is delivered in a group, online, or other alternative mode	~~1. I have approached a primary school in Liverpool to provide a psychological intervention for the teachers. I understand that many struggle to make time to look after themselves and the intervention will focus on stress management. The intervention will be either group-based or on an individual basis. [8002.10, 8002.11]~~ ~~2. I have accepted an opportunity to support the development of an online pain management programme, the face-to-face version of which has been put on hold due to the coronavirus pandemic. This will involve producing a self-help resource to address pain catastrophising, which will support delivery of the programme. [8002.10, 8002.11]~~ ~~3. I will potentially provide a one-to-one behaviour change intervention to a friend who has requested support with diet and exercise. Consideration will be given to the nature of the relationship [8002.10, 8002.11]~~ **Update 25/10/2021** In place of opportunity 3., I intend to provide a behaviour change intervention to a patient in my placement in the community mental	Case Study of a psychological intervention for an individual client [8002.10, 8002.11] Case Study of a psychological intervention for group client (Health Trainers) [8002.10, 8002.11] Reflective reports [8002.10, 8002.11] Viva voce examination [8002.10, 8002.11, 8003.1]

	health team who lives with chronic pain and disability and has presented with low mood [8002.10, 8002.11]. **Update 02/01/2022** Following research I was unable to identify relevant research pertinent to the development of the intervention identified in point 2. in line with time availability afforded by my changed work commitments. I was also unable to progress with opportunity 1. I now intend to design and deliver an online intervention aimed at increasing fruits and vegetables intake in the Liverpool City Region [8002.10, 8002.11].	

Core unit of Competency – Research

Learning outcomes covered	Area of work in which unit will be covered	Supporting evidence to be compiled for this unit of competence (with further detail if necessary).
8002.1 - Demonstrate skills in conceptualisation, design, development, implementation and analysis of a study to investigate a pertinent research question in Health Psychology 8002.2- Review systematically a substantial body of knowledge in an area of Health Psychology 8002.3 - Create and interpret new knowledge through original research or advanced scholarship in Health Psychology 8003.1 – Conduct an oral defence of their work, demonstrating ownership,	~~1. As part of my consultancy I will analyse interviews as part of a wider piece of research to evaluate the impact of a wellbeing worker providing a social prescribing programme which involves 66 patients in a Liverpool GP surgery [8002.1]~~ **removed 10/2020 (project did not progress)** ~~2. In response to the coronavirus pandemic, I will undertake a quantitative piece of research to understand the impact of coronavirus and UK lockdown measures on perception of non covid- related symptoms and use of healthcare services. [8002.1, 8002.3]~~ 3. In response to the coronavirus pandemic, I will undertake a mixed methods piece of research to understand the impact of UK lockdown's halt on team sport on women's physical activity levels and wellbeing [8002,1, 8002.3] ~~4. I will potentially carry out a systematic review exploring methods for self-care and pain catastrophizing, in conjunction with a behaviour change intervention [8002.2]~~ **removed 01/2022 (project did not progress)**	Systematic review [8002.2] Empirical papers x 2 [8002.1, 8002.3] Research Commentary [800 2.1] Ethics approvals [8003.2] Viva voce examination [8003.1]

reflection and understanding commensurate with mature and safe independent professional practice 8003.2 – Conduct ethically sound work in health psychology at professional practice level	~~5. My interests also lie in stress management and I would like to develop and carry out a research project relating to one of these areas should I have the opportunity. [8002.2, 8002.3]~~ **removed as other opportunities identified** **Update 14/09/2021** – In place of opportunity 2., I will undertake a readability analysis of online health information relating to migraine and headache available to the general population **Update 20/04/2022 –** In place of opportunity 4., I will carry out a systematic review exploring the impact of walking interventions on symptoms of anxiety.	

Core unit of Competency – Consultancy

Learning outcomes covered	Area of work in which unit will be covered	Supporting evidence to be compiled for this unit of competence (with further detail if necessary).
8002.7- Assess requests for consultancy and establish the needs of a client group 8002.8- Plan, manage, monitor and evaluate consultancy in Health Psychology at the forefront of professional practice 8002.9 - Formulate recommendations to clients based on evidence collected and disseminate information effectively to clients on the process and outcomes of consultancy	I have explained these opportunities more in depth over other competencies (research and teaching/ training) but have summarised these opportunities below [8002.7, 8002.8, 8002.9]: ~~Analysis of interviews as part of a piece of research to evaluate the impact of a wellbeing worker providing a social prescribing programme which involves 66 patients in a Liverpool GP [8002.7, 8002.8, 8002.9, 8002.1, 8002.3~~] **removed 10/2020 (project did not progress)** The provision of training for staff of the NHS Innovation Agency on health psychology and creation of a behaviour change intervention. [8002.4, 8002.5, 8002.6, 8002.7, 8002.8, 8002.9]	Case Study [8002.7, 8002.8, 8002.9] Contract and working agreement conditions document [8002.7, 8002.8] Viva voce examination [8003.1]

Core unit of Competency – Teaching/ Training

Learning outcomes covered	Area of work in which unit will be covered	Supporting evidence to be compiled for this unit of competence
8002.4- Demonstrate the systematic acquisition and understanding of teaching skills and professional practice 8002.5- Plan, deliver and critically evaluate a training programme for the development of new knowledge, applications or understanding in Health Psychology 8002.6- Carry out teaching to contribute to the development of new knowledge, applications or understandings of Health Psychology	I will provide an hour-long session to the physiotherapy team at Alder Hey Hospital as part of a monthly rota for departmental in-service trainings. [8002.4, 8002.6] I will provide a three-part teaching series to students enrolled on the NHS Innovation Agency's "Coaching for spread and adoption" programme which will focus on mental health in the workplace. I will introduce health psychology and provide training in the development and evaluation of behaviour change interventions to support their innovations [8002.4, 8002.5, 8002.6] As part of a consultancy project, I will provide a further training series for NHS Innovation Agency, an academic health science network for the north west who provide support for the adaption of innovation into the NHS. Sessions will consist of four 1 hour zoom calls and one pre-recorded session to fit in with staff availability. Students come from both health professional and business backgrounds [8002.4, 8002.5, 8002.6, 8002.7, 8002.8, 8002.9]	Teaching and training Case Study [8002.4, 8002.5, 8002.6] Teaching Diary [8002.4, 8002.5, 8002.6, 8003.3, 8003.4] Viva voce examination [8003.1]

	Update 02/2022 – I will provide a one-off training session to health professionals in my community mental health team on motivating behaviour change	

2. TEACHING AND TRAINING

This section contains two pieces of work: a Teaching and Training Diary, which details my growth as an educator; and a detailed case study, describing and reflecting on a five-part teaching series delivered to clinical and corporate professionals in an NHS organisation. It demonstrates achievement of the following learning outcomes:

4. Demonstrate the systematic acquisition and understanding of teaching skills and professional practice.

5. Plan, deliver and critically evaluate a training programme for the development of new knowledge, applications or understanding in Health Psychology.

6. Carry out teaching to contribute to the development of new knowledge, applications or understandings of Health Psychology.

2.1 Teaching and Training Diary

Learning outcomes achieved:

4. Demonstrate the systematic acquisition and understanding of teaching skills and professional practice.

5. Plan, deliver and critically evaluate a training programme for the development of new knowledge, applications or understanding in Health Psychology.

6. Carry out teaching to contribute to the development of new knowledge, applications or understandings of Health Psychology.

Introduction

This teaching diary covers experiences in teaching and training throughout the doctorate. Over this time, I have provided one-off sessions and series to a wide range of participants, including physical and mental health professionals, business professionals working in the healthcare field, secondary mental health service users and the general public. Subject matters have included introduction to health psychology, treatment adherence, building behaviour change interventions and development of emotional coping skills, and sessions have been delivered face-to-face and virtually. I have also had the chance to prepare and deliver sessions in real-time and through pre-recording content.

In the last three years, I have sought opportunities to develop my skills in teaching and, in this piece, I have provided a chronological account of these opportunities, reflecting on how I have acquired new skills, what I have taken from these experiences, and how I have used newly-learned knowledge to bring more to my practice. Throughout this process, I kept a reflective diary, which I have drawn on to provide this account. For one experience, I have produced a detailed case study, which highlights the process in more detail. As such, this account is not detailed in this piece of work, though it is included in the timeline.

May 2019: A One-off Teaching Session to Physiotherapists and Occupational Therapists Working in a Children's Hospital

The first piece of teaching was secured in April 2019, when I was asked to provide a single session on treatment adherence to a group of Physiotherapists and Occupational Therapists at Alder Hey Children's Hospital. Although I had some confidence in public speaking through presenting to health professionals as part of my role, this was the first time I had ever taught a group of people.

I approached the piece of work by arranging a meeting with one of the attendees to understand the nature of the challenges experienced by them and the barriers to treatment adherence faced by their patients. Following assessment of needs, I planned to search literature on the use of models in paediatric treatment adherence, and to use specific case studies to demonstrate practical examples. I identified that the biopsychosocial model and the Health Belief Model could be helpful theories to approach the topic, and I used specific examples of cystic fibrosis and chronic pain for the practical applications. I prepared a session which was approximately 30 minutes in length, allowing time for questions and evaluation measures (see Appendix a for slides).

Delivery of the session itself went smoothly, although I did feel like some nerves broke through; I noticed myself stammering slightly, and my hands were shaking. After the session I distributed questionnaires so that feedback could be provided anonymously (see Table 1. for overview, for detailed qualitative feedback, see Appendix c). Feedback was mostly positive, but suggested I went through the content a little too quickly, and that there could be a little more interaction. I had built in time at the end of the session for questions, which I perceived as an interactive aspect, but no one came forward.

	Strongly agree	Slightly agree	Neither agree nor disagree	Slightly disagree	Strongly disagree
The content was interesting	11	9			
The content was understandable	11	7	2		
The session was relevant to my role	11	7	2		
The delivery of the sessions was effective and clear	9	9	2		
The objectives of the session were clearly identified	17	3			
The objectives of the sessions were met (if not, please explain below)	15	5			

Table 1. Results from feedback survey (n=20)

Coming into the session from a relatively inexperienced standpoint, I was overwhelmed- something that I often experience when I have to apply my own creativity- and this impacted on my motivation. I found myself trying to include everything I could in the time available, and in doing so, was almost "paralysed" with indecision. In the end, I managed to cut it down to include specific subject areas, but the worry about not getting enough health psychology knowledge across didn't leave me. Looking back, I think this indecision was reflected in the slides, in that they possibly did include too much information and I was left with little time to plan in much interactivity like I had originally planned. This was also reflected in the feedback; attendees recommended slowing down, using bigger text on the slides and having more interaction.

Overall, I do think that I managed to deliver a session that was informative, which was received well, as evidenced by the feedback received. Attendees spoke of how understanding the models was useful for their role. Although I took note from a doctoral training session on delivering teaching and tried to keep the slides clear with minimal wording, looking back, I understand that I could have educated myself on the concepts of adult learning theory more comprehensively prior to this session, which could have equipped me with the tools to make the session stronger. Through further learning, I identified the theory of andragogy, which suggests that there are six key principles that influence adult learning; "the need-to know", "self-concept", "previous experiences and knowledge", "readiness to learn", "orientation to learning" and "motivation" (Knowles et al., 2005). I had already identified the importance of using relevant examples ("orientation to learning"), but moving forwards, I decided to use these principles to guide the delivery. This would mean emphasising the benefits of any teaching, using more examples to foster group discussion, and building tasks and more opportunity for feedback into sessions to offer a self-directed learning environment. At the time of delivery, I felt that I had introduced interactivity, but I knew that this needed to be more than asking a few questions about experience.

Another space for growth came from the preparation process. I am aware that I hold myself to high standards, and I often think about how I need to come across as competent to others, not leaving space for anything that could be described as less than perfect. I often feel that I have everything to prove, and this extends to many areas in my life. In this scenario, as a relatively inexperienced practitioner, I felt at times that I didn't have as much expertise as my students. I felt a "need" to prove that I had something to bring to the table, and this resulted in the aforementioned absence of motivation. Literature shows that low self-efficacy can cause motivational problems (Margolis & McCabe, 2006), and in believing that I was "lesser" than my students, this could explain why I faced difficulty in focusing on the task and the decision-making process. Alongside this, I understood that this pressure to not portray incompetence could indicate a trait of socially prescribed perfectionism, which is associated with motivational deficits due to the pressure of a perceived demand of perfection from others (Flett et al., 2022). This theory could also explain why I found myself adding too much information into the slides instead of choosing specific areas of focus. This is something that I knew I needed to become more aware of for any future teaching opportunities.

May – September 2020 - Providing an Introduction To Health Psychology And the Use of Behavioural Models to Create an Evidence-Based Intervention to Entrepreneurs

For this piece of work, I was asked to deliver a short series to entrepreneurs enrolled on an NHS-led programme to support spread and adoption of their innovations into healthcare. Prior to commencing this piece of work, I worked with a member of the coaching team in the programme, who gave me really helpful advice around planning sessions and using relevant theory; something I had identified to be of importance from my previous experience.

This was my first opportunity to deliver a series. Prior to commencement of the sessions, I prepared and submitted a short questionnaire which investigated prior experience and goals, and I used this to tailor the sessions by using specific examples and explaining why the information was needed. The series consisted of three sessions, delivered in May, July and September 2020, which introduced the use of health psychology models in designing, delivering and evaluating interventions. I chose to focus on the COM-B model, and designed multiple interactive elements, including smaller and larger group tasks and worksheets (see Appendices d-i for slides and worksheets). Participants interacted well with the content during the first and second session, albeit less so in the third. I asked for feedback afterwards and received a mixture of good and average feedback with suggestions to improve. This included defining objectives better, delivering content more clearly and making the content easier to understand (see Appendix j for full qualitative results). See Table 2. for quantitative results:

Table 2.

Results from feedback survey (n=5)

	Strongly agree	Slightly agree	Neither agree nor disagree	Slightly disagree	Strongly disagree
The content was interesting	3	2			
The content was easy to understand	1	3	1		
The subject was relevant to me	3	2			
The delivery of the sessions was effective and clear	3	1	1		
The objectives of the session were clearly identified	3	1	1		
The objectives of the sessions were met (if not, please explain below)	3	1	1		
The host was clear and easy to understand	3	2			

Upon reviewing feedback, I initially felt upset. I know that I have low resilience against criticism and often look at it as a personal attack, feeling that those offering the feedback think lesser of me as a person. Although this could, similarly to the first experience, be attributed to socially prescribed perfectionism, I know that I am an anxious person and understand that anxiety is associated with a bias in favour of negative information and a difficulty to disengage from it (Rudaizky et al., 2014). Evidence also indicates this sensitivity to negative feedback is sustained over time (Tobias & Ito, 2021), which aligns with my continued low resilience to negative feedback, despite repeated reflection.

Despite my reservations to receiving it, literature suggests that feedback is an important factor in learning (Clynes & Raftery, 2008; Hattie, 2008; Kourgiantakis et al., 2019), and I understand that it's an invaluable tool for understanding where to improve. Stepping away from the emotional aspect of receiving criticism helps me to identify what to work on, and looking back at the previous experience, I had already implemented positive changes in designing these sessions. When receiving feedback, its important to take personal responsibility and look at the self and the significance of the feedback rather than the person offering it (Orsmond & Merry, 2013), and, whilst I think this is something that an ongoing reflective practice helps me to implement, I am still learning to reflect on this earlier on in the process in an attempt to disengage from the emotional response sooner.

Using self-assessment alongside the feedback, I can understand where improvements were required. I only had three sessions that were 40 minutes long to cover an introduction to health psychology and the creation and evaluation of an intervention. At times for me it did also feel rushed. I think this builds on the learning from the previous session; although I had made a conscious effort to not cover multiple subject areas, designing an intervention using the COM-B model did require more time, and if I were to deliver it again I possibly would have chosen a focus within the model and directed to further learning should students be interested. This could have led to a better comprehension of content for the students and may have felt less of an information overload. Although in this case there was not the option to deliver over more sessions or longer session lengths, I noted that time required could also be considered at the early planning stages if time was open to negotiation.

It is important to add that for this piece of work I was faced with the additional challenge of the pandemic; at the time the sessions were delivered, lockdowns were in effect. For this reason, they were delivered online, using *Zoom*. Although I had used *Zoom* previously, it was new to me as a facilitator and I had to find ways to keep students engaged. I opted to make use of breakout rooms for smaller discussions, and the chat and annotate functions to engage the whole group. Delivering the sessions online also meant that I could use more notes than I would have been able to had they been delivered in person. I have taken the opportunity to reflect on the experience of using video conferencing software to teach in the teaching and training case study.

October 2020- Delivering a Five Part Teaching Series to Clinical and Corporate Professionals at the Innovation Agency

After I had delivered the above series for the Innovation agency, the course facilitator asked if I could provide some training on the use of the COM-B model to their own workforce, which consisted of staff in both clinical and business development roles. Content found in the teaching and training case study details this piece of work.

February 2022- Delivering a One-Off Session to a Secondary Mental Health Multi-Disciplinary Team on Fostering Motivation and Achievable Goal Setting

For this piece, I was asked by my Team Manager to provide training on fostering motivation and setting achievable goals to the wider team, including Mental Health Nurses, Occupational Therapists, Social Workers and Support Workers. As lockdown measures were still enforced within my Trust, I delivered the session remotely, although around half of the group were in a room together. I understood some of the challenges faced by the team through working with them regularly, and I aimed to foster thought around barriers to engagement and adherence. I chose to introduce the Health Belief Model and SMART goals and produced an hour-long session as I understood that the team were busy and I wanted them to be able to attend if they wanted to.

To provide structure to the sessions and foster reflection of previous experience, I used Kolb's (1984) experiential learning cycle (see figure 3, Teaching and Training Case Study). I built from the teaching I had already delivered and made effort to include lots of interaction, including case

discussion in smaller groups and as a whole, and made the content of the slides as clear and engaging as possible. I also made sure to keep focus of the session, directing to further learning where necessary so as to keep the information delivered clear and understandable (see Appendix k for slides). I asked for feedback through an online survey after the session, but only received one response. This was positive, and when asked what was taken away from the session, they provided the response "*Totally relevant to how we work with service users. Good to hear colleagues' views and Kate encouraged our participation which was important*." This was valuable for me to hear, as encouraging interaction and reflection in line with theories of andragogy was an important objective for me. Qualitative, informal feedback was positive, and since the training has been delivered, colleagues have told me how they have applied it to their role, with one email stating that they would "*provide service users with information and support regarding their motivation and signpost to services that can provide ongoing support"*.

The biggest challenge here was managing the group, understanding that most of my students were in one room and I was in another. This was unexpected and thus something that I had not prepared for, although in hindsight as this is how team meetings are often run, I possibly could have predicted this. Nevertheless, I had to adapt and run the session. During tasks, I used breakout rooms to split the group into those physically in the room, and those who attended virtually. However, I was unable to see everybody present as there was only one webcam available, and at times it was hard to hear discussion, and to know who was talking. This meant that, although the group were well engaged with the content, I did feel a little out of control at times. I also worried that those who attended virtually would feel "left out" and may not engage fully with the content.

I conducted research to reflect on this more, and found a study which investigated this in the context of hybrid meetings (Saatçi et al., 2019). Authors found that co-located participants dominated the interaction, whilst remote participants felt isolated. Other literature suggests that this "hybrid" environment could lead to disengagement of remote participants (Standaert et al., 2022). Despite my understanding that many schools were faced with providing education using this method during the pandemic, I struggled to find any research investigating this. However, a study which looked at the utilisation of webinars, face-to-face and hybrid meetings to foster learning opportunities for Urologists found that hybrid meetings enabled those who preferred face-to-face meetings and those who preferred webinars, or who had accessibility issues surrounding attendance at face-to-face meetings, to attend such opportunities, leading authors to conclude that hybrid meetings should continue to be employed as the world transitions post Covid-19 (Hameed et al., 2021). It is clear that, whilst there are clear limitations surrounding the social aspect of hybrid learning, it does offer a chance to foster greater inclusion.

Findings that remote participants may struggle more with engagement echoed my concerns and helped me to think more about how to manage a similar situation in the future. I do think that I managed the dynamics of the group well with the use of breakout rooms and directed questioning to both groups, and I was lucky that participants knew each other well and felt comfortable in the interaction. Keeping this inclusive approach would be something I would take away from this

situation. However, as an educator, I think it would be important for me to be physically present in a hybrid teaching situation, so that I am able to see all students.

March 2022- Preparing Pre-Recorded Psychoeducational Sessions to Inform on Fruit and Vegetable Uptake and Achievable Goal Setting as Part of a Behaviour Change Intervention Aimed at Adults Living in the Liverpool City Region

I wanted to incorporate an educational aspect into my online intervention to increase knowledge, and due to time constraints and logistics I opted to provide this through two pre-recorded educational videos; one on the benefits of fruits and vegetables and recommended portion sizes, and one on setting achievable goals and self-monitoring. I understood that engagement with educational videos is impacted on adversely after six minutes (Guo et al., 2014) and so made an effort to ensure both videos were as short as possible. See Appendix l for video links.

Keeping these videos short whilst fitting in all the content I wanted to include was challenging. I identified guidance for producing educational videos which noted that effective videos aim to reduce extraneous load, optimise germane load, and manage intrinsic load (Brame, 2016), and I used this guidance when designing the videos. This included highlighting important information with the use of images and selective key words and phrases, using images where relevant to incorporate dual streams of information and keeping the videos as simple as possible by not using music or complex backgrounds.

Looking back at the videos, I'm proud that I managed to compress content into a short amount of time to keep it engaging, and I did the best with my skillset. This was a new venture for me, and though the production process was time consuming, I felt that working with the medium, and at the content length, offered a space for me to express my creativity without feeling overwhelming, as it often does.

Although I don't have specific feedback for the videos themselves, all 18 intervention participants who completed the survey strongly agreed (n=11) or agreed (n=7) that the programme was educational, and many commented that the programme helped them to be more aware of portion sizes and self-monitoring, indicating that the videos imparted this knowledge (e.g. "*I have learnt what a portion consists of for each fruit and veg*", "*I didn't know beans were a fruit or veg*", "*Food tracking helps to increase fruit and veg because you take responsibility for what you are eating*"). Looking at *YouTube* analytics, I can also see that most of those who clicked on the video watched it until the end.

Taking the opportunity to produce educational videos offered me a novel way in which to strengthen my skillset as an educator. I understand that producing brief educational videos can be a valuable tool to impart knowledge (Kaim et al., 2020; Khan et al., 2022), and can provide autonomy through flexibility in access to the learner. Despite this, I do believe that it is still important to take into account andragogy theories through offering space for reflection, and discussion of specific examples. Research indicates that a blended learning approach (utilising

face-to-face and online approaches) is preferred by adult learners, though one of the key considerations, in line with andragogy, is managing a level of interactivity both in person and online (McKenna et al., 2019).

In this instance, the purpose of the educational videos was as part of a brief intervention aimed at increasing knowledge to change health behaviour, and they were intended to take up minimal time in the participant's day. Should I recreate a similar intervention with the availability of more resources, I would consider implementing an interactive element such as facilitating within participant discussion. With regards to teaching experiences generally, I would consider the use of short videos to complement multiple ways of learning, including educator-led sessions, online discussion and informal assessment.

The Application of Newly Assimilated Knowledge to my Role.

In addition to the teaching experiences detailed above, I have had opportunity to apply learning in this area to a number of experiences across both placements. In this section, I have provided a brief overview of these applications.

Engaging With Health Professionals for CATCH

In my first placement at *Damibu*, I often reached out to health professionals, running sessions with teams to share how CATCH could support them in their role. After learning andragogical principles, I brought these to the sessions, encouraging reflection of challenges and ways in with CATCH could support. This led to greater levels of active engagement and use of CATCH thereafter.

Supporting Development of Emotional Coping Skills

Although these sessions may not be delivered stereotypically as teaching sessions, and include a therapeutic approach, I felt it important to discuss these generally, as I could see improvements in my confidence and quality of delivery alongside the development my skills in teaching and training:

One-to-One Sessions

I use a combination of information sheets, work sheets and drawing diagrams alongside verbal delivery to share knowledge of emotional coping skills. Each session is delivered differently, and often requires some on the spot decisions. Although I'm provided with the session subject, I work with each patient to build on their knowledge base, and have used teaching techniques and learnings from the above experiences to strengthen the delivery. Looking back to my first psychoeducational session, I was unsure of the content, and was stricter in its delivery. I'm now able to adapt each session so people get the most of it. I think having a stronger understanding of this information and of learning theory gives me the freedom to understand how each person might learn best, and to adapt those sessions on the spot/ in a short amount of time to deliver it more effectively.

Group Sessions

Over the course of the last year, I've worked with five other Assistant Psychologists to improve psychoeducational content and methods of feedback for an online emotional coping skills programme delivered in a group format. Working in collaboration with my colleagues, and delivering to a group of service users has presented with its challenges, but over time I have managed to bring added strengths to the process from my development as an educator. One contribution which I am proud of was in the creation of the slides used. All facilitators produced their own sessions and added the skeleton to each slide. I then edited each slide to display uniformity in design and content, highlighting important information, using minimal text, adding visuals and incorporating group tasks and discussion. We've received positive feedback from participants weekly, who often share their learnings and progression.

Final Note

Putting these diary entries together, and reading through the final document has really helped to see just how much I have improved as an educator. It's gone from being something I met with much discomfort, to something that I almost feel at ease with. I'm now able to improvise, to interact, and to be confident that, if I don't know the answer, I can be honest and come back to the enquirer at another time. I'm excited to continue my development in this area.

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Appendices

Appendix A

Case One slides

An Introduction to Health Psychology for Physiotherapists

Aims

1. Explain the concept of Health Psychology and how it can be used in a clinical setting
2. Introduce two psychological models of health and illness and explain how they can be related to treatment adherence in children and their families

Health Psychology v Clinical Psychology

Health Psychologists

- Help people deal with psychological and emotional aspects of health and illness as well as supporting people who are chronically ill.
- Teach people effective coping strategies to improve their health

Clinical Psychologists

- Study psychological disorders and mental illnesses
- Aim to reduce psychological distress and to enhance the promotion of psychological wellbeing

What could a health psychologist do?

- Help a person with asthma manage their condition and adhere to treatment
- Assist a person to lose/ gain weight through healthy eating and physical activity
- Work with a patient with chronic pain and their family to develop coping mechanisms
- Create interventions to help a person to develop stress management techniques

Treatment Adherence

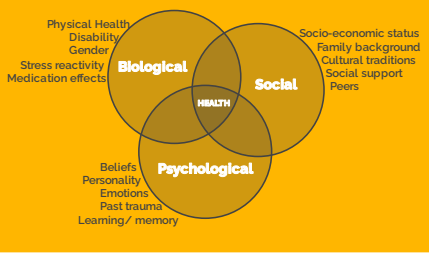
- Extent to which a person's behaviour is in line with health care recommendations
- Poor treatment and medication adherence is common in children with chronic illnesses (Dean et al. 2010; Morton et al., 2014)
- Adherence to therapeutic devices ranges from 32% to 53% in paediatric populations (Helfenstein et al., 2006; Bugni et al., 2012)

Younger children v adolescents

- Younger children require much more input from parents/ carers where older children and adolescents have higher autonomy (not adherence!)

What excuses for non - treatment adherence have you heard?

Biopsychosocial Model (Engel 1977)

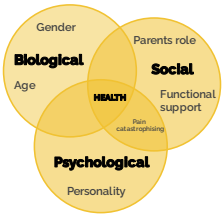


Chronic pain in children

- Chronic pain previously thought to be physical in origin
- Symptoms can reduce quality of life and delay/ prevent a full recovery.
- Recent research supports a biopsychosocial approach
- Physiotherapy treatment with medication and psychological intervention could effectively treat symptoms

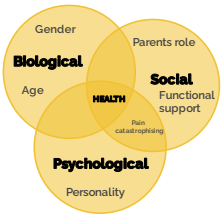
Chronic pain in children

- Social factors in children fall more heavily on the family unit
- Conflict can impact on treatment adherence
- Poorer family functioning can lead to higher pain-related disability
- Parent responses to pain behaviours impact on development and maintenance

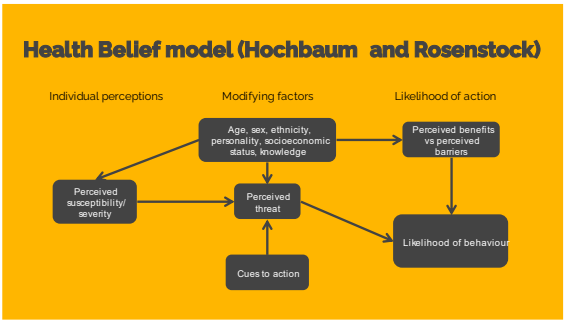


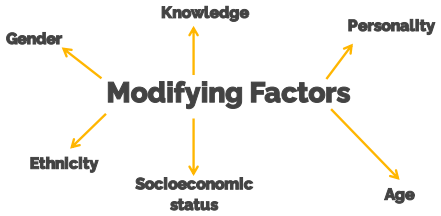
Pain catastrophising

- Pain catastrophising can be influenced by a child's personality and disposition and is linked to pain, functional disability and quality of life.
- Parent catastrophising can encourage a child to control their pain



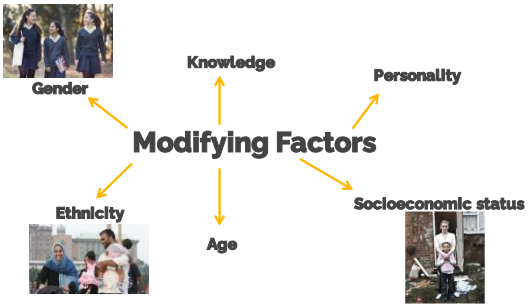
Health Belief model (Hochbaum and Rosenstock)





Knowledge

- People with lower levels of education may not understand impact of actions
- Lower health literacy is linked with 14% lower adherence in adults (Miller, 2016)
- Study investigating influence of self efficacy and disease knowledge found that adolescents had limited disease knowledge
- Lack of knowledge ➔ lower long term adherence
- Effect bigger when treatments didn't give immediate benefits
- Need for educational intervention



Treatment adherence in cystic fibrosis

- Treatment adherence is poor in paediatric pulmonary diseases because of the intensity and complexity of treatment regimens
- Lower adherence rates are seen in exercise and physiotherapy
- Poor adherence can lead to worse outcomes

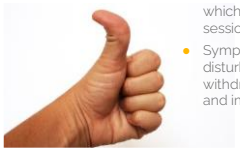
Treatment adherence in cystic fibrosis and asthma (Goodfellow et al. 2016)

- Sample of 100 children with cystic fibrosis and their parents
- Only 28% of participants were adherent overall
- 51% of children and 61% of parents reported adherence to chest physiotherapy
- Belief of necessity of treatment was higher for parents than children

A collaborative approach

- Would a collaborative approach help?
- Teenagers with diabetes who felt that their self -care was dictated to them were less likely to adhere than those who's opinions were used collaboratively
- Patients of professionals who promote autonomy and value relationship in care have increased adherence
- A collaborative approach could help identify all barriers.

Treatment adherence in hypermobility



- Sample included 32 parents and 19 children and young people aged 5-17
- Participants had just completed an intervention in which children received three physiotherapy sessions over 10 weeks.
- Symptoms of participants included pain, disturbed sleep, difficulties at school, withdrawing from exercise, altered self-image and impact on family life.

Treatment adherence in hypermobility

Building exercises into family routines
Rewards
Creating competition with siblings
Seeing a physical improvement
Improving quality of life

Strain on parent -child relationship when child doesn't take responsibility
Lack of time and resources
Lack of privacy
Monotonous exercises
Exercise causing distress

Aims

1 Explain the concept of Health Psychology and how it can be used in a clinical setting

2 Introduce two psychological models of health and illness and explain how they can be related to treatment adherence in children and their families

Thanks!

Any questions?

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Appendix B

Case one evaluation – qualitative results

1. Understanding of the models
2. Treatment adherence
3. Applying HBM to practice
4. What effects parents have on a child
5. Discussing treatment adherence and basis of models
6. Learning about the models and how they influence adherence
7. Factors that influence adherence to physio
8. Different aspects of compliance explained well via use of models
9. Health models, info re education
10. The practical applications
11. Health behaviours and adherence to treatment
12. Considering different aspects of BPS model, able to relate to msk pts
13. Treatment ideas. How parents impact a child's behaviour
14. How parents impact on child's treatment/ outcome
15. The models
16. Seeing models
17. Ideas to increase patient compliance. mum out of treatments
18. Learning about the different models used within psychology and how this applies to our role

1. More treatment techniques
2. Yes, how a child copes with a life limiting illness
3. Neuro conditions and family expectations/ participation
4. Techniques to improve adherence
5. Techniques/ strategies to adherence issues identified
6. Affects of new diagnosis can have
7. More in depth re chronic pain, medically unexplained illness or fabricating induced illness
8. A case study of what to ask/ do in a specific situation e.g. non compliance with meds and how to navigate it
9. Would like to know more about health needs in relation to acute pain as this would be more relevant to my role
10. More case studies related to msk/ orthopaedics
11. How to use the models for children with ABIs and very young children/ education
12. Relevance to acquired brain injuries - ie adolescents/ educ./ understanding
13. Functional overlay
14. How sleep, mood, diet etc contributes to chronic pain and how to improve these

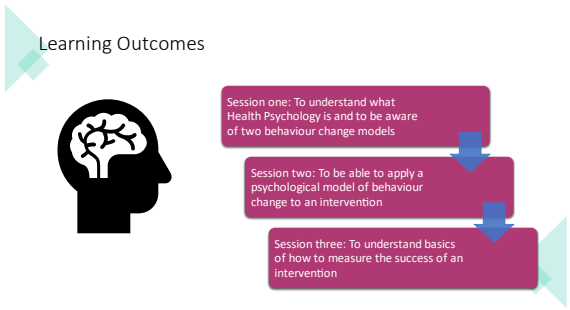
1. More information on other conditions/ simplified models
2. Case studies showing a path of input
3. Slow down in speed of presentation
4. A lot of detailed information to take in. Maybe break down into smaller sections and make interactive
5. Is there any links to short coaching sessions to help get the most out of appointments
6. The session achieved its aims and was well delivered. No improvements required
7. More audience participation discussing our own patients or experience
8. Bigger writing on presentation case studies/ clinical examples
9. Slow down, few more examples
10. Different strategies/ explanations to help a patient understand their chronic pain

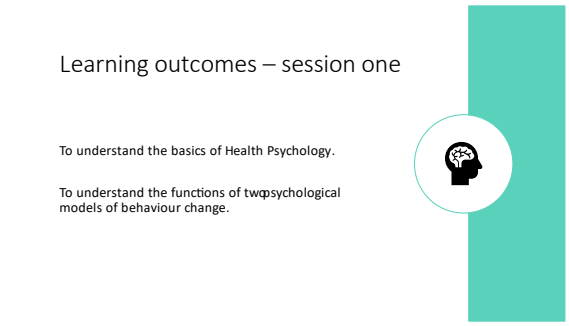
11. This could be applied to different professions rather than being tailored specifically to physiotherapy

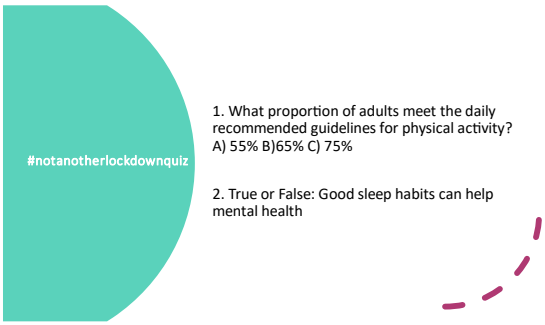
1. Really enjoyed and found it interesting
2. Very clear and interesting
3. Really interesting to see link. Well done and good luck
4. Thank you for a very interesting presentation which was clearly presented
5. Useful session, thank you
6. Really good, well presented
7. Good amount of balance between models/ case studies/ research. Thank you!
8. Very interesting and relevance to practice. Thank you.
9. Well done
10. Well done- great talk!
11. Thank you :)

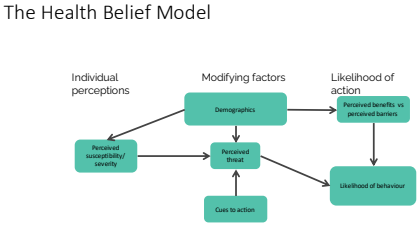
Appendix C

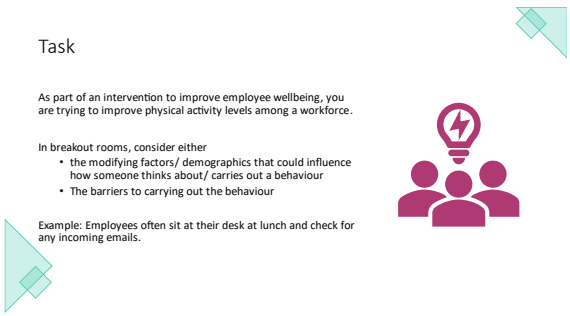
Case two session one slides





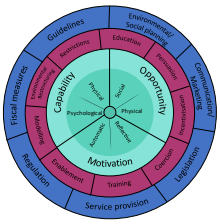






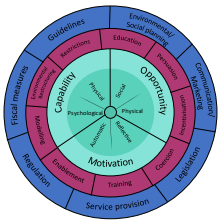
COM-B model

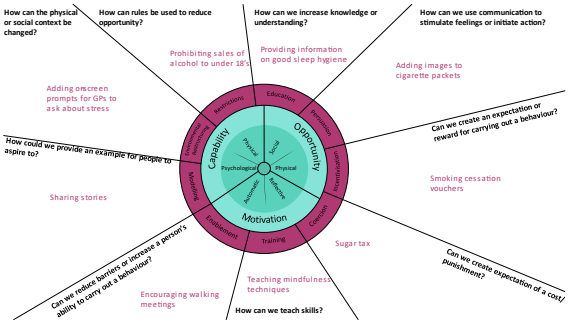
- Result of a study undertaken by 30 researchers in health psychology and implementation science
- Evaluated existing frameworks and created one that covered more functions and behaviour models
- Introduced in 2011

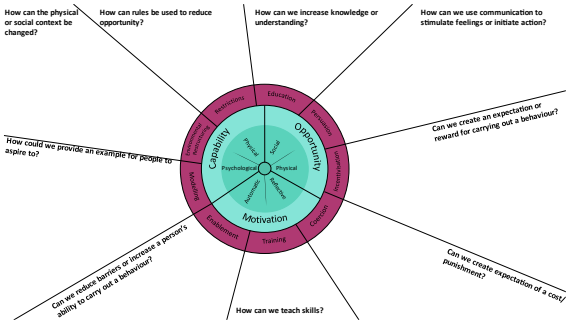


COM-B model

- Inner circle/ hub = sources of behavior that cause and maintain change/ prevent change
- Middle Circle = Intervention Functions
- Outer Circle – policy categories







Next Steps

- Consider how your own service or innovation uses evidence to influence long term behavior change. How can this be strengthened?

Learning outcomes – session one

To understand the basics of Health Psychology.

To understand the functions of two psychological models of behaviour change.

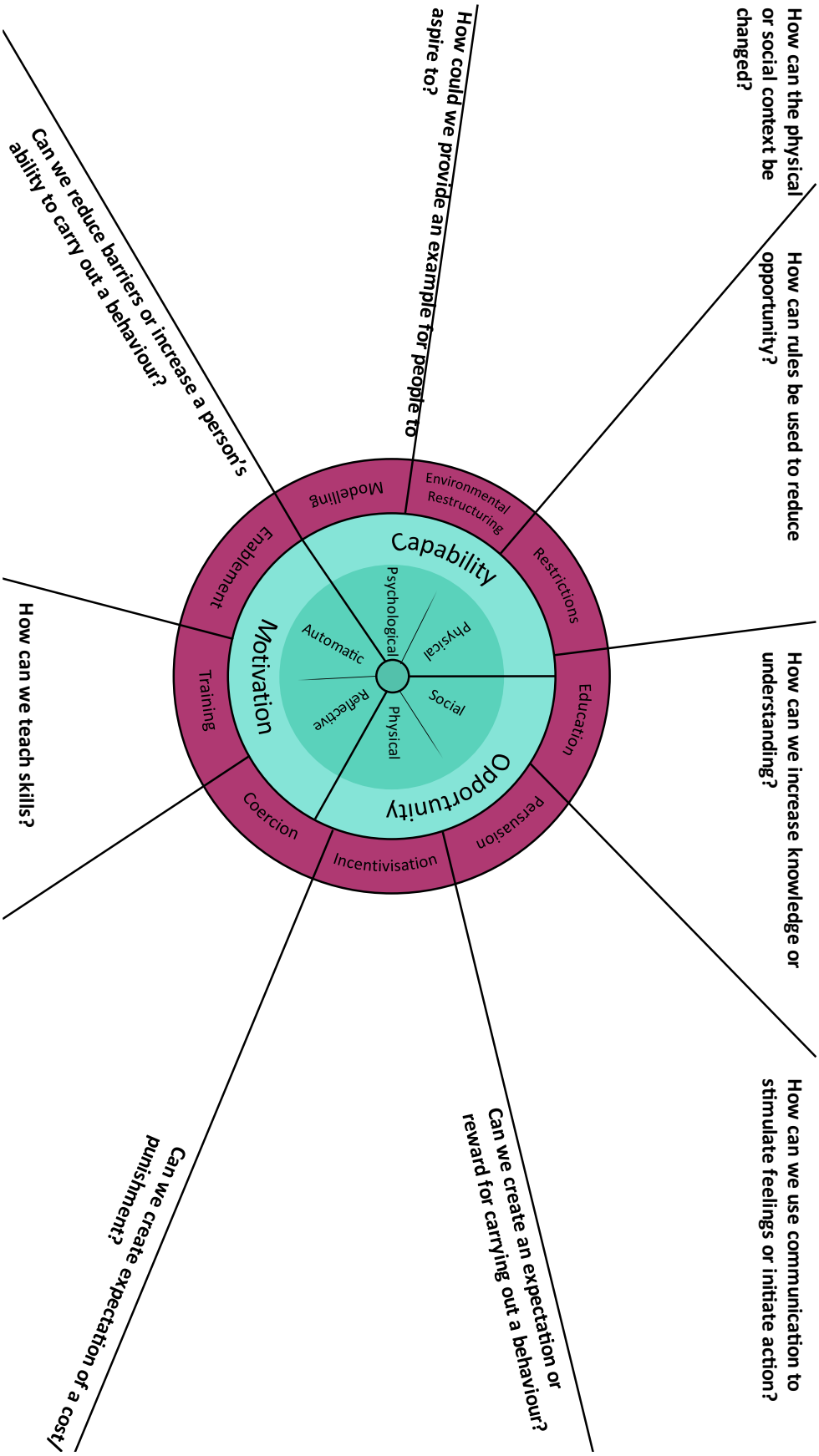
Feedback survey - session one

References

- https://fingertips.phe.org.uk/profile/physical activity/data#page/3/gid/1938132899/pat/15/par/E92000001/ati/6/are/E12000004/iid/93014/age/298/sex/4/cid/4/page options/ovw-do-0_cardo-0
- Mastin, D., Kennedy, L., &Peszka, J. (2018). 0209 The Relationship Between Sleep Hygiene and Positive and Negative Facets of Mental Health. *SLEEP, 41*(Suppl1), A81.
- Michie, S., Van Stralen, M. M., & West, R. (2011). The behaviour change wheel: a new method for characterising and designing behaviour change interventions. *Implementation science, 6*(1), 42.

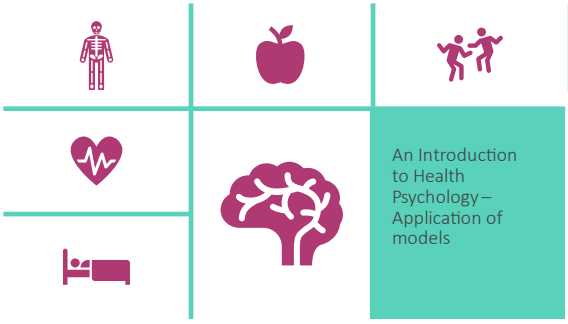
Appendix D

Intervention functions worksheet



Appendix E

Case two, session two slides



Learning Outcomes

Session one: To understand what Health Psychology is and to be aware of two behaviour change models

Session two/three: To be able to apply a psychological model of behaviour change to an intervention

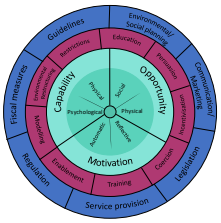
Session three: To understand basics of how to measure the success of an intervention

Learning Outcomes

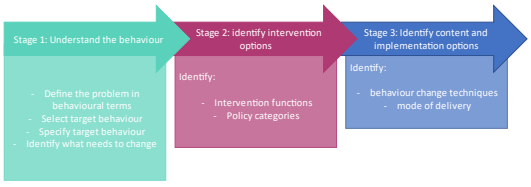
- To understand the first two stages in creating an intervention based on the behaviour change wheel
- To be able to apply the two stages to an example intervention

Recap

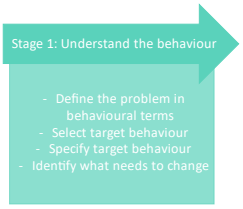
- Inner circle/ hub = sources of behavior that cause and maintain change/ prevent change
- Middle Circle = Intervention Functions
- Outer Circle – policy categories



Understanding the behaviour



Stage 1 – Understand the behaviour



1. Define the problem in behavioural terms

What behaviour?	
Where does this behaviour occur?	
Who is involved in performing the behaviour?	

1. Define the problem in behavioural terms

What behaviour?	Stress management techniques
Where does this behaviour occur?	At home, at work, in public places
Who is involved in performing the behaviour?	Employees

2. Selecting a target behaviour

"Behaviours are part of a system"

2. Selecting a target behaviour

Concentrate intensively on one or two behaviours

Look at:
- Existing Research
- Local knowledge
- Own expertise in working with target audience
- Discussions with stakeholders
- Discussions/ focus groups with target audience

2.1 TEACHING DIARY

2. Selecting a target behaviour

- What is the impact of changing this behaviour?
- How easy is it to change the behaviour?
- Will there be any impact on other behaviours as a result?
- How can I measure changes?

2. Selecting a target behaviour

Potential target behaviours	Impact of behaviour change	Likelihood of changing behaviour	Spillover score (impact on other behaviours)	Measurement score (how easy is it to measure)
Record final target behaviour here:				

Rate as unacceptable, unpromising but worth considering, promising, very promising

2. Selecting a target behaviour

Potential target behaviours	Impact of behaviour change	Likelihood of changing behaviour	Spillover score (impact on other behaviours)	Measurement score (how easy is it to measure)
Increasing mindfulness practice	Promising	Unpromising but worth considering	Very promising	Promising
Increasing physical activity throughout the day	Very promising	Promising	Promising	Promising
Record final target behaviour here: **Increasing physical activity throughout the day**				

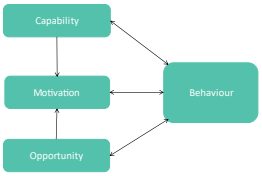
3. Specify target behaviour

STAGE 1: Understand the behaviour

- Define the problem in behavioural terms
- Select target behaviour
- Specify target behaviour
- Identify what needs to change

Who needs to perform thebehaviour - Everyone
What does the person need to do differently? - spend 15-20 minutes walking around work schedule
When will they do it? - Before work/ at lunch time/ after work
Where will they do it? - Outside/ on a treadmill
How often will they do it? - Every working day
With whom will they do it– Alone/ with colleagues/ with family/ with friends

4. Identify what needs to change



COM-B components		What needs to happen for the target behaviour to occur?	Is there a need for change?
Capability	Physical		
	Psychological		
Opportunity	Physical		
	Social		
Motivation	Reflective		
	Automatic		

COM-B components		What needs to happen for the target behaviour to occur?	Is there a need for change?
Capability	Physical	Have the physical capability to walk for 15 minutes	No change needed – no staff have any physical disabilities
	Psychological	Know when is appropriate to take time out to walk	No change needed as this knowledge is sufficient
Opportunity	Physical	Have the time to walk around working hours	Change needed as staff often work through lunch
	Social	See senior staff members changing their behaviour to notice as the norm	Change needed as senior staff add pressure
Motivation	Reflective	Believing that consistent physical activity will reduce stress	No change needed as focus groups identified staff are aware of this
	Automatic	Establish routines and habits for physical activity around working hours	Change needed to establish habit

Stage 2: Identify intervention options

Stage 2: identify intervention options

Identify:

- Intervention functions
- Policy categories

	Education	Persuasion	Incentivisation	Coercion	Training	Restriction	Environmental restructuring	Modelling	Enablement
Physical Capability					■				■
Psychological capability	■				■				■
Physical opportunity					■	■	■		■
Social opportunity						■	■	■	■
Automatic motivation		■	■	■	■		■	■	■
Reflective motivation	■	■	■	■					

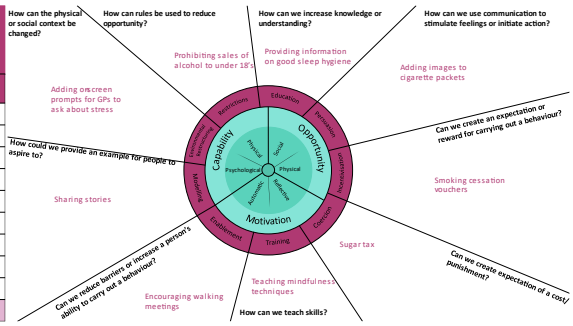
1. Identify intervention functions

A ffordability
P racticability
E ffectiveness (and cost effectiveness)
A cceptability
S ide Effects/ safety
E quity

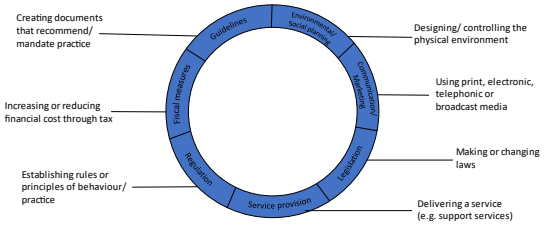
2.1 TEACHING DIARY

1. Identify intervention functions

Intervention Functions	Does this meet the APEASE criteria?
Education	Yes, to some extent
Persuasion	
Incentivisation	
Coercion	Not acceptable to staff
Training	
Restriction	
Environmental Restructuring	
Modelling	
Enablement	
Selected intervention functions:	



2. Policy categories



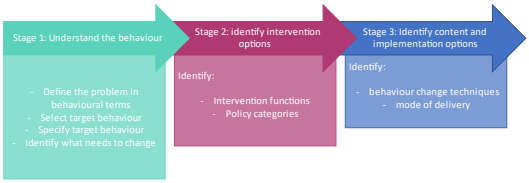
Stage 1: Understand the behaviour

- **Define the problem in behavioural terms**– Stress management in the workplace
- **Select target behaviour**– Increasing physical activity throughout the day
- **Specify target behaviour** – Walking for 15-20 minutes around working hours
- **Identify what needs to change**– Physical and social opportunity and automatic motivation

Stage 2: identify intervention options

Identify:

- **Intervention functions**
- ~~Policy categories~~



Learning outcomes – session one

- To understand the first two stages in creating an intervention based on the behaviour change wheel
- To be able to apply the two stages to an example intervention

The Behaviour Change Wheel - Susan Michie, Lou Atkins and Robert West

Michie, S., Van Stralen, M. M., & West, R. (2011). The behaviour change wheel: a new method for characterising and designing behaviour change interventions. *Implementation science*, *6*(1), 42.

1. Identify intervention functions

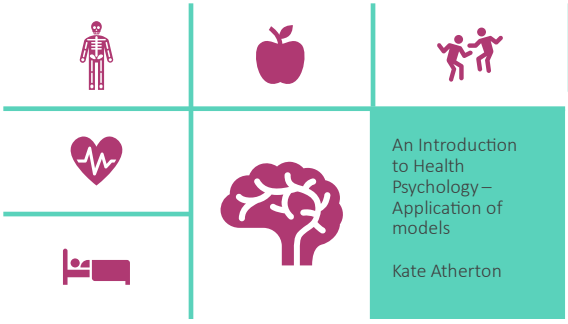
Intervention Functions	COM-B component	Most frequently used BCT's	Does this meet the APEASE criteria?
Training	Physical opportunity Automatic Motivation	Instruction on how to perform a behaviour	Unlikely to be effective
		Feedback on the behaviour	Not practicable to deliver
		Self-monitoring of behaviour	Yes
Modelling	Social opportunity Automatic Motivation	Demonstration of the behaviour	Not relevant
Enablement	Physical opportunity Social opportunity Automatic motivation	Social support	Yes
		Goal setting (behaviour)	Yes
		Goal setting (outcome)	Yes
Selected BCTs: Self-monitoring of behaviour, social support, goal setting (behaviour), goal setting (outcome)			

1. Identify intervention functions

Intervention Functions	COM-B component	Most frequently used BCT's	Does this meet the APEASE criteria?
Training	Physical opportunity Automatic Motivation	Instruction on how to perform a behaviour	
		Feedback on the behaviour	
		Self-monitoring of behaviour	
Modelling	Social opportunity Automatic Motivation	Demonstration of the behaviour	
Enablement	Physical opportunity Social opportunity Automatic motivation	Social support	
		Goal setting (behaviour)	
		Goal setting (outcome)	
Selected BCTs: Self-monitoring of behaviour, social support, goal setting (behaviour), goal setting (outcome)			

Appendix F

Case one, session three slides



Learning Outcomes

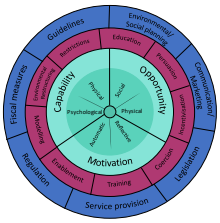
Session one: To understand what Health Psychology is and to be aware of two behaviour change models

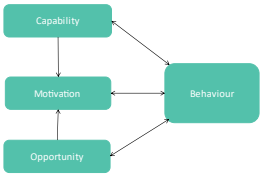
Session two/three: To be able to apply a psychological model of behaviour change to an intervention

Session three: To understand basics of how to measure the success of an intervention

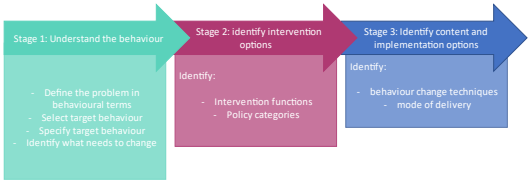
Recap

- Inner circle/ hub = sources of behavior that cause and maintain change/ prevent change
- Middle Circle = Intervention Functions
- Outer Circle – policy categories





Understanding the behaviour



Behaviour Change Techniques

An active component of an intervention designed to change behaviour.

It should be:

- Observable
- Replicable
- Irreducible
- Active within the intervention

Behaviour Change Techniques

PROMPTS/ NUDGES
Introduce something new to remind an individual to carry out the behaviour

GOAL SETTING
Work to identify individual, achievable goals.
Play to strengths

SELF-MONITORING
Help individual to establish a method to help monitor behaviour

DEMONSTRATION OF THE BEHAVIOUR
Show the individual how best to carry out the behaviour
Act as/ create a role model

What behaviour change techniques can you think of?

What have you used in the past?

What has/ hasn't been effective?

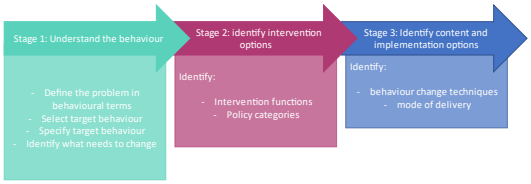
A ffordability
P racticability
E ffectiveness (and cost effectiveness)
A cceptability
S ide Effects/ safety
E quity

Identify Behaviour Change Techniques

Intervention Functions	COM-B component	Most frequently used BCT's	Does this meet the APEASE criteria?
Training	Physical opportunity Automatic Motivation	Instruction on how to perform a behaviour	No- the behaviour is simple and so this wouldn't be effective.
		Feedback on the behaviour	
		Self-monitoring of behaviour	
Modelling	Social opportunity Automatic Motivation	Demonstration of the behaviour	
Enablement	Physical opportunity Social opportunity Automatic motivation	Social support	
		Goal setting (behaviour)	
		Goal setting (outcome)	

Mode of delivery				Does this meet the APEASE criteria?
Face to Face	Individual			
	Group			
Distance	Population level	Broadcast Media	TV	
			Radio	
		Outdoor media	Billboard	
			Poster	
		Print media	Newspaper	
			Leaflet	
		Digital media	internet	
			Mobile app	
	Individual level	Phone	Phone helpline	
			Mobile phone text	
		Individually accessed computer programme		

Understanding the behaviour

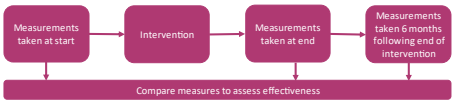


Evaluating an intervention

- Has the intervention had the outcomes you hoped for?
- Useful for finding IF effect was achieved and HOW it was achieved.
- Should be considered before and throughout he process
- Can work backwards to evaluate effectiveness of existing interventions

Evaluating an intervention

- Measure before and after the intervention
- Identify exactly what you will be measuring
- Be aware of:
  - Recall bias
  - Social desirability bias
  - Interacting factors
- Acknowledge limitations

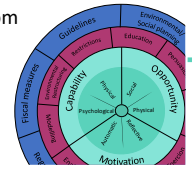


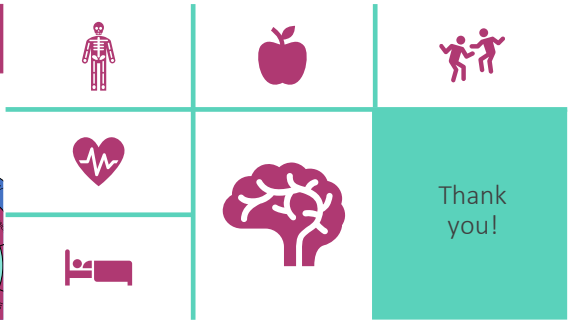
Evaluating an intervention

- Consider the APEASE criteria.
- Make whole intervention person-centred, INCLUDING the evaluation
- When creating measures, look at:

Final Thoughts for the series

- Make your intervention theory based
- Take a person-centred approach
- Consider how evaluation will work from the start
- Always try to APEASE





Appendix G

Session three, worksheet one

Mode of delivery				Does this meet the APEASE criteria?
Face to face	Individual			
	Group			
Distance	Population level	Broadcast media	TV	
			Radio	
		Outdoor media	Billboard	
			Poster	
		Print media	Newspaper	
			Leaflet	
		Digital media	Internet	
			Mobile app	
	Individual level	Phone	Phone helpline	
			Mobile phone text	
		Individually accessed computer programme		

Taken from: Michie, Susan, Lou Atkins, and Robert West. "The behaviour change wheel." *A guide to designing interventions. 1st ed. Great Britain: Silverback Publishing* (2014): 1003-1010.
Full taxonomy with definitions accessed here

Appendix H

Session three, worksheet two

Intervention function	COM-B component	Individual BCTs	Does the BCT meet the APEASE criteria (affordability, practicability, effectiveness/ cost effectiveness, acceptability, side-effects/ safety, equity)?
Education		**Most frequently used BCTs:** **Information about social and environmental consequences** **Information about health consequences** **Feedback on behaviour** **Feedback on outcome(s) of behaviour** **Prompts/ cues** **Self- monitoring of behaviour** Less frequently used BCTs: Biofeedback Self-monitoring of outcome(s) of behaviour Cue signalling reward Satiation Information about antecedents Re-attribution Behavioural experiments Information about emotional consequences Information about others' approval	
Persuasion		**Most frequently used BCTs:** **Credible source** **Information about social and environmental consequences**	

		Information about health consequences **Feedback on behaviour** **Feedback on outcome(s) of the behaviour** Less frequently used BCTs: Biofeedback Re-attribution Focus on past success Verbal persuasion about capability Framing/ reframing Identity associate with changed behaviour Identification of self as role model Information about emotional consequences Salience of consequences Information about others' approval Social comparison	
Incentivisation		**Most frequently used BCTs:** **Feedback on behaviour** **Feedback on outcome(s) of behaviour** **Monitoring of behaviour by others without evidence of feedback** **Monitoring outcome of behaviour by others without evidence of feedback** **Self-monitoring of behaviour** Less frequently used BCTs: Paradoxical instructions Biofeedback Self-monitoring of outcome(s) of behaviour Cue signalling reward Remove aversive stimulus Reward approximation Rewarding completion Situation-specify reward Reward incompatible behaviour Reduce reward frequency	

		Reward alternate behaviour Remove punishment Social reward Material reward Material reward (outcome) Self-reward Material reward Material reward (outcome) Self-reward Non-specific reward Incentive Behavioural contract Commitment Discrepancy between current behaviour and goal Imaginary reward	
Coercion		**Most frequently used BCTs:** **Feedback on behaviour** **Feedback on outcome(s) of behaviour** **Monitoring of behaviour by others without evidence of feedback** **Monitoring outcome of behaviour by others without evidence of feedback** **Self-monitoring of behaviour** Less frequently used BCTs: Biofeedback Self-monitoring of outcome(s) of behaviour Remove access to the reward Punishment Behaviour cost Remove reward Future punishment Behavioural contract Commitment Discrepancy between current behaviour and goal Incompatible beliefs Anticipated regret Imaginary punishment	

Training		**Most frequently used BCTs:** **Demonstration of the behaviour** **Instruction on how to perform a behaviour** **Feedback on the behaviour** **Feedback on outcome(s) of behaviour** **Self-monitoring of behaviour** **Behavioural practice/ rehearsal** Less frequently used BCTs: Biofeedback Self-monitoring of outcome(s) of behaviour Habit formation Habit reversal Graded tasks Behavioural experiments Mental rehearsal of successful performance Self-talk Self-reward	
Restriction		No BCTs linked to this function because they are focused on changing the way that people think feel and react rather than the way the external environment limits their behaviour	
Environmental restructuring		**Most frequently used BCTs:** **Adding objects to the environment** **Prompts/ cues** **Restructuring the physical environment** Less frequently used BCTs: Cue signalling reward Remove access to the reward Remove aversive stimulus Satiation Exposure Associative learning Reduce prompt/ cue Restructuring the social environment	

Modelling		**Most frequently used BCTs:** **Demonstration of the behaviour**	

Taken from: Michie, Susan, Lou Atkins, and Robert West. "The behaviour change wheel." *A guide to designing interventions. 1st ed. Great Britain: Silverback Publishing* (2014): 1003-1010.

Appendix I

BCT taxonomy table

Behaviour change techniques within the behaviour change technique taxonomy		
1. Goals and planning 1.1. Goal setting (behaviour) 1.2. Problem solving 1.3. Goal setting (outcome) 1.4. Action planning 1.5. Review behaviour goal(s) 1.6. Discrepancy between current behaviour and goal 1.7. Review outcome goal(s) 1.8. Behavioural contract 1.9. Commitment **2. Feedback and monitoring** 2.1. Monitoring of behaviour by others without feedback 2.2. Feedback on behaviour 2.3. Self-monitoring of behaviour 2.4. Self- monitoring of outcome(s) of behaviour 2.5. Monitoring of outcome(s) of behaviour without feedback 2.6. Biofeedback 2.7. Feedback of outcome(s) of behaviour **3. Social Support** 3.1. Social support (unspecified) 3.2. Social support (practical) 3.3. Social support (emotional) **4. Shaping knowledge** 4.1. Instruction on how to perform the behaviour 4.2. Information about antecedents 4.3. Re-attribution 4.4. Behavioural experiments **5. Natural consequences**	**6. Comparison of behaviour** 6.1. Demonstration of the behaviour 6.2. Social comparison 6.3. Information about others' approval **7. Associations** 7.1. Prompts/ cues 7.2. Cue signalling reward 7.3. Reduce prompts/ cues 7.4. Remove access to the reward 7.5. Remove aversive stimulus 7.6. Satiation 7.7. Exposure 7.8. Associative learning **8. Repetition and substitution** 8.1. Behavioural practice/ rehearsal 8.2. Behaviour substitution 8.3. Habit formation 8.4. Habit reversal 8.5. Overcorrection 8.6. Generalisation of target behaviour 8.7. Graded tasks **9. Comparison of outcomes** 9.1. Credible source 9.2. Pros and cons 9.3. Comparative imagining of future outcomes **10. Reward and threat** 10.1. Material incentive (behaviour) 10.2. Material reward (behaviour)	**12. Antecedents** 12.1. Restructuring the physical environment 12.2. Restructuring the social environment 12.3. Avoidance/ reducing exposure to cues for the behaviour 12.4. Distraction 12.5. Adding objects to the environment 12.6. Body changes **13. Identity** 13.1. Identification of self as role model 13.2. Framing/ reframing 13.3. Incompatible beliefs 13.4. Valued self- identity 13.5. Identity associated with changed behaviour **14. Scheduled consequences** 14.1. Behaviour cost 14.2. Punishment 14.3. Remove reward 14.4. Reward approximation 14.5. Rewarding completion 14.6. Situation-specific reward 14.7. Reward incompatible behaviour 14.8. Reward alternative behaviour 14.9. Reduce reward frequency 14.10. Remove punishment **15. Self-belief** 15.1. Verbal persuasion about capability

5.1. Information about health consequences 5.2. Salience of consequences 5.3. Information about social and environmental consequences 5.4. Monitoring of emotional consequences 5.5. Anticipated regret 5.6. Information about emotional consequences	10.3. Non-specific reward 10.4. Social reward 10.5. Social incentive 10.6. Non-specific incentive 10.7. Self-incentive 10.8. Incentive (outcome) 10.9. Self-reward 10.10. Reward (outcome) 10.11. Future punishment **11. Regulation** 11.1. Pharmacological support 11.2. Reduce negative emotions 11.3. Conserving mental resources 11.4. Paradoxical instructions	15.2. Mental rehearsal of successful performance 15.3. Focus on past success 15.4. Self-talk **16. Covert learning** 16.1. Imaginary punishment 16.2. Imaginary reward 16.3. Vicarious consequences

Taken from: Michie, Susan, Lou Atkins, and Robert West. "The behaviour change wheel." *A guide to designing interventions. 1st ed. Great Britain: Silverback Publishing* (2014): 1003-1010.

Appendix J

Case two qualitative evaluation

19. Most of it was a reminder of stuff Ive done before but Id not really thought of a lot of it in terms of actually develop and communicate and evaluate our new offer.
20. Evaluating the intervention - this is something I had been "making up" using common sense and personal experience.
21. That there are models of behaviour change which are useful for my work.
22. Intrigued to learn more about recall bias and social desirability bias
23. Benefits of intervention in workplace.

Will you do anything differently as a result of attending?

1. Reflect on my learning and use models presented.
2. I will research behaviour change technique and try and understand them better

3. Yes this is something that we can use to analyse, develop and evaluate our work
4. More knowledge of how to help others to create a new change.
5. Use the Apease tool.

1. HOW to monitor and evaluate. Are there specific systems to help with this or is it a matter of an excel spreadsheet and then interpreting data and typing each individual one into a report for each individual and then collating the data of a whole project or project period on excel and then writing more reports?
2. More time to talk about the APEASE
3. There has been so much valuable information to take in - it's all been really interesting.
4. Unsure sorry

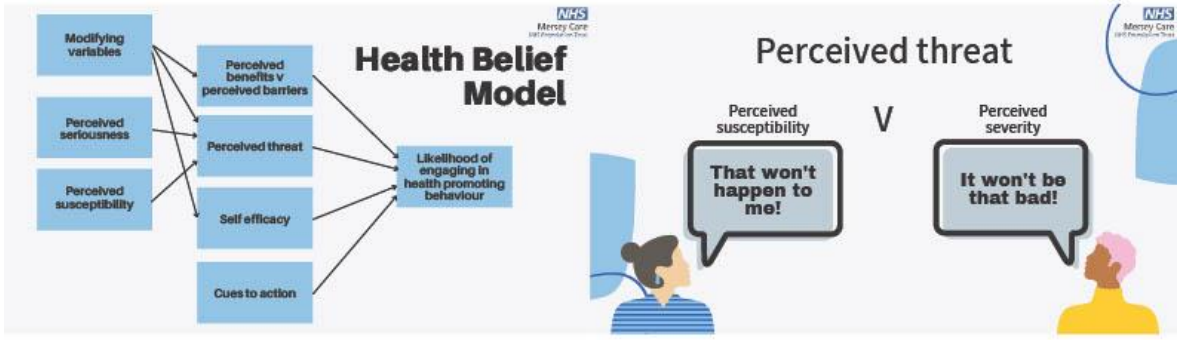
1. Some sort of handout with links to resources
2. Just having more time to take it all in. There isn’t anything you can improve
3. Unsure

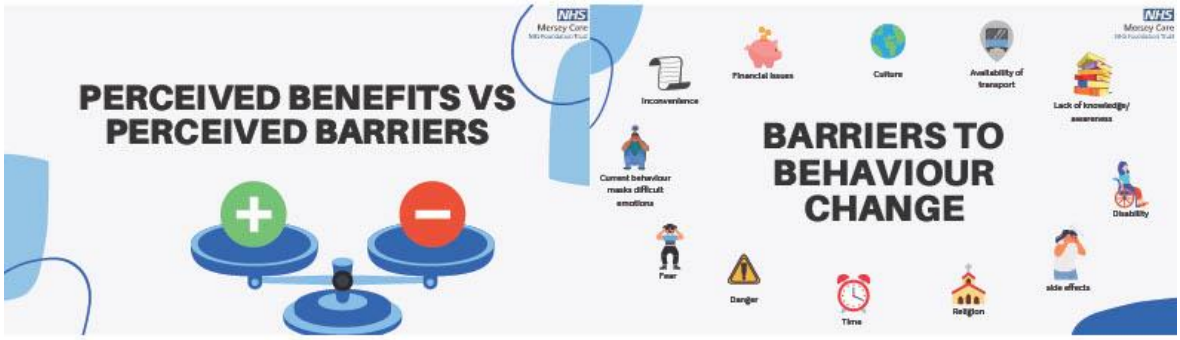
Any other comments?

1. Thankyou
2. Thank you I am really learning a lot and apologies for not putting enough time in between sessions to do the necessary reflection.
3. Thank you - it's all been very helpful and I look forward to spending more time looking at, reflecting on and using the resources.
4. Thank you Kate

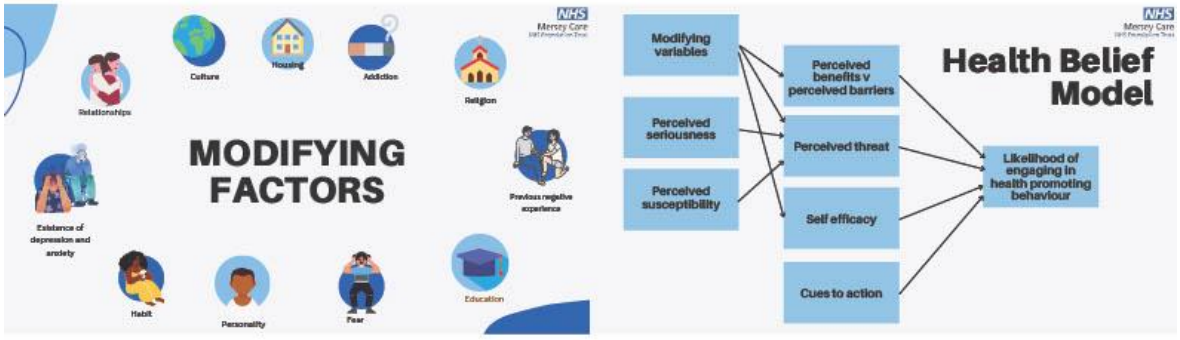
Appendix K

Case four slides



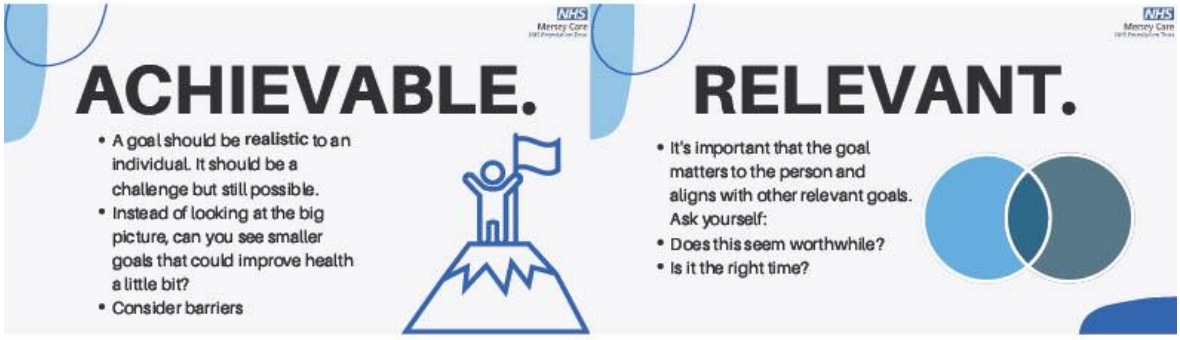

PERCEIVED BENEFITS VS PERCEIVED BARRIERS
BARRIERS TO BEHAVIOUR CHANGE
Inconvenience
Financial issues
Culture
Availability of transport
Lack of knowledge/ awareness
Current behaviour masks difficult emotions
Disability
Fear
Danger
Time
Religion
side effects


CUES TO ACTION
The stimulus needed to trigger the decision making process to engage in a health behaviour.
Internal (chest pains, sickness, a diagnosis)
External (Advice from others (professionals), family illness, news, reading a piece of information, falling out with someone)
I can't do it
SELF EFFICACY
Having faith in one's ability to make a change can have a big impact on one's actual ability to do it.

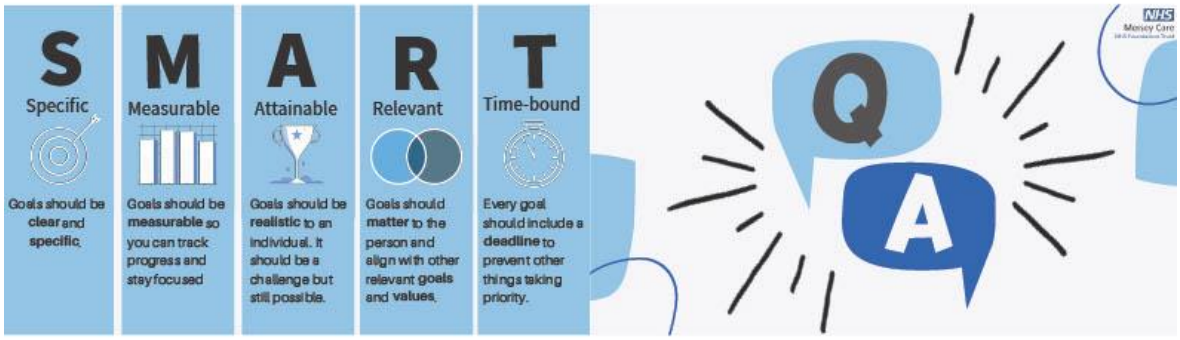

MODIFYING FACTORS
Relationships
Culture
Housing
Addiction
Religion
Existance of depression and anxiety
Previous negative experience
Habit
Personality
Fear
Education
Health Belief Model
Modifying variables
Perceived seriousness
Perceived susceptibility
Perceived benefits v perceived barriers
Perceived threat
Self efficacy
Cues to action
Likelihood of engaging in health promoting behaviour

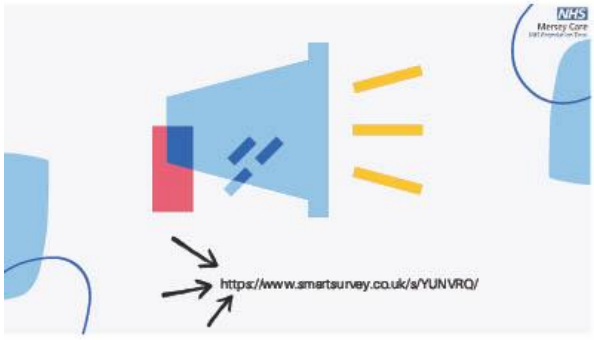

SMART Goals
Specific
Measurable
Attainable
Relevant
Time bound
S
Specific
Goals should be clear and specific.
M
Measurable
Goals should be measurable so you can track progress and stay focused
A
Attainable
Goals should be realistic to an individual. It should be a challenge but still possible.
R
Relevant
Goals should matter to the person and align with other relevant goals and values.
T
Time-bound
Every goal should include a deadline to prevent other things taking priority.


SPECIFIC.
What do I want to do?
Who would be involved?
Where do I need to do it?
How often do I need to do it?
Do I need anything to do it?
MEASURABLE.
Goals should be measurable to go so you can track progress and stay focused.
Can you track changes over time?
If you make changes, is there a way you can quantify it?


ACHIEVABLE.
A goal should be realistic to an individual. It should be a challenge but still possible.
Instead of looking at the big picture, can you see smaller goals that could improve health a little bit?
Consider barriers
RELEVANT.
It's important that the goal matters to the person and aligns with other relevant goals. Ask yourself:
Does this seem worthwhile?
Is it the right time?


TIME BOUND.
• Every goal should include a deadline to prevent other things taking priority.
• What can you do today?
• What can you aim for in a month?
• What can you aim for in 6 months?
Exercise
Helena is a self-confessed couch potato. She wakes up every morning, goes to her 4 hour shift as a receptionist and comes home to spend the rest of the day in front of the TV, ignoring texts from friends. She knows that she needs to get up and do more exercise like she used to when she was a runner, but she just doesn't have the motivation to move after she sits down on the sofa. She's noticed her mood is getting worse and lately she's been feeling out of breath just walking up the stairs. She was worried about this and went to her doctor who ruled out anything serious but recommended that she try being a bit more physically active in the day. Helena wants to do this but is struggling to be motivated. She says to herself "tomorrow I will go for a big run but it's too late today" and sits back in front of the TV.


S
Specific
Goals should be clear and specific.
M
Measurable
Goals should be measurable so you can track progress and stay focused
A
Attainable
Goals should be realistic to an individual. It should be a challenge but still possible.
R
Relevant
Goals should matter to the person and align with other relevant goals and values.
T
Time-bound
Every goal should include a deadline to prevent other things taking priority.
Q
A


https://www.smartsurvey.co.uk/s/YUNVRQ/

Appendix K

Case five video links

Video One – Why do we need fruit and veg and what is a portion size?

https://youtu.be/MFPImtCyLzM

Video Two – Setting SMART goals and tracking habits

https://youtu.be/FunLzVth38M

2.2 Teaching and Training Case Study

Learning outcomes achieved:

4. Demonstrate the systematic acquisition and understanding of teaching skills and professional practice.

5. Plan, deliver and critically evaluate a training programme for the development of new knowledge, applications or understanding in Health Psychology.

6. Carry out teaching to contribute to the development of new knowledge, applications or understandings of Health Psychology.

2.2 TEACHING AND TRAINING CASE STUDY

Overview

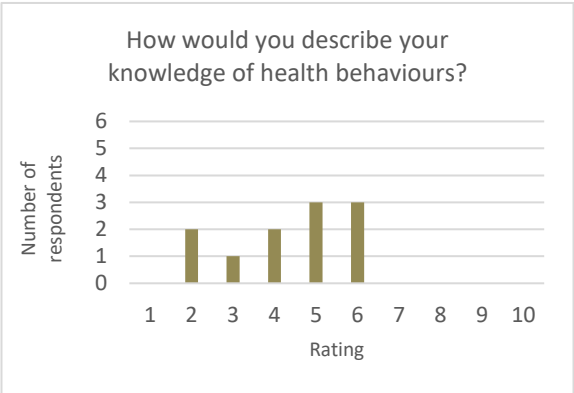
This Case Study describes and evaluates a five-part teaching series completed in fulfilment of the Teaching/ Training competency. The series was delivered over five consecutive weeks between 9th October 2020 and 6th November 2020.

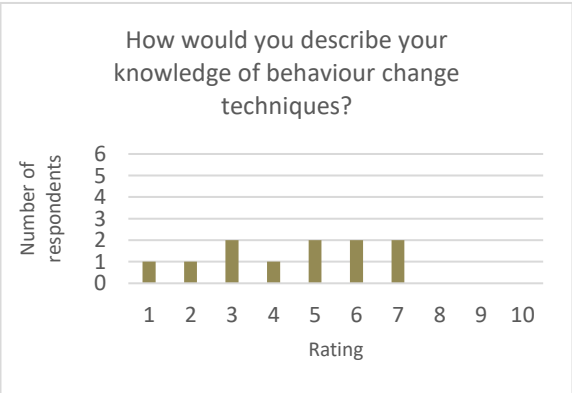
Finding client group and assessing training needs

I had previously provided a short teaching series as part of the Innovation Agency's coaching programme. The Innovation Agency is an Academic Health Science Network for the North West Coast and acts as an "innovation arm of the NHS " (Innovation Agency, 2020). After delivery of the first session, which focused on an introduction to behaviour change for innovators, I was approached by the course facilitator to provide a similar series to their own staff as part of a consultancy agreement.

I noticed that I could turn this opportunity into a bigger series and requested that I provide this. Due to time restraints, I suggested four face-to-face sessions and one pre-recorded session, spaced weekly. The contract was drawn up and agreed (see Consultancy case study). Due to the constraints provided by lockdown, it was agreed that face-to-face sessions were to be provided via Zoom.

By way of background, the client group were employees of the Innovation Agency. Job roles included Project and Programme Managers, Patient Involvement and Engagement, Head of Coaching, Engagement and Events Lead and a Clinical Champion/ Physiotherapist. A person's existing knowledge is an important aspect of initiating the learning process (Taylor & Hamdy, 2013) and it was important to understand where the students stood on the subject. I therefore shared a questionnaire which asked students two initial questions to self-evaluate their own knowledge: "How would you describe your knowledge of health behaviours?" and "How would you describe your knowledge of behaviour change techniques?". Though this question was primarily to gauge the level at which to pitch my sessions, I also thought forward to evaluation and decided to ask the same questions upon completion to understand if any learning had taken place. Outcomes for the two questions can be seen below (where 1 = No knowledge, and 10= I am an expert):





Students were asked what they were hoping to gain from the sessions and if there was anything specifically that they would like to learn. Students generally wanted to understand behaviour change

and how this could be applied to their role in supporting projects, though there were some more specific scenarios (see Appendix A for full responses).

Planning the series

I built the series based on the information given by the client, the content of the previous series and responses received from students. I was asked to produce learning outcomes prior to delivery of the sessions, to which I produced the following:

Learning Outcomes

1. Introduction to Health Psychology

- To understand what Health Psychology is and where it is used.
- To know what a health behaviour is.
- To understand the barriers to carrying out a health behaviour including how socioeconomic differences can impact

2. Introduction to models of behaviour change

- To understand the basic mechanisms of 2-3 models of behaviour change

3. COM-B behaviour change wheel

- To understand facets of the behaviour change wheel
- To be able to apply elements to real life applications

4. Applying the COM-B model to an intervention

- To be able to create an intervention based on facets of the behaviour change wheel

5. Evaluating the effectiveness of an intervention (provided as a pre-recorded video)

- To be able to apply evaluative measures to understand whether an intervention is effective

It was acknowledged that the learning outcomes were an initial draft and that they could change slightly once I started to build and deliver the series. I chose to produce the sessions alongside delivery so that any discussions and my own sense of the group's understanding of the materials could be factored into the next session, to personalise the series. Looking back on this, though it made the period of delivery much busier, it helped me to personalise the sessions to the cohort. I do understand that this isn't always possible and that this means I can't use this content for a different cohort, however, the skeleton of the sessions is transferrable.

Initial Research

I started by recapping doctorate training sessions and looking at teaching theory. Prior to the previous teaching series, I had sat down with the course facilitator who is a qualified teacher. She had explained some teaching techniques and my understanding from this session was that anything I

produce should include a level of interactivity. I had done this in the previous series but still felt that I was talking "at" the cohort so knew I needed to do more. I also thought back to times in which I have conducted engagement sessions as part of my job role and felt that the more successful sessions are those in which I have asked questions and fostered discussion, rather than just run through details of the project. Finally, I thought about my own learning experiences in the past. I prefer more interactive sessions with applications to real life situations, and often find I don't come away with much learning from lecture-style experiences. However, I am mindful that people learn in different ways (Fleming & Mills, 1992; Honey & Mumford, 1989; Kolb, 1993) and so I wanted to include a mix of talking, practical tasks and discussion.

Learning Theory

The theory of andragogy suggests there are six key principles that influence adult learning (Knowles, Holton Iii, & Swanson, 2005). I considered each principle, how this could impact on students' learning throughout the series and how I could address any barriers:

- **The need-to-know** – Adults need to know why they need to learn something. Students should be made aware of why the content is useful to them both prior to and during the sessions. A short paragraph detailing the benefits of learning about behaviour change and what it can enable was requested and provided as below:

> Learning about health psychology and behaviour change can help us to understand the underlying factors that might lead a person to behave in a certain way. If we understand these mechanisms, we can create better interventions that enable long term change and we can consider how to address disparities and inequalities. Behaviour change can be applied to a huge number of health outcomes, a few of which I've listed below:
>
> - Public health outcomes (including weight management, smoking cessation, and other health promoting behaviours)
> - Management of long-term conditions
> - Pain management
> - Stress reduction

- **Self-concept** – Adults have a need to be seen by others as being capable of self-direction. Effort should be made to foster a self-directed learning environment through regular feedback and discussion as well as requests for future learning.
- **Previous experiences and knowledge** – Adults have a range of experiences and teaching techniques should reflect this by using discussion and problem solving. Care should be taken to challenge opinions and not to devalue experience but instead build on this.
- **Readiness to learn** – Adults are more likely to be ready to learn. From the questionnaire, most students are ready to learn about behaviour change.

- **Orientation to learning** – Adults are motivated to learn due to the perception that the learning will help them in real-life situations. They learn best when they are presented in the right context. Examples and tasks should be used. regularly to show how to apply the knowledge to concepts that are familiar to them.
- **Motivation** – Adults are likely to be intrinsically motivated but this motivation can be met with barriers such as negative self-concept, inaccessibility of opportunities and time constraints. Time constraints specifically were identified as a barrier when arranging the sessions so care should be taken to ensure all content is useful.

I also used Kolb's experiential learning cycle (Kolb, 1984) to provide structure to the sessions. In fostering adequate reflection of both previous experiences and the application of new knowledge, experiential learning theory suggests new knowledge can be developed. As it was clear from the questionnaire that knowledge was low, I knew that sessions would include an aspect of lecture-style presentation to introduce the subject and key themes, particularly when introducing any behavioural models.

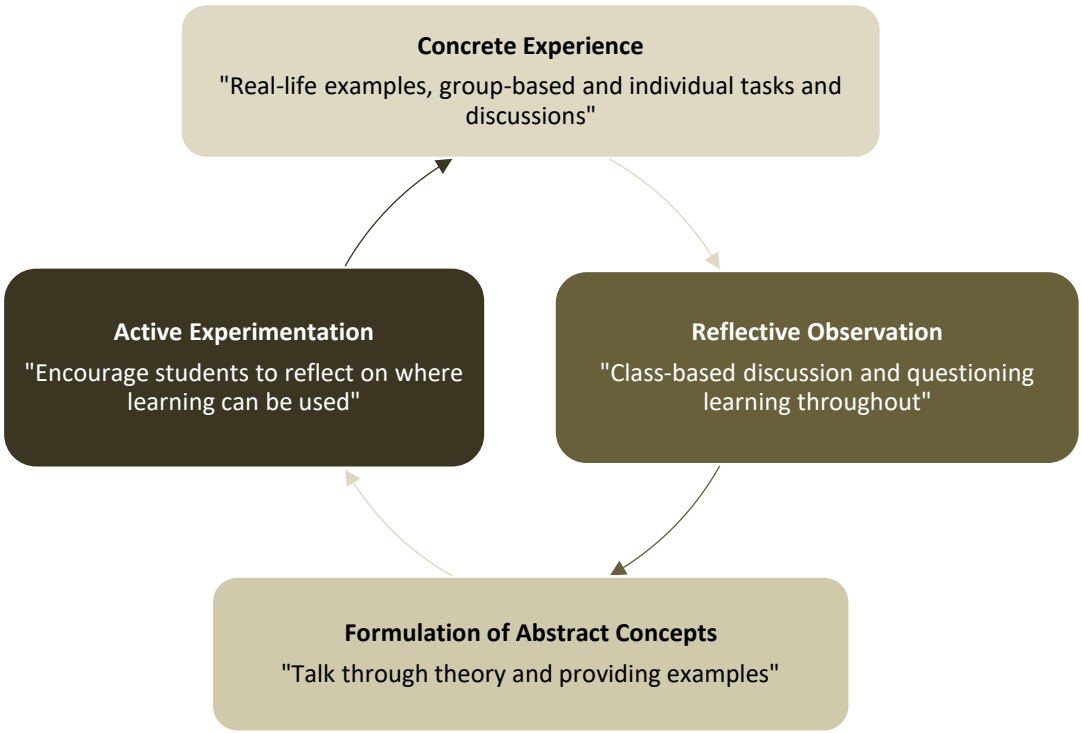


Figure 3. Kolb's experiential learning cycle (Kolb, 1984), including summary of how each stage was implicated into session planning.

Firstly, I decided that all sessions would use relatable examples and would also include an element of individual or small-group-based tasks. This would foster discussion of personal experiences and allow for a self-directed learning environment. It would also take into account that quieter voices could be heard, allowing for all students to input their own experiences into the session.

Secondly, I would foster class-based discussion. This would introduce a second level of reflective observation and it would reinforce how the information could be applied to different experiences. I

would use questions where possible to encourage reflection to take place within the group and guide them in the right direction where applicable.

Thirdly, as before, I would ensure a mix of lecture-style presentation both before and after tasks, to provide context and to reinforce the "need to know". Effort would be made to keep these as short as possible, whilst considering the amount of information that was to be relayed.

Finally, I would encourage active experimentation through the suggestion of further reading, use of case studies and application of knowledge to their own challenges.

Online learning

Another important factor to consider was that sessions could only be provided online. I identified several barriers and facilitators:

Facilitators	Barriers
Breakout rooms can facilitate group-based tasks	Inability to easily provide visual and tactile learning aids, such as sticky notes.
Annotate function allows facilitator to "write on a board" and allows multiple students to contribute to a task.	Inability to see all learners at once due to limitations provided by video conferencing software.
No paper and physical handouts, saving resources	Poor internet connectivity and lack of suitable technology
Ability to record sessions (with permission) to upload for those unable to attend and for future reflection	
Ability to have more notes – this could be both a pro and a con as it could benefit what the facilitator can remember but it could also make the sessions too structured and robotic	

Table 1. Barriers and facilitators to learning in an online environment

Building and delivering the series

As sessions were built and adapted alongside delivery, outcomes of discussions and learning experiences could be reflected in future sessions. Learning outcomes were explained at the start of each session and recapped. Learning outcomes broadly remained similar but were modified for sessions three to five due to time constraints and the nature of content. Final learning outcomes and content design and delivery are explained below. Slides from each session with links to video recordings can be found in Appendices B-G.

Session One – Introduction to Health Psychology

- To understand what Health Psychology is and where it is used.
- To know what a health behaviour is.

- To understand some barriers and facilitators to carrying out a health behaviour including how barriers including socioeconomic differences can impact.

Session one started by defining Health Psychology and where you might find a Health Psychologist in practice. From experience, health psychology is still little-known, so I thought it important to provide this. I wanted to establish previous experiences and knowledge and see how the group worked together so set a task to note known heath behaviours together. It was clear that there was some initial understanding of what constituted a health behaviour, and I was pleasantly surprised at how interactive the group was. From experience, it can sometimes be challenging to get most members of the group to speak up in group-based activity and I think that by allowing students to use the 'annotate' function, they could answer anonymously. This could have negated any worries of being seen as less knowledgeable and for me, this function is definitely a strength of online learning.

Figure 3. Outcomes of group-based task

This session also covered barriers and facilitators to health behaviours, including a focus on socioeconomic differences, adverse childhood experiences and personality. This was to provide a base in which to build information and knowledge that would ultimately be referred to throughout the rest of the series.

A realisation from this session was that I had failed to account for lateness, introductions and general chat. I had planned a one-hour session, including only lecture style delivery and three group-based tasks. I allowed some time for students to take a personality test in order to make the content more relatable. This was met positively and led to a lot more discussion than I had anticipated and I was also faced with some technical difficulties. This meant that the lecture-style parts of the session felt extremely rushed, particularly near the end, and I ended up negating a group-based task encouraging active experimentation in favour for fast-paced information delivery. Though I did explain the task and suggest that students took the time away from the session to reflect, this, to me, was unacceptable. I therefore modified the following sessions, planning for around 40-45 minutes for delivery and allowing more time for discussion.

Session Two – Introduction to models of behaviour change

To understand the basics of three theories of behaviour change:

- The Health Belief Model
- Self-determination theory
- COM-B Model

Session two built on session one by introducing a few models of behaviour change briefly. I was initially going to introduce the Health Belief Model (Rosenstock, 1974), Self-determination Theory (Deci & Ryan, 2008), the COM-B model (Michie, Van Stralen, & West, 2011) and the Theory of Planned Behaviour (Ajzen, 1991), but as I started building the sessions this felt too much, especially with the reduced time. I chose to remove the Theory of Planned Behaviour as it was a model that was less familiar to me than the others and it consisted of more layers so would have required more time.

I was nervous for this session as I had focused so much on how information-heavy the first session was. I was concerned about drop out because of this. However, I recognised this as an opportunity to improve. To ensure I had prepared with enough time and that there were no obvious questions or opportunities for discussion that I had not identified, I delivered the session to my partner who does not come from a health or psychology background.

For the session itself, I ran through each theory by introducing the concept with the basic model, then explaining further using relatable examples (see figures below) to support orientation to learning. This was also something that I had learned would be useful from experience. Due to time constraints, I didn't include a task for self-determination theory but I did refer students to further reading if they were interested in learning more.

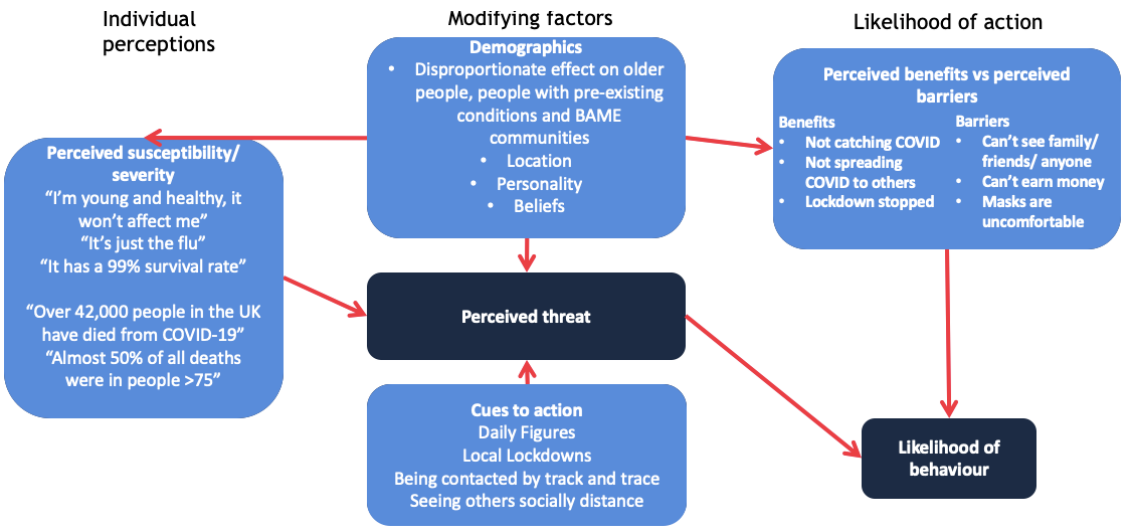


Figure 4. Applying the Health Belief Model to social distancing during the coronavirus pandemic

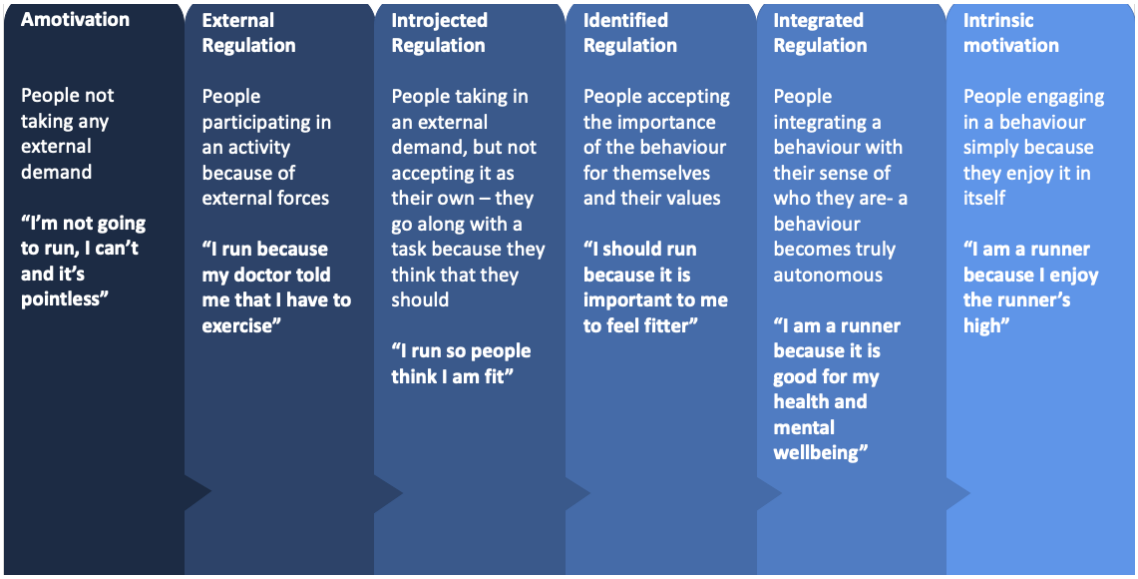


Figure 5. Explaining the spectrum of motivation using the example of running

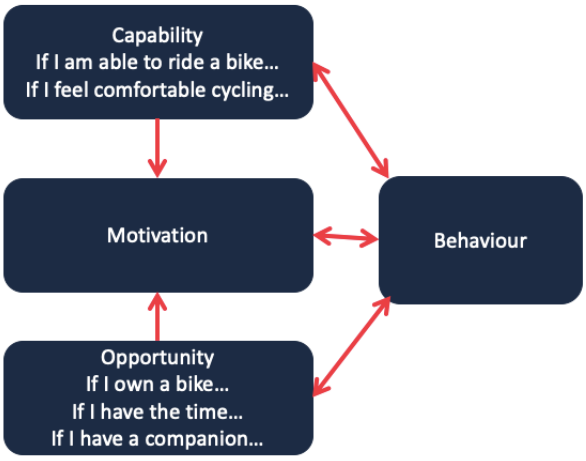


Figure 6. Applying the COM-B model to riding a bike

This was also the first session in which I used breakout rooms to encourage smaller group discussion. This task involved reflection on how the Health Belief Model could be applied to different circumstances and I found it interesting and rewarding that students were referring to differences discussed in the previous session. I found that breakout rooms worked well, but students needed a little more time as not all managed to run through the model.

The second task involved discussing where they had seen successful examples of different intervention functions in real life events and interventions. I decided to do this task as a whole group, annotating as answers were discussed, but it turned into more of a discussion on why it had been used successfully instead of how. I saw this as an opportunity to foster a self-directed learning environment and didn't redirect this back to the initial task. I think this is an example of why lesson planning shouldn't be to a strict schedule, especially within a group of adults with knowledge and previous experience.

I ran out of time again, rushing the final couple of slides slightly. I understood that I still needed to improve on the balance between lecturing and interactive teaching but, again, I needed to

introduce three new concepts so it was important to talk more. I think if I had a chance to re-plan and re-deliver session three, I would have either split it into separate sessions or removed another theory to allow more time for reflection and discussion whilst remaining in time limits.

Session Three – COM-B model session one

- To understand and identify a target behaviour using the COM-B model.
- To identify suitable intervention functions to move forward.

Session three originally aimed to introduce the COM-B model in more detail. When I started to create the session I realised that the process of creating an intervention was too large for one session so I modified the learning outcomes of sessions three and four to include application of the intervention as a two-part series. This didn't move away from the original learning outcomes much but instead gave some more structure to the sessions.

The session started with a brief recap of the model from the previous week followed by an introduction to the APEASE criteria (Affordability, Practicability, Effectiveness and cost effectiveness, Acceptability, Side effects/ safety and Equity). I chose to introduce these criteria earlier as I felt that they needed to be considered at every stage, particularly for the cohort, consisting mainly of Project Managers overseeing innovations into the NHS.

The rest of the session covered the first two stages of the model, leaving stage three to its own session. I did this as I knew that the group wanted to understand more about behaviour change techniques specifically from the initial questionnaire and because they can be used more briefly where time is of issue.

As the use of annotation in the first session provoked positive discussion, I chose to run the first task as one group. The task itself didn't provoke much out-loud discussion but all students took part, coming up with a number of suggestions. I explained the difference between deficits leading to the behaviours and the behaviours themselves and verbally checked their understanding to confirm this.

Figure 7. Outcome of group-based task

As I moved through each stage, there was some valuable reflection from one of the students who wanted to apply the model to effect system change on behaviours that weren't related to health. Though it didn't evoke discussion through the rest of the group, it felt beneficial to discuss this.

The second task of the session asked the group to identify deficits in capability, opportunity and motivation. To get around the issue of time constraints hampering open discussion in breakout rooms as identified previously, I split the group into three and assigned each group different components which I think worked well. However- as they focused mainly on one aspect, they didn't always consider the others and whether their own suggestions could apply elsewhere. Despite this, the group discussion was a chance for more reflective observation which solidified where each suggestion could sit. I used annotation to turn the screen into a whiteboard so that everything could be seen clearly as we moved through the task.

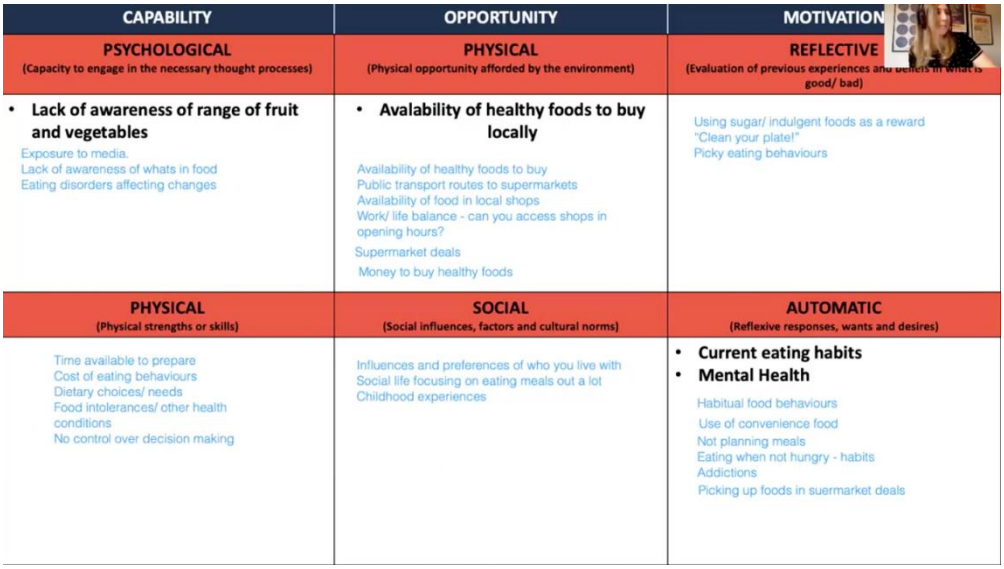


Figure 8. outcome of breakout room task using annotation

Completion of this task took longer than I had allocated time for and I ran out of time to cover all of the learning outcomes of the session. However, as the group was engaged in relevant conversation, it felt wrong to move on to rush so I suggested that this be covered in the fourth session. I asked for suggestions of specific components to address in the following session to make it more relevant and self-directed to the group and psychological capability was identified at this point.

Session Four – COM-B model session two

- To identify suitable intervention functions and policy categories for an intervention.
- To understand and identify suitable behaviour change techniques.
- To understand and identify a suitable mode of delivery.

Planning session four was complicated as I had to squeeze in the delivery of content on intervention functions to make up for time lost in the previous week. As the session relied on the outcome of the previous week's task, I reintroduced what we had discussed initially. I identified three deficits, including one within psychological capability, to move forward.

I continued to use the deficits and real-life examples to explain concepts introduced throughout stages two and three of the process but this session included a lot more talking than I would have liked. I think if I had a longer or extra session, I would have been able to spend more time on practical aspects. I also think that this stage showed flaws in online learning, as in a face-to-face session I would have used worksheets and less text-heavy slides (see Figure 9).

1. Identify intervention functions

- Lack of knowledge of importance of eating fruit/ veg
- Lack of time to prepare healthy food
- Poor eating habits

Intervention Functions	COM-B component	Policy categories	Does this meet the APEASE criteria?
Education	Psychological capability (knowledge of importance of fruit and veg intake)	Communication/ marketing	Yes
		Guidelines	Yes
		Regulation	Not practicable for this target group
		Legislation	Not practicable for this target group
		Service Provision	Not suitable for this component
Training	Automatic Motivation (bad habits)	Guidelines	Yes
		Fiscal Measures	Not practicable for this target group
		Regulation	Not practicable for this target group
		Legislation	Not practicable for this target group
		Service Provision	Yes
Modelling	Automatic motivation (bad habits)	Communication/ marketing	Yes
		Service provision	Not in this context
Enablement	Psychological Capability (knowledge of importance of fruit and veg intake) Automatic Motivation (habits) Physical Opportunity (lack of time)	Guidelines	Yes
		Fiscal Measures	Not practicable for this target group
		Regulation	Not practicable for this target group
		Legislation	Not practicable for this target group
		Environmental/ social planning	Yes
		Service Provision	Yes
Selected policy categories: Communication/ marketing, guidelines, service provision			

Figure 9. Working through a worksheet- an example of a text-heavy slide.

The use of matrices and worksheets received some negative feedback, with one participant saying that they were struggling to keep up, though they did say that they found the content relatable to what they were currently working on (this participant was absent for the two previous sessions). Providing worksheets before was something I had considered, but from a previous teaching series

in which I had done the same, when I brought up the worksheet the students hadn't read the email and so hadn't brought the sheets along. Potentially in the future it could be something that I introduce at the start, advising students to look out for worksheets, but I would also have to consider either availability of printing facilities or the difficulty of flipping between screens. I did, however, provide a breakdown of behaviour change techniques (see Appendix H) which I shared mid-session.

Though session four wasn't the final session, as it was the last face-to-face session and the last on the COM-B model, I provided a summary of the previous sessions and asked if there were any questions on the series to date. Some students wanted more information for them to research further in their own time which was valuable to me as it meant that I had managed to engage them enough to want them to know more. There was also reflective observation at the end within the group around how behaviour change fits within their own work and within culture change. I opted to send an email after session five with links to all sessions, useful worksheets and tables and further reading (see Appendices I-L)

Session Five - Evaluating the effectiveness of an intervention (provided as a pre-recorded video)

- To understand the concept and domains of the Theoretical Domains Framework.
- To understand methods to evaluate an intervention.
- To understand what can influence reliability of an evaluation.

The final session was provided as a pre-recorded video. I added the Theoretical Domains Framework to the session to complement the COM-B model as an optional step should the students want to understand more. The framework was introduced and domains were explained using an example that was used in previous sessions:

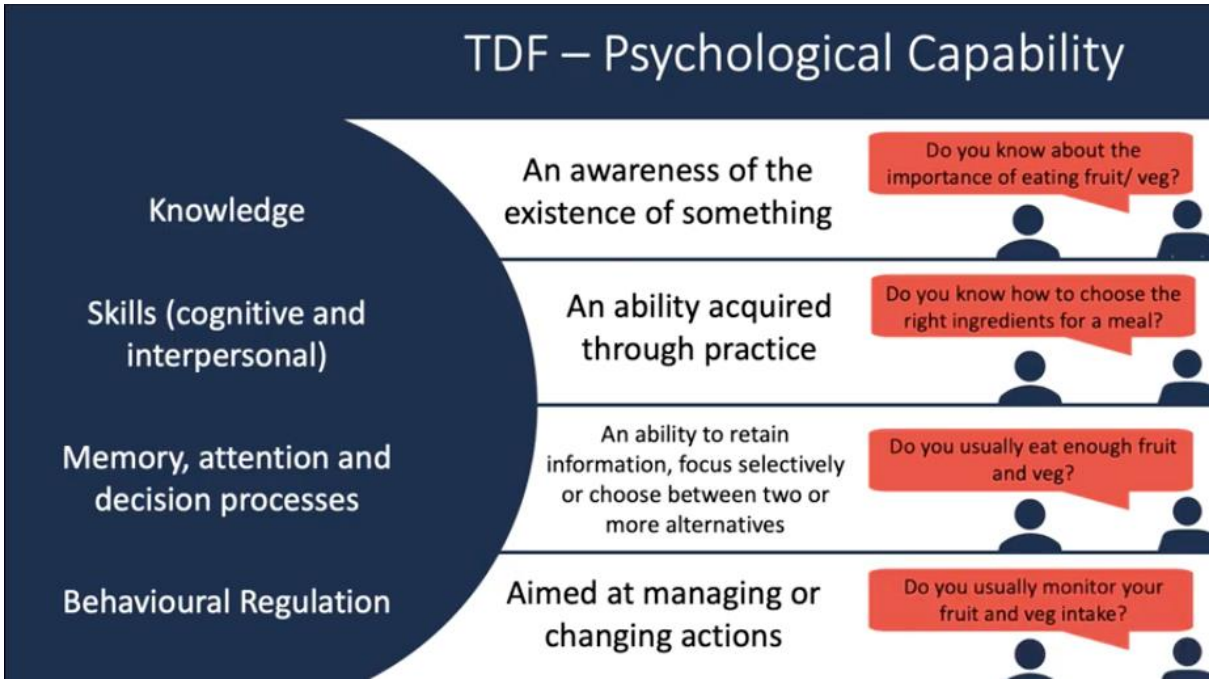


Figure 10. Introduction of theoretical domains using examples

The second part of the session focused on how to evaluate an intervention and included a brief introduction as to why it would be helpful for them to evaluate systematically, time periods for measures to be taken, interacting factors and biases to consider and types of self-reporting measures that could be used. This completed the final stage in understanding behaviour change theory, applying it to interventions and considering evaluation.

The video was uploaded to YouTube and shared. Analytics show that this session wasn't well attended. Though it was less than 25 minutes in length, there was no interactivity and no accountability to be there in person for a session. As it was pre-recorded, there was also no set time to attend so could get pushed aside. However, it can also be said that pre-recorded sessions allow more flexibility in that a student can learn when and at the pace that they want (Luongo, 2018; O'Callaghan, Neumann, Jones, & Creed, 2017).

Another factor that may have influenced attendance here was time. For the first four sessions, students had time set aside in their working day to attend the sessions. However, this time was not available for the final session which is why it was pre-recorded. Though I was aware that students were still able to watch in their working hours, other work may have taken priority over this. This is supported by the literature, where videoconferencing methods to CPD can act as a barrier to learning as it does not allow prioritisation over other workplace demands (Ducat, Burge, & Kumar, 2014). Although the face-to-face sessions were still provided online, the physicality of a live session as mentioned earlier may have increased accountability.

Although in this case holding the final session as a pre-recorded video was inevitable, I would avoid this in future and treat anything similar as additional learning materials for those who wish to learn more. If this was unavailable, I could use more interactive tools such as quizzes and worksheets, however my issue was that the video wasn't accessed in the first instance.

Evaluation

In order to provide a thorough evaluation of the series, I used a combination of student feedback surveys, detailed feedback and self-reflection. Content was also checked by my doctoral supervisor before each session and video recordings were shared after completion.

Student Feedback

In total, 11 students responded to the questionnaire before the sessions and seven after. The survey afterwards asked the same two questions as before, "How would you describe your knowledge of health behaviours?" and "How would you describe your knowledge of behaviour change techniques?". Average rating for question a) rose from 4.4 to 7.7 and average rating for question b) rose from 4.5 to 7.7, showing an increase in knowledge and/or confidence as a result of the sessions.

The survey also included a matrix of statements in which students were asked to rate the extent to which they agreed on a scale of five (see Table 2.) and three further questions: "What is the biggest thing that you have taken away from the series?", "Is there anything you will do differently as a

result?" and "How could this series have been improved?". There was also a space for further comments. For full survey and results see Appendix M.

Table 2.

Results from question four in feedback survey

	Strongly agree	Slightly agree	Neither agree nor disagree	Slightly disagree	Strongly disagree
The content was interesting	6	1			
The content was easy to understand	5	1		1	
The sessions were engaging	4	3			
The subject was relevant to me	5				
The delivery of the sessions was effective and clear	6	1			
The objectives of each session were clearly identified	6	1			
The objectives of the sessions were met (if not, please explain below)	5	2			
The host was clear and easy to understand	6	1			
There was a suitable level of interaction	6	1			

There was one response within the matrix where eight of nine checkboxes lay in 'strongly disagree' and one in 'slightly disagree'. They had provided no further feedback. However, I saw this is a misread of the question as I had received no negative feedback throughout the sessions from all students, no further feedback privately and all other students rated on the other end of the scale. For this reason, I have reversed the responses in the table.

Written responses to other questions were positive, with students generally enjoying the sessions and finding what they had learned to be useful. Students had intentions to use the sessions to improve their work-related planning and in their own life in one case.

Some students felt that the time constraints were an issue and wanted more time to run through the sessions. One participant wished for the sessions to be delivered slower and in less detail to facilitate absorption of the content. Whilst I agree that more time was needed to cover the material and I had identified this myself at the start of and throughout the series, I did see some room for improvement in what I did with the time I was given. I understand that time will likely be a barrier for adult learning, particularly in the course of employment, and I shouldn't neglect quality of content to fit in all of the information that I want to cover. Adults attending a short course in behaviour change won't be expecting to be experts and I want to acknowledge this for future teaching opportunities. I think I could have either covered one less model and split the COM-B model into three sessions, removing evaluation as a learning objective; or removed session two entirely and just covered the COM-B model.

I asked for some more detailed feedback from one student with whom I had arranged the sessions and who had provided me with teaching feedback previously. Her response can be seen below:

> "I have really enjoyed working with Kate over the past months this is due to the enthusiasm, passion and knowledge Kate brings to each session. Kate has been able to provide exciting and interactive content that has intrinsically motivated participants. Kate is competent in using online platforms to teach and has developed a good flipped teaching style.
>
> Kate has supported and tailored the needs of the organisation within her lessons and brought the context back to the relevance of the participants. Kate's resources allowed participants to delve into content and work at individual pace. The resources will be a great asset to the learning of the organisation. Each session was successful in meeting the anticipated learning outcomes. The programme was sequential and each session started with an appropriate recap of the last checking learning throughout."

Ongoing Feedback

As well as requesting feedback via survey completion, I made sure to recap and check understanding throughout. This was done using tasks and discussion and by asking students if they understood the content after delivering an information-heavy slide. Though I understood that students might not always speak up if they were struggling, I wanted to give extra time and opportunity and there were times in which students did ask questions.

Final Thoughts

The interactivity of a few members of the group was valuable and helped my confidence as a teacher. The fact that they were outwardly reflecting and saying how they would use the knowledge was rewarding. Students can benefit from group reflection and peer challenge of the learning process (Adelopo, 2017). Their reflection also helped me to reflect on my own teaching and how I could have made the sessions more relevant to the group to begin with. I noted that some questions and ponderings across the sessions focused on how content I was covering was transferrable to their role in effecting system change and adoption of innovations. Though my role was to introduce health psychology, I could have used more examples that were relevant to them as providing context to learners is important in identifying their knowledge deficits and increasing motivation to learn (Cooper & Richards, 2017). However, the risk here would have been that the connections may have been less obvious as this would have meant focusing less on more simple health behaviours.

To improve the sessions, I could use both an example of a health behaviour relevant to their own life and one relevant to their role of supporting innovation and systemic change. As time constraints were identified as an important limiting factor, for this to be effective, I would need to arrange more time if these sessions were to be repeated with similar groups.

Another challenge of this experience was constraints provided by lockdown and the use of video. The biggest challenge was that, especially when slides were 'projected', I couldn't see faces and it was hard to gauge interest and understanding in the subject matter without this. My experience is echoed in the literature, where Luongo (2018) looked at educators' experience of online learning. Some students saw a lost human connection and one expressed that human emotion and body language can be lost in an online environment. However, it's worth noting that this study also saw positives in the experience and found that it helped other students to express their opinions where they otherwise wouldn't do so. Although I got around this somewhat through using tasks and asking questions, and Zoom has a "raise hand function", I think it would have been easier to read the room if it were in person.

Teaching in a pandemic using online learning tools also came with its positives. A feature of online learning I found useful was the "annotate" function. Fostering group discussion was important in creating a collective understanding of the topic (Mercer & Howe, 2012) and this tool allowed the class to contribute to shared tasks in a way that I possibly wouldn't have considered doing had it not been for the situation. This meant that students who otherwise wouldn't have contributed were able to put forward answers anonymously, which, as mentioned above, has been echoed in literature (Luongo, 2018). Though this meant that I didn't know if someone wasn't contributing to the task and so I couldn't tell if there was a lack of understanding, I think it was a novel replacement of brainstorming and fostered self-concept through group reflective observation.

Another positive of using video learning which could be unhelpful to future teaching was that I was able to have more notes with me than I could have had in person. I was conscious of this and tried to deliver the session as naturally as possible using extra examples which, looking back at footage, I am happy that I was able to. I think if I had fewer notes, I could have delivered the session in more of a reactive way to the group discussion and if I have this opportunity again, this is something I will try to do differently.

A final benefit of delivering sessions online was the ability to record and upload the sessions. I saw this as beneficial for the cohort as recordings can help students to recap where information is not comprehended fully (McCredden & Baldock, 2009). It also meant that those unable to attend could catch up. It was of benefit to me as I was able to watch myself back and understand the strengths and weaknesses of the session to see where I could improve.

In general designing and delivering this teaching series possibly helped me to learn more than the students themselves. It helped to consider learning theory and building the sessions increased my own knowledge in the subject. Increasing this knowledge- both through researching for content and through my own self-reflection with the cohort- increased my confidence in delivering training, and a valuable lesson I have learned in this process is that I don't have to know everything to provide an informative and engaging teaching series.

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Appendices

Appendix A

Initial Questionnaire Responses (Q4 and Q5)

Q4. What are you hoping to gain from these sessions?

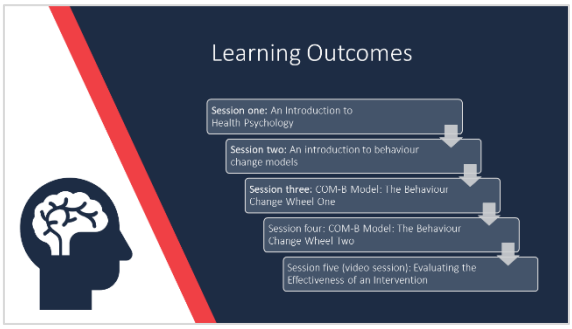
1. Understand bh in health scenario
2. I would like to gain a better understanding of current health behaviours, behaviour change tools and also develop the approach to supporting change, not just within projects but also in my own approach.
3. Greater understanding of behaviour change in myself and others
4. I am hoping for any insight to assist with the longevity of my working in a positive frame of mind, and to support me when I am facilitating workshops
5. Expand knowledge to help engagement with both patients and staff to progress positive behavioural change.
6. An understanding of the subject areas and techniques available.
7. I am just really interested in psychology and specifically behaviour, I have no specific hopes, just interested to learn more.
8. I would like to become more knowledgeable about behaviour change and how to enable action... I talk a lot about change management and understanding change, but I know I can learn more about better language to use with people I am coaching. Coaching is all about helping people think metacognitively, so I'd love to know more about helping them to take action.
9. Understanding of behaviour change theories and principles- and how these translate into the healthcare setting.
10. Better understanding of techniques and how this can be shared with SME who are working in the health and social care settings.
11. General knowledge about behaviour change techniques and how to apply them.

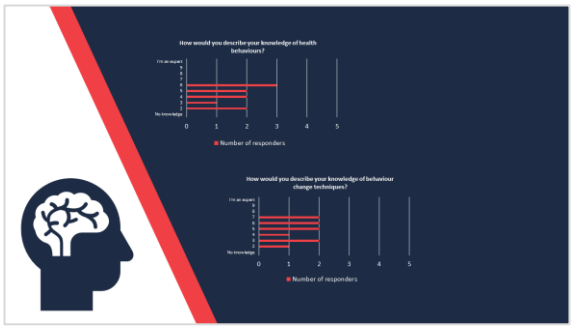
Q5. Is there anything specifically you want to learn?

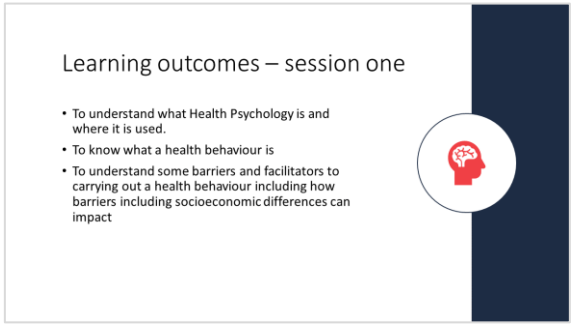
1. If what I've done previously for behaviour change around transport/travel is transferable to health.
2. How to positively approach behaviour change when there are different styles and approaches across one group.
3. How behaviour change methodology can be used to help in disease prevention and population health applications.
4. I am really interested in Neuro-linguistic programming right now and would love to know more about that. Also, I have read about changing habits but I still have a hard time getting through the "21 days" to change part.
5. Techniques for successfully delivering business change in the current 'remote' working environment.
6. No.
7. No.

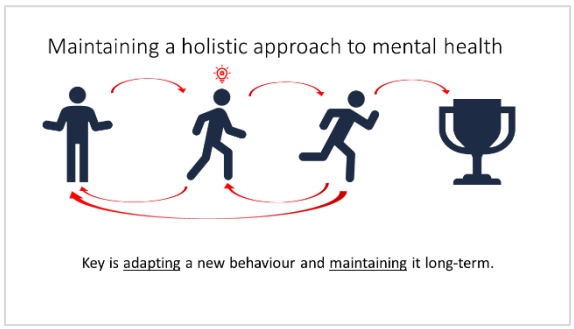
Appendix B

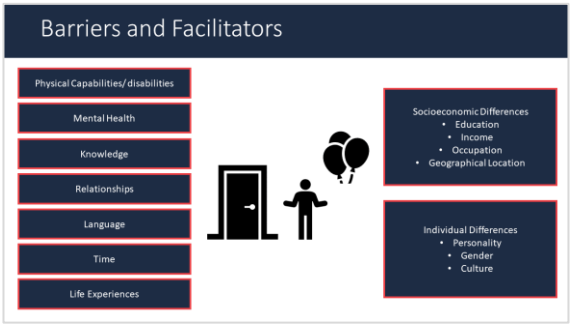
Session one slides

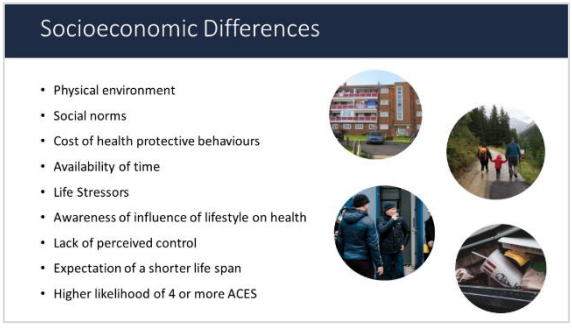




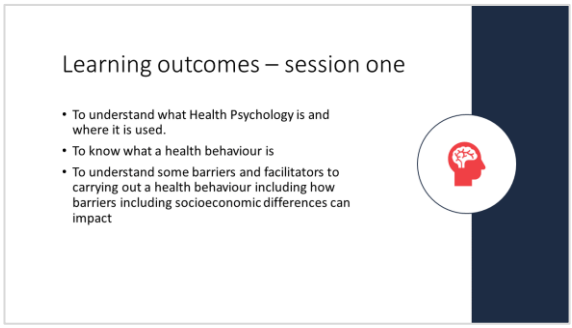






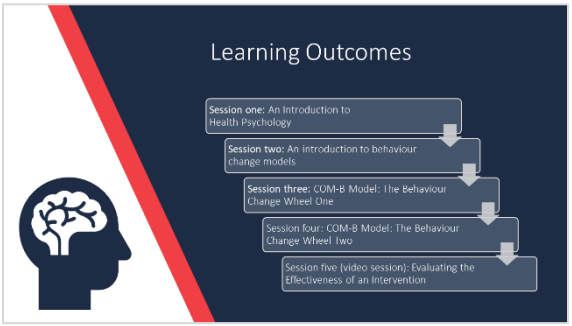


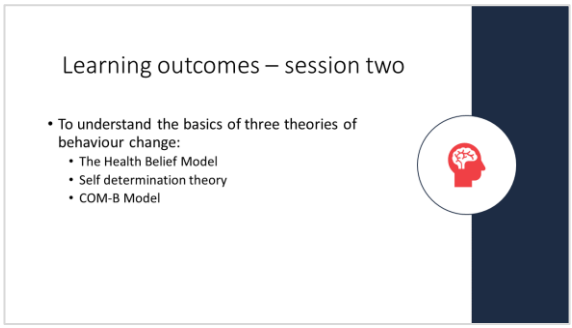
1.2 TEACHING AND TRAINING CASE STUDY

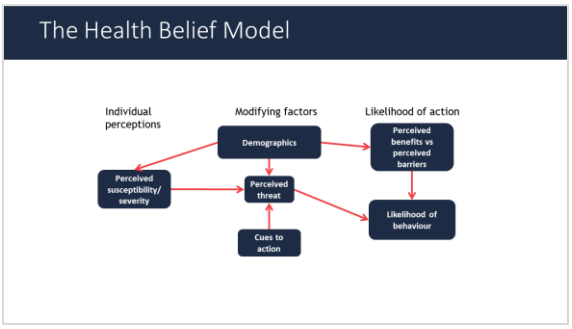


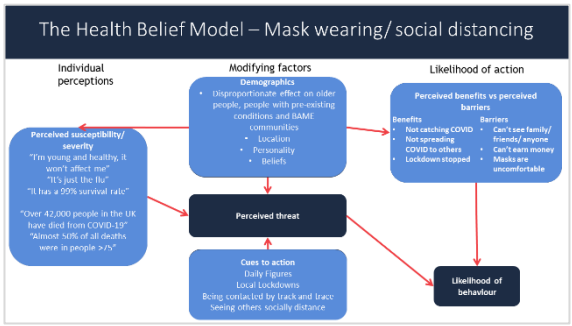
Appendix C

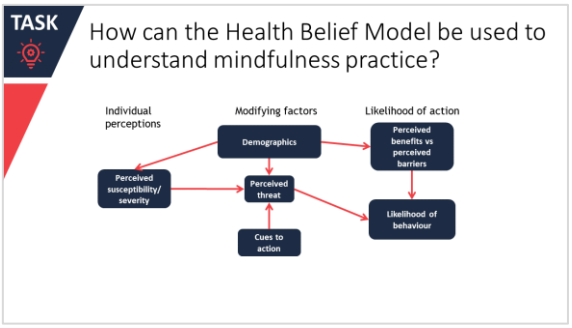
Session two slides

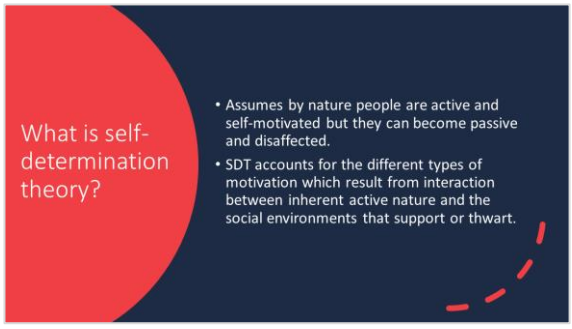


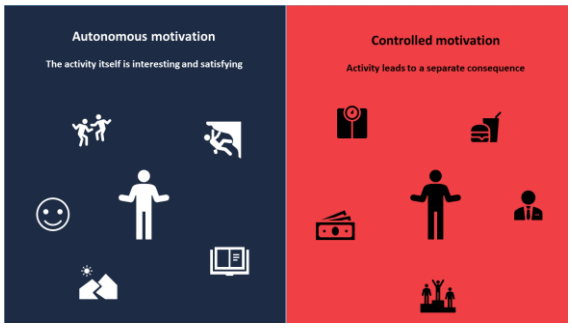


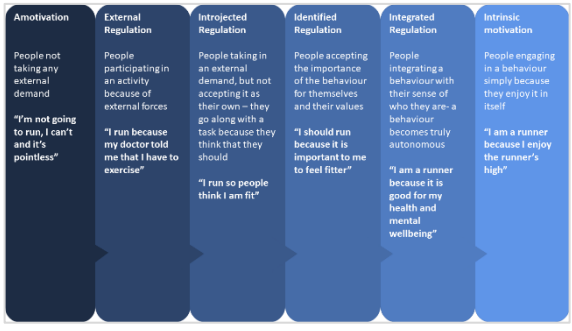


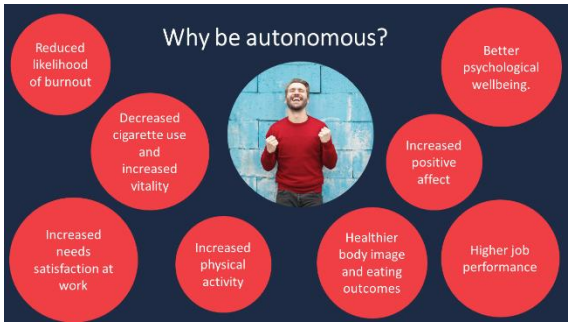




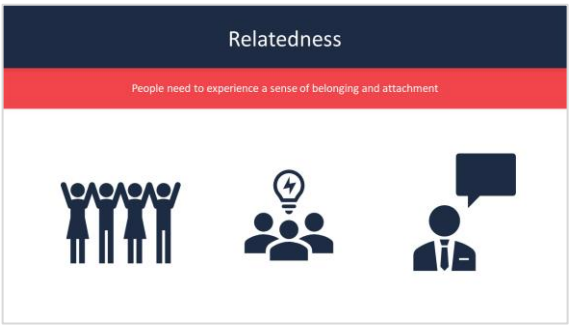


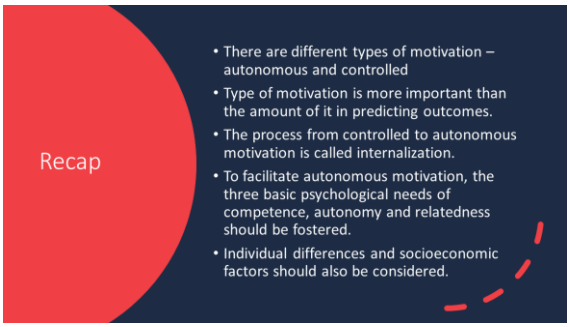


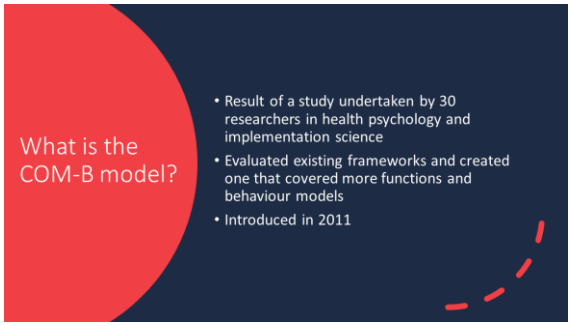


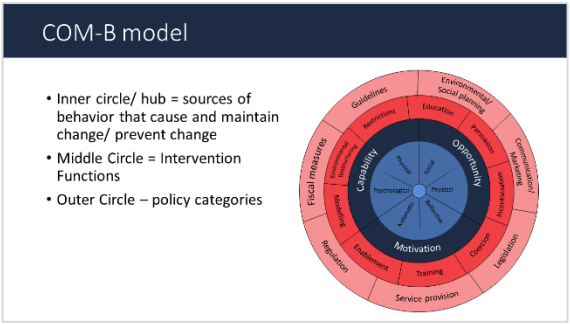


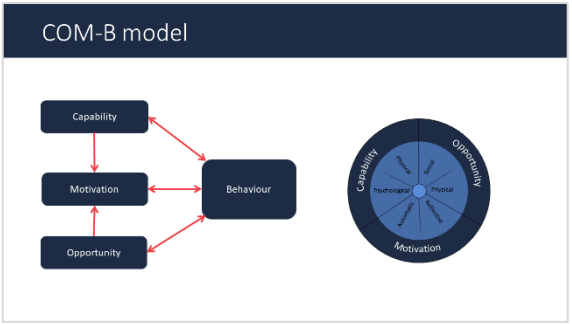
1.2 TEACHING AND TRAINING CASE STUDY

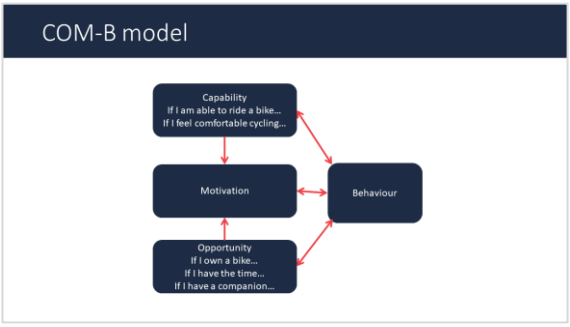


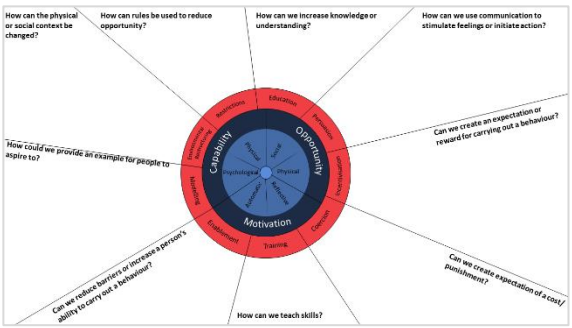




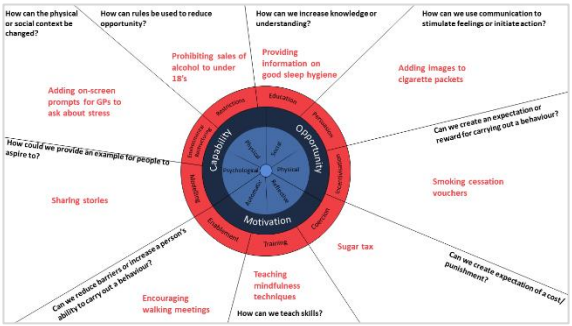


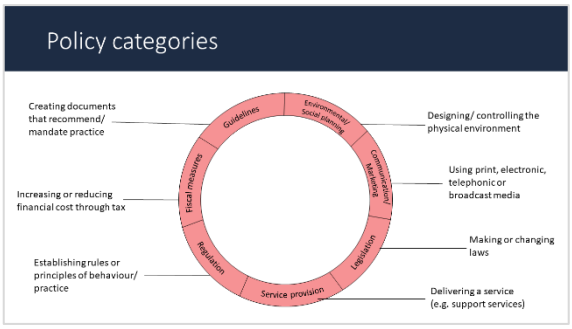


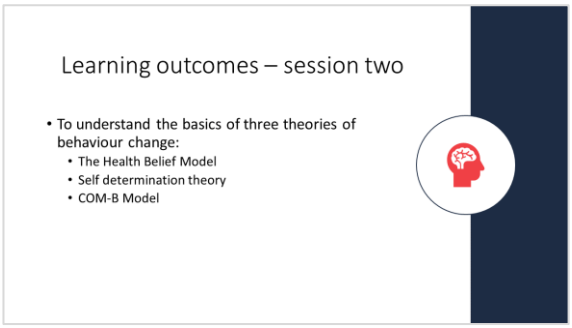




1.2 TEACHING AND TRAINING CASE STUDY

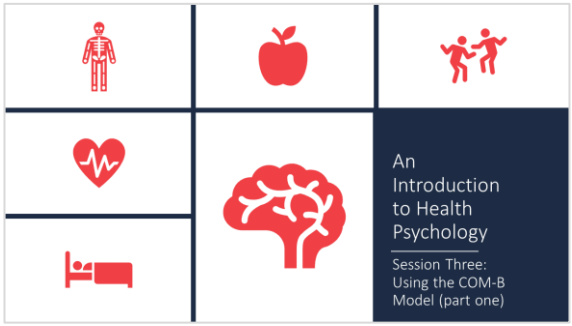


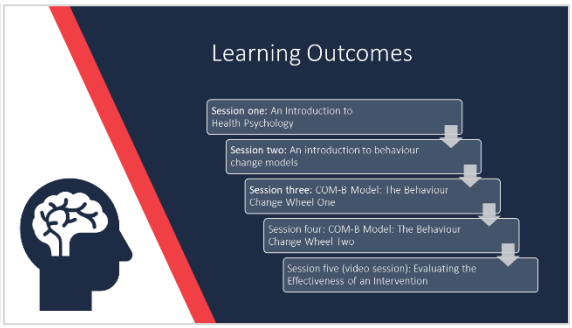


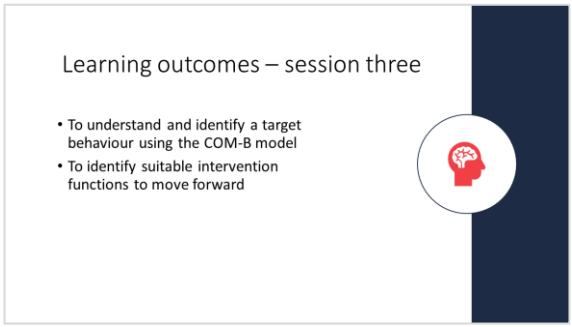


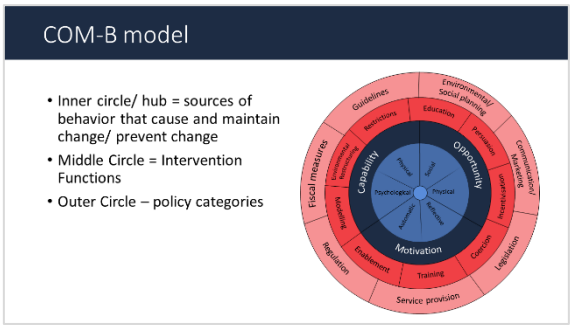
Appendix D

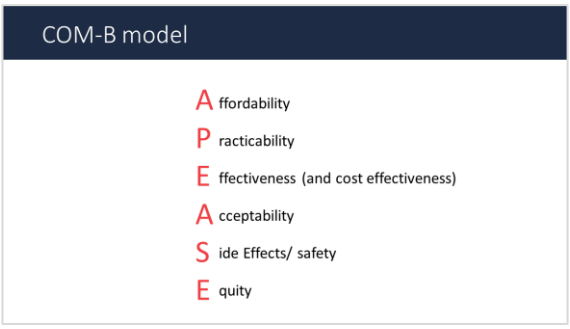
Session three slides

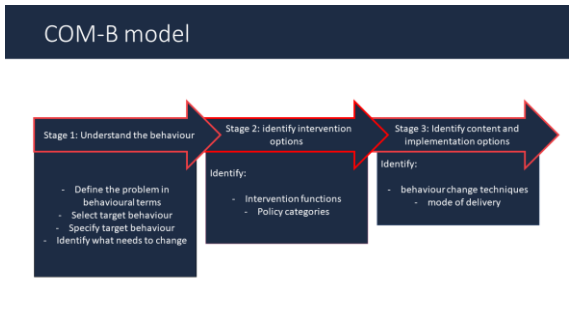


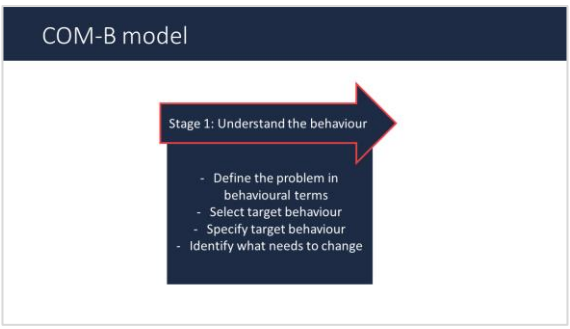


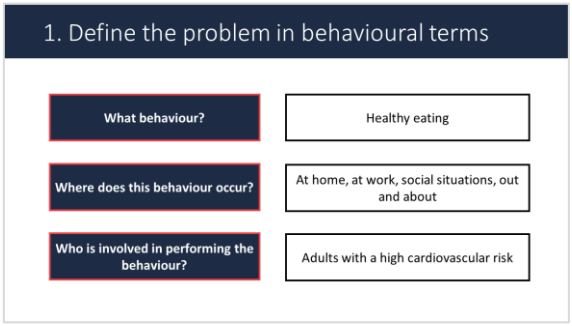


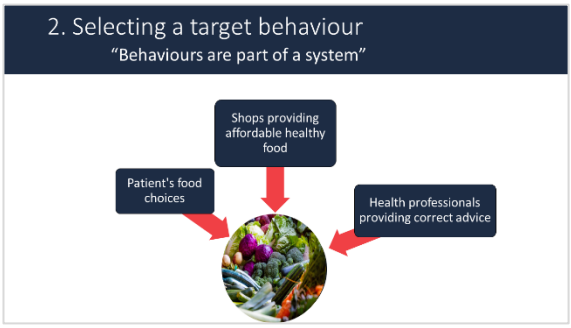


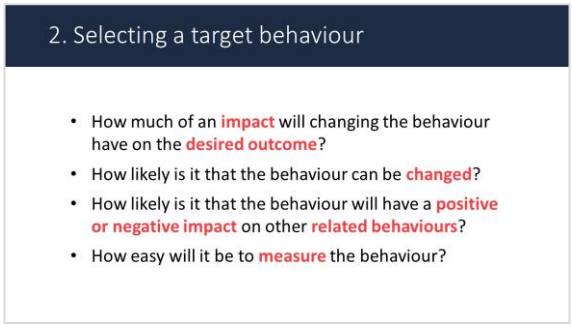










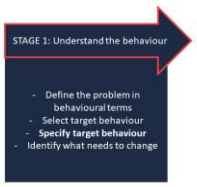


2. Selecting a target behaviour

Potential target behaviours	Impact of behaviour change	Likelihood of changing behaviour	Spillover score (impact on other behaviours)	Measurement score (how easy is it to measure)
Eating more healthy foods	Very promising	promising	unpromising	Very promising
Eating less unhealthy foods				
Cutting out sugar	Very promising	unpromising	unpromising	Very promising
Buying heart healthy food				
Record final target behaviour here:				

Rate as unacceptable, unpromising but worth considering, promising, very promising

3. Specify target behaviour



Who needs to perform the behaviour?
Patients with elevated cardiovascular risk

What does the person need to do differently?
Eat more fruit and veg each day

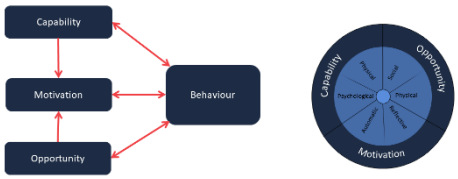
When will they do it?
At meal times

Where will they do it?
At home/ at work/ out socially

How often will they do it?
Every day

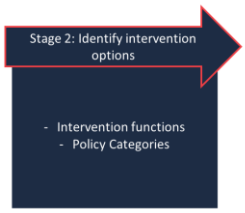
With whom will they do it?
Alone/ with household

COM-B model



CAPABILITY	OPPORTUNITY	MOTIVATION
PSYCHOLOGICAL (Capacity to engage in the necessary thought processes)	**PHYSICAL** (Physical opportunity afforded by the environment)	**REFLECTIVE** (Evaluation of previous experiences and beliefs in what is good/ bad)
• Lack of awareness of range of fruit and vegetables	• Availability of healthy foods to buy locally	
PHYSICAL (Physical strengths or skills)	**SOCIAL** (Social influences, factors and cultural norms)	**AUTOMATIC** (Reflexive responses, wants and desires)
		• Current eating habits • Mental Health

Stage 2



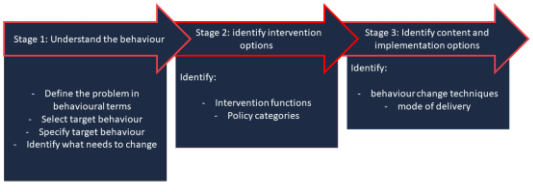
	Education	Persuasion	Incentivisation	Coercion	Training	Restriction	Environmental restructuring	Modelling	Enablement
Physical Capability					■				■
Psychological capability	■				■				■
Physical opportunity					■	■	■		■
Social opportunity						■	■	■	■
Automatic motivation		■	■	■	■		■	■	■
Reflective motivation	■	■	■	■					

A ffordability
P racticability
E ffectiveness (and cost effectiveness)
A cceptability
S ide Effects/ safety
E quity

1. Identify intervention functions

Intervention Functions	Does this meet the APEASE criteria?
Education	
Persuasion	
Incentivisation	
Coercion	
Training	
Restriction	
Environmental Restructuring	
Modelling	
Enablement	
Selected intervention functions:	

COM-B model

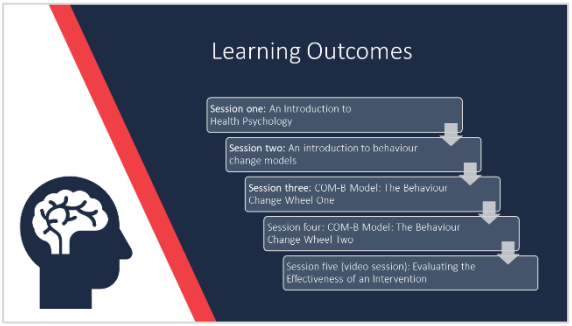


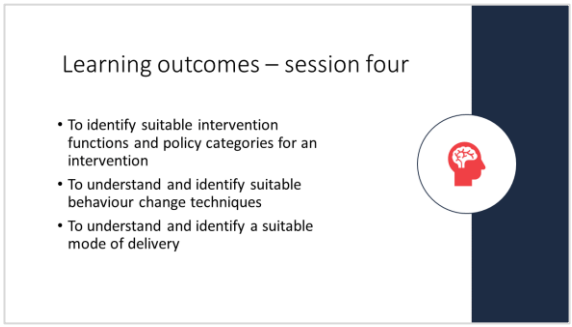
Learning outcomes – session three

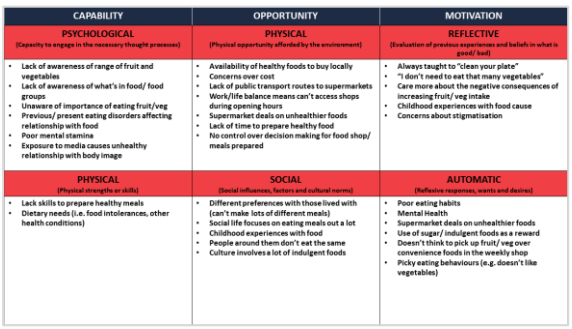
- To understand and identify a target behaviour using the COM-B model
- To identify suitable intervention functions to move forward

Appendix E

Session four slides

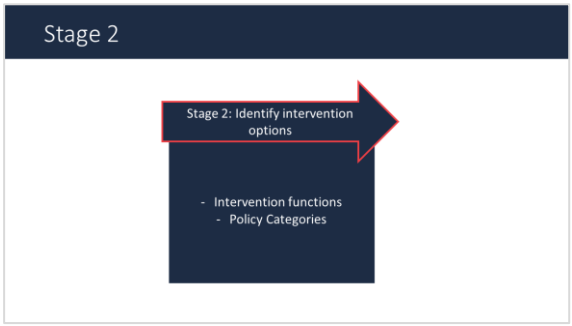






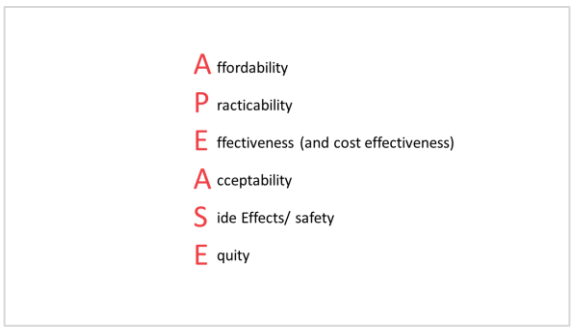
CAPABILITY	OPPORTUNITY	MOTIVATION
PSYCHOLOGICAL (Capacity to engage in the necessary thought processes)	**PHYSICAL** (Physical opportunity afforded by the environment)	**REFLECTIVE** (Evaluation of previous experiences and beliefs in what is good/ bad)
• Lack of awareness of range of fruit and vegetables • Lack of awareness of what's in food/ food groups • Unaware of importance of eating fruit/veg • Previous/ present eating disorders affecting relationship with food • Poor mental stamina • Exposure to media causes unhealthy relationship with body image	• Availability of healthy foods to buy locally • Concerns over cost • Lack of public transport routes to supermarkets • Work/life balance means can't access shops during opening hours • Supermarket deals on unhealthier foods • Lack of time to prepare healthy food • No control over decision making for food shop/ meals prepared	• Always taught to "clean your plate" • "I don't need to eat that many vegetables" • Care more about the negative consequences of increasing fruit/ veg intake • Childhood experiences with food cause • Concerns about stigmatisation
PHYSICAL (Physical strengths or skills)	**SOCIAL** (Social influences, factors and cultural norms)	**AUTOMATIC** (Reflexive responses, wants and desires)
• Lack skills to prepare healthy meals • Dietary needs (i.e. food intolerances, other health conditions)	• Different preferences with those lived with (can't make lots of different meals) • Social life focuses on eating meals out a lot • Childhood experiences with food • People around them don't eat the same • Culture involves a lot of indulgent foods	• Poor eating habits • Mental Health • Supermarket deals on unhealthier foods • Use of sugar/ indulgent foods as a reward • Doesn't think to pick up fruit/ veg over convenience foods in the weekly shop • Picky eating behaviours (e.g. doesn't like vegetables)

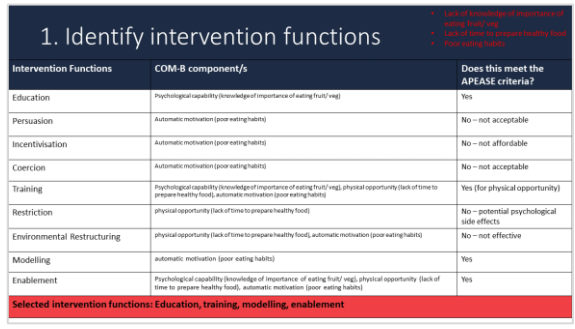
CAPABILITY	OPPORTUNITY	MOTIVATION
PSYCHOLOGICAL (Capacity to engage in the necessary thought processes)	**PHYSICAL** (Physical opportunity afforded by the environment)	**REFLECTIVE** (Evaluation of previous experiences and beliefs in what is good/ bad)
• Unaware of importance of eating fruit/veg	• Lack of time to prepare healthy food	
PHYSICAL (Physical strengths or skills)	**SOCIAL** (Social influences, factors and cultural norms)	**AUTOMATIC** (Reflexive responses, wants and desires)
		• Poor eating habits



COM-B components	Education	Persuasion	Incentivisation	Coercion	Training	Restriction	Environmental restructuring	Modelling	Enablement
Physical Capability					■				■
Psychological capability	■				■				■
Physical opportunity					■	■	■		■
Social opportunity						■	■	■	■
Automatic motivation		■	■	■	■		■	■	■
Reflective motivation	■	■	■	■					

COM-B components	Education	Persuasion	Incentivisation	Coercion	Training	Restriction	Environmental restructuring	Modelling	Enablement
Physical Capability					■				■
Psychological capability	■				■				■
Physical opportunity					■	■	■		■
Social opportunity						■	■	■	■
Automatic motivation		■	■	■	■		■	■	■
Reflective motivation	■	■	■	■					





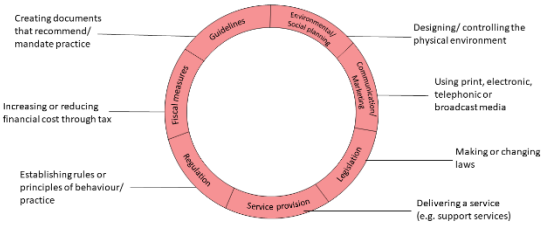
1. Identify intervention functions

- Lack of knowledge of importance of eating fruit/ veg
- Lack of time to prepare healthy food
- Poor eating habits

Intervention Functions	COM-B component/s	Does this meet the APEASE criteria?
Education	Psychological capability (knowledge of importance of eating fruit/ veg)	Yes
Persuasion	Automatic motivation (poor eating habits)	No – not acceptable
Incentivisation	Automatic motivation (poor eating habits)	No – not affordable
Coercion	Automatic motivation (poor eating habits)	No – not acceptable
Training	Psychological capability (knowledge of importance of eating fruit/ veg), physical opportunity (lack of time to prepare healthy food), automatic motivation (poor eating habits)	Yes (for physical opportunity)
Restriction	physical opportunity (lack of time to prepare healthy food)	No – potential psychological side effects
Environmental Restructuring	physical opportunity (lack of time to prepare healthy food), automatic motivation (poor eating habits)	No – not effective
Modelling	automatic motivation (poor eating habits)	Yes
Enablement	Psychological capability (knowledge of importance of eating fruit/ veg), physical opportunity (lack of time to prepare healthy food), automatic motivation (poor eating habits)	Yes
Selected intervention functions: Education, training, modelling, enablement		

1.2 TEACHING AND TRAINING CASE STUDY

2. Identify Policy Categories



Policy Categories	Education	Persuasion	Incentivisation	Coercion	Training	Restriction	Environmental restructuring	Modelling	Enablement
Communication/ Marketing	■	■	■	■				■	
Guidelines	■	■	■	■	■	■	■		■
Fiscal Measures			■	■	■		■		■
Regulation	■	■	■	■	■	■	■		■
Legislation	■	■	■	■	■	■	■		■
Environmental/ social planning							■		■
Service Provision	■	■	■	■	■			■	■

Policy Categories	Education	Persuasion	Incentivisation	Coercion	Training	Restriction	Environmental restructuring	Modelling	Enablement
Communication/ Marketing	■							■	
Guidelines	■				■				■
Fiscal Measures					■				■
Regulation	■				■				■
Legislation	■				■				■
Environmental/ social planning									■
Service Provision	■				■			■	■

1. Identify intervention functions

- Lack of knowledge of importance of eating fruit/ veg
- Lack of time to prepare healthy food
- Poor eating habits

Intervention Functions	COM-B component	Policy categories	Does this meet the APEASE criteria?
Education	Psychological capability (knowledge of importance of fruit and veg intake)	Communication/ marketing	Yes
		Guidelines	Yes
		Regulation	Not practicable for this target group
		Legislation	Not practicable for this target group
		Service Provision	Not suitable for this component
Training	Automatic Motivation (bad habits)	Guidelines	Yes
		Fiscal Measures	Not practicable for this target group
		Regulation	Not practicable for this target group
		Legislation	Not practicable for this target group
		Service Provision	Yes
Modelling	Automatic motivation (bad habits)	Communication/ marketing	Yes
		Service provision	Not in this context
Enablement	Psychological Capability (knowledge of importance of fruit and veg intake)	Guidelines	Yes
		Fiscal Measures	Not practicable for this target group
	Automatic Motivation (habits)	Regulation	Not practicable for this target group
		Legislation	Not practicable for this target group
	Physical Opportunity (lack of time)	Environmental/ social planning	Yes
		Service Provision	Yes

Selected policy categories: Communication/ marketing, guidelines, service provision

COM-B model

Stage 1: Understand the behaviour

Target behaviour: Increasing intake of fruit and vegetables daily

Change needed: **Psychological capability** (lack of knowledge of importance of eating fruit/ veg), **physical opportunity** (lack of time to prepare healthy food), **automatic motivation** (poor eating habits)

Stage 2: identify intervention options

Intervention Functions: Education, training, modelling, enablement

Policy Categories: Communication/ marketing, guidelines, service provision

Stage 3: Identify content and implementation options

Identify:

- behaviour change techniques
- mode of delivery

Behaviour Change Techniques

An active component of an intervention designed to change behaviour.

It should be:

- Observable
- Replicable
- Irreducible
- Active within the intervention

Behaviour Change Techniques

PROMPTS/ NUDGES

Introduce something new to remind an individual to carry out the behaviour

GOAL SETTING

Work to identify individual, achievable goals.
Play to strengths

SELF-MONITORING

Help individual to establish a method to help monitor behaviour

DEMONSTRATION OF THE BEHAVIOUR

Show the individual how best to carry out the behaviour
Act as/ create a role model

Identify Behaviour Change Techniques

- Lack of knowledge of importance of eating fruit/ veg
- Lack of time to prepare healthy food
- Poor eating habits

Intervention Functions	COM-B component	Most frequently used BCT's	Does this meet the APEASE criteria?
Education	Psychological capability (knowledge of importance of fruit and veg intake)	Information about health consequences	
		Prompts/ cues	
		Self-monitoring of behaviour	
		Feedback on behaviour	
Modelling	Automatic Motivation (bad habits)	Demonstration of the behaviour	
Enablement	Psychological Capability (knowledge of importance of fruit and veg intake)	Social support	
		Goal setting (behaviour)	
	Automatic Motivation (habits)	Action planning	
	Physical Opportunity (lack of time)		
Training	Automatic Motivation (bad habits)	Instruction on how to perform a behaviour	
		Demonstration of the behaviour	
		Feedback on the behaviour	
		Feedback on behaviour outcomes	

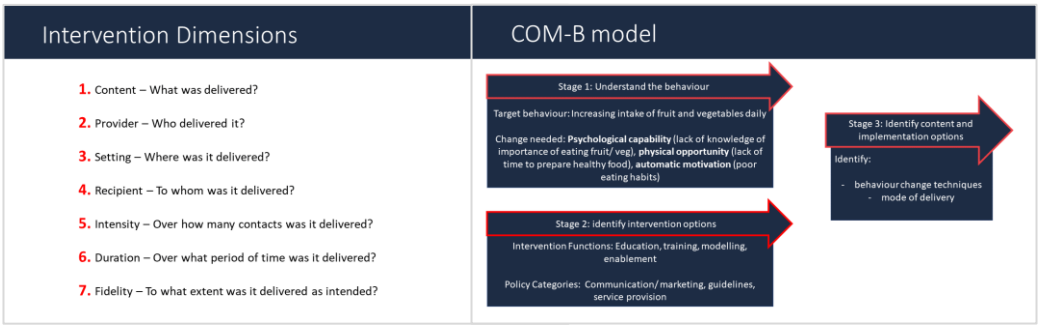
Intervention Strategy

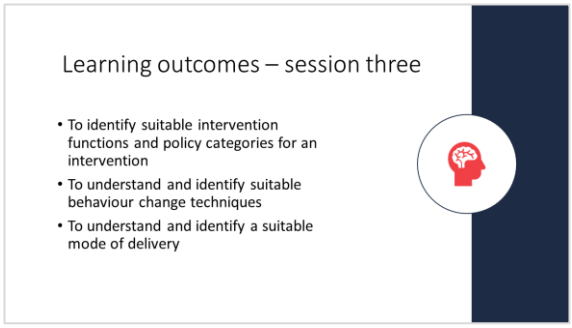
Psychological Capability (knowledge of importance of F+V)
Automatic Motivation (habits)
Physical Opportunity (lack of time)

Intervention Functions	Com-B	Policy categories	Intervention Strategy
Education	Psychological Capability	Communication/ marketing, guidelines	Who will deliver, how will you use the BCTs?
Training	Physical Opportunity Psychological Capability	Guidelines/ service provision	
Modelling	Automatic Motivation	Communication/ Marketing	
Enablement	Physical Opportunity Psychological Capability Automatic Motivation	Guidelines, Service provision	

Mode of Delivery

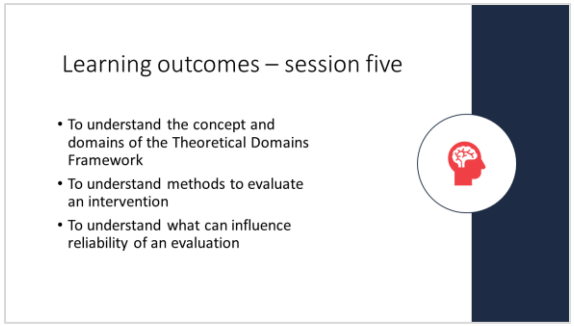
Mode of delivery				Does this meet the APEASE criteria?
Face to Face	Individual			
	Group			
Distance	Population level	Broadcast Media	TV	
			Radio	
		Outdoor media	Billboard	
			Poster	
		Print media	Newspaper	
			Leaflet	
		Digital media	Internet	
			Mobile app	
	Individual level	Phone	Phone helpline	
			Mobile phone text	
		Individually accessed computer programme		

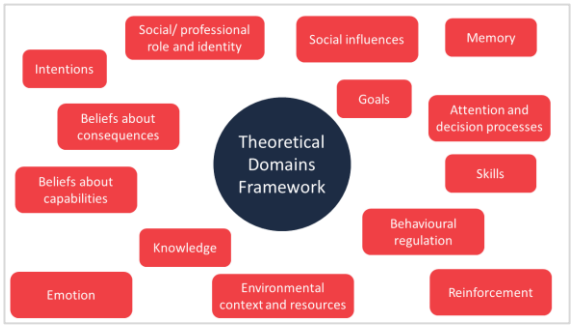

Intervention Dimensions
1. Content – What was delivered?
2. Provider – Who delivered it?
3. Setting – Where was it delivered?
4. Recipient – To whom was it delivered?
5. Intensity – Over how many contacts was it delivered?
6. Duration – Over what period of time was it delivered?
7. Fidelity – To what extent was it delivered as intended?
COM-B model
Stage 1: Understand the behaviour
Target behaviour: Increasing intake of fruit and vegetables daily
Change needed: Psychological capability (lack of knowledge of importance of eating fruit/ veg), physical opportunity (lack of time to prepare healthy food), automatic motivation (poor eating habits)
Stage 2: identify intervention options
Intervention Functions: Education, training, modelling, enablement
Policy Categories: Communication/marketing, guidelines, service provision
Stage 3: Identify content and implementation options
Identify:
- behaviour change techniques
- mode of delivery

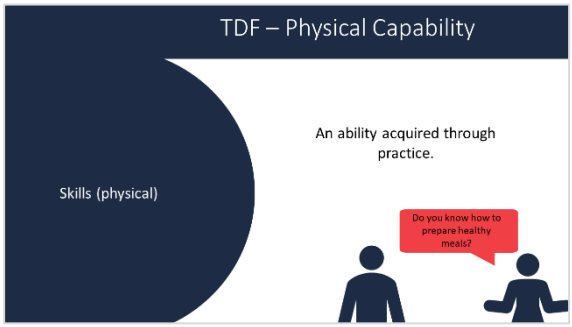

Learning outcomes – session three
• To identify suitable intervention functions and policy categories for an intervention
• To understand and identify suitable behaviour change techniques
• To understand and identify a suitable mode of delivery

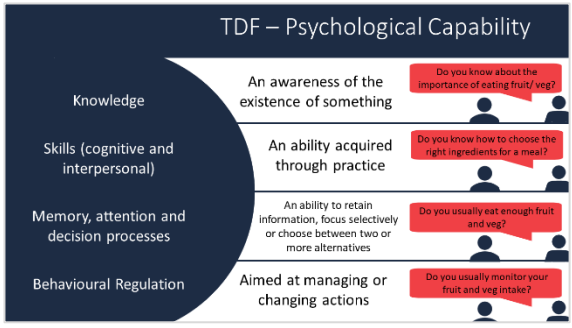
Appendix F

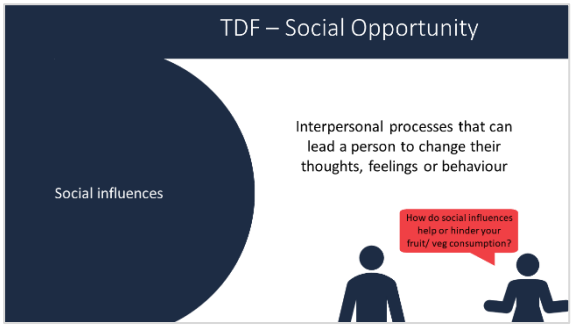
Session five slides

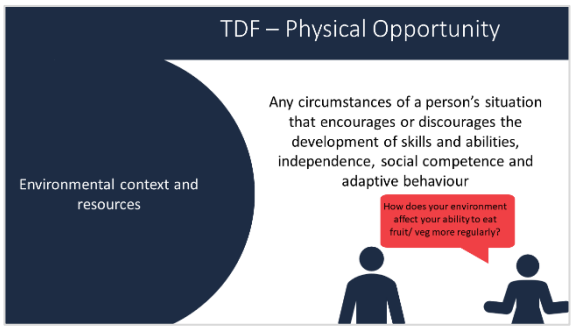


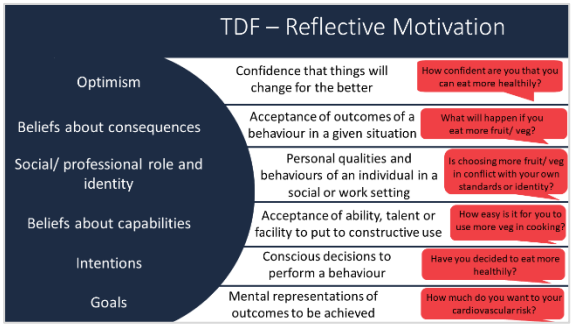


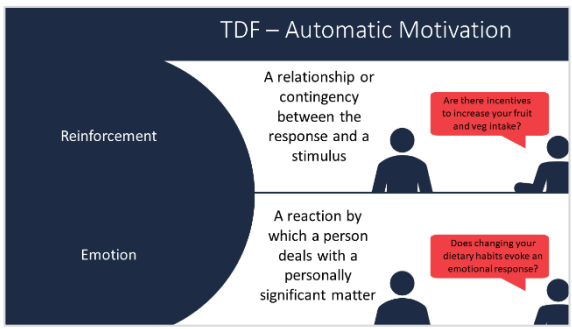












1.2 TEACHING AND TRAINING CASE STUDY

Evaluating an intervention

- Has the intervention had the outcomes you hoped for?
- Useful for finding IF effect was achieved and HOW it was achieved.
- Should be considered before and throughout the process
- Can work backwards to evaluate effectiveness of existing interventions

Evaluating an intervention

Evaluating an intervention

SELF REPORTING BIAS

Error caused by a person's need for approval/ social desirability

RECALL BIAS

Error caused by person's inability to accurately recall a past event.

INTERACTING FACTORS

Person may engage in different behaviour with same intended outcome/ be subject to different interventions.

Evaluating an intervention

- Consider the APEASE criteria.
- Make whole intervention person-centred, **INCLUDING** the evaluation

TIME
Do your participants have the time to complete or is there a faster way?

LENGTH OF MEASURE
Will your participants stay motivated to complete long measures?

NUMBER OF MEASURES
Can you measure changes effectively with as few measures as possible?

LITERACY LEVEL
Are the questions worded in a way that's easy to understand by everyone?

FORMAT
Can you measure what you need using simple tick boxes?

VALIDATED MEASURE
Has the measure been validated and used in other evaluations/ research?

Evaluating an intervention

- Evaluation should be considered and planned from the start.
- Multiple measures/ time points where possible.
- Consider the APEASE criteria when planning your intervention too:
  - **A**ffordability
  - **P**racticability
  - **E**ffectiveness and Cost Effectiveness
  - **A**cceptability
  - **S**ide effects/ safety
  - **E**quity

Learning outcomes – session five

- To understand the concept and domains of the Theoretical Domains Framework
- To understand methods to evaluate an intervention
- To understand what can influence reliability of an evaluation

Appendix G

Links to session recordings (shared with permission)

Session One: https://youtu.be/Ll3bAUO4PQs

Session Two: https://youtu.be/B3dhkNbG6vA

Session Three: https://youtu.be/W3UHM_sImnw

Session Four: https://youtu.be/kiLHvWUS6mY

Session Five: https://youtu.be/H2_PKirPG5Y

Appendix H

Behaviour change techniques handout

Behaviour change techniques within the behaviour change technique taxonomy		
1. Goals and planning 1.1. Goal setting (behaviour) 1.2. Problem solving 1.3. Goal setting (outcome) 1.4. Action planning 1.5. Review behaviour goal(s) 1.6. Discrepancy between current behaviour and goal 1.7. Review outcome goal(s) 1.8. Behavioural contract 1.9. Commitment **2. Feedback and monitoring** 2.1. Monitoring of behaviour by others without feedback 2.2. Feedback on behaviour 2.3. Self-monitoring of behaviour 2.4. Self- monitoring of outcome(s) of behaviour 2.5. Monitoring of outcome(s) of behaviour without feedback 2.6. Biofeedback 2.7. Feedback of outcome(s) of behaviour **3. Social Support** 3.1. Social support (unspecified) 3.2. Social support (practical) 3.3. Social support (emotional) **4. Shaping knowledge** 4.1. Instruction on how to perform the behaviour 4.2. Information about antecedents 4.3. Re-attribution 4.4. Behavioural experiments **5. Natural consequences**	**6. Comparison of behaviour** 6.1. Demonstration of the behaviour 6.2. Social comparison 6.3. Information about others' approval **7. Associations** 7.1. Prompts/ cues 7.2. Cue signalling reward 7.3. Reduce prompts/ cues 7.4. Remove access to the reward 7.5. Remove aversive stimulus 7.6. Satiation 7.7. Exposure 7.8. Associative learning **8. Repetition and substitution** 8.1. Behavioural practice/ rehearsal 8.2. Behaviour substitution 8.3. Habit formation 8.4. Habit reversal 8.5. Overcorrection 8.6. Generalisation of target behaviour 8.7. Graded tasks **9. Comparison of outcomes** 9.1. Credible source 9.2. Pros and cons 9.3. Comparative imagining of future outcomes **10. Reward and threat** 10.1. Material incentive (behaviour) 10.2. Material reward (behaviour) 10.3. Non-specific reward	**12. Antecedents** 12.1. Restructuring the physical environment 12.2. Restructuring the social environment 12.3. Avoidance/ reducing exposure to cues for the behaviour 12.4. Distraction 12.5. Adding objects to the environment 12.6. Body changes **13. Identity** 13.1. Identification of self as role model 13.2. Framing/ reframing 13.3. Incompatible beliefs 13.4. Valued self- identity 13.5. Identity associated with changed behaviour **14. Scheduled consequences** 14.1. Behaviour cost 14.2. Punishment 14.3. Remove reward 14.4. Reward approximation 14.5. Rewarding completion 14.6. Situation-specific reward 14.7. Reward incompatible behaviour 14.8. Reward alternative behaviour 14.9. Reduce reward frequency 14.10. Remove punishment **15. Self-belief** 15.1. Verbal persuasion about capability 15.2. Mental rehearsal of successful performance

5.1. Information about health consequences 5.2. Salience of consequences 5.3. Information about social and environmental consequences 5.4. Monitoring of emotional consequences 5.5. Anticipated regret 5.6. Information about emotional consequences	10.4. Social reward 10.5. Social incentive 10.6. Non-specific incentive 10.7. Self-incentive 10.8. Incentive (outcome) 10.9. Self-reward 10.10. Reward (outcome) 10.11. Future punishment **11. Regulation** 11.1. Pharmacological support 11.2. Reduce negative emotions 11.3. Conserving mental resources 11.4. Paradoxical instructions	15.3. Focus on past success 15.4. Self-talk **16. Covert learning** 16.1. Imaginary punishment 16.2. Imaginary reward 16.3. Vicarious consequences

Taken from: Michie, Susan, Lou Atkins, and Robert West. "The behaviour change wheel." *A guide to designing interventions. 1st ed. Great Britain: Silverback Publishing* (2014): 1003-1010.

Appendix I

Debriefing email

From: Kate Atherton <kateatherton.healthpsychology@gmail.com>

Date: Fri, 6 Nov 2020 at 14:01

Subject: Session Five

Hi everyone,

As promised, you can find session five of the behaviour change teaching series here - https://youtu.be/H2_PKirPG5Y

The slides are also attached, as are the empty worksheets and tables.

I would be grateful if you could fill out the feedback questionnaire here (it should only take 5 minutes):

https://www.smartsurvey.co.uk/s/HAFJMN/

For ease of access, you can find all sessions below:

Session One: https://youtu.be/Ll3bAUO4PQs

Session Two: https://youtu.be/B3dhkNbG6vA

Session Three: https://youtu.be/W3UHM_sImnw

Session Four: https://youtu.be/kiLHvWUS6mY

Session Five: https://youtu.be/H2_PKirPG5Y

Further reading

Self-determination theory (including lots of research!) - https://selfdeterminationtheory.org/research/

You can find more information on the behaviour change wheel, including a link to the book, here - http://www.behaviourchangewheel.com/about-wheel

I've provided some examples below of where the wheel has been used in community, workplace and population health settings, to both create and evaluate interventions:

1.2 TEACHING AND TRAINING CASE STUDY

Stand More AT Work (SMArT Work): using the behaviour change wheel to develop an intervention to reduce sitting time in the workplace - https://bmcpublichealth.biomedcentral.com/track/pdf/10.1186%2Fs12889-018-5187-1

Improving medication management in multimorbidity: intervention using the Behaviour Change Wheel - https://implementationscience.biomedcentral.com/track/pdf/10.1186/s13012-015-0322-1

Designing an intervention to improve sexual health service use among university undergraduate students: a mixed methods study guided by the behaviour change wheel - https://bmcpublichealth.biomedcentral.com/track/pdf/10.1186%2Fs12889-019-8059-4

National policies for the promotion of physical activity and healthy nutrition in the workplace context: a behaviour change wheel guided content analysis of policy papers in Finland - https://bmcpublichealth.biomedcentral.com/track/pdf/10.1186%2Fs12889-017-4574-3 (This paper looks at existing interventions, so works backwards to understand how they work)

Using the behaviour change wheel to explore infant feeding peer support provision; insights from a North West UK evaluation - https://internationalbreastfeedingjournal.biomedcentral.com/track/pdf/10.1186/s13006-019-0236-7

Once again, thank you for coming along to the sessions and if you have any questions, just let me know. Please feel free to share with anyone who couldn't attend.

Best wishes,

Kate Atherton

Appendix J

Linking COM-B components to intervention functions

COM-B	Intervention functions
Capability	
Knowledge	**Educate** about ways of enacting the desired behaviour or avoiding the undesired one
Skill	**Train** in cognitive, physical or social skills required for the desired behaviour or to avoid the undesired one
Strength	**Train** or **enable** development of mental or physical strength required for the desired behaviour or to resist the undesired one
Stamina/ endurance	**Train** or **enable** endurance required for desired behaviour or sustained resistance to undesired one
Opportunity	
Time	**Train** or **restructure the environment** to reduce time or demand or competing time demands for desired behaviour (and additionally use **restriction** to reduce undesired behaviour)
Resources	**Restructure the environment** to increase social support and cultural norms for desired behaviour (and additionally use **restriction** to reduce undesired behaviour)
Location/ physical barriers	**Train** or **restructure the environment** to provide cues and prompts for desired behaviour (and converse for undesired behaviour)
Interpersonal influences/ cultural expectations	**Restructure the social environment** or use **modelling** to shape people's ways of thinking
Motivation	
Plans	**Educate**, **train** to form clearer personal rules/ action plans, and train to remember and apply the rules when needed
Evaluations	**Educate** or **persuade** to create more positive beliefs about desired, and negative ones about undesired, behaviour
Motives	**Persuade**, **incentivise**, **coerce**, **model** or **enable** to feel positively about the desired behaviour and negatively about the undesired one
Impulses/ inhibition	**Train** or **enable** to strengthen habitual engagement in the desired behaviour or weaken the undesired one
Responses	**Model** desired behaviour to induce automatic imitation

Taken from: Michie, Susan, Lou Atkins, and Robert West. "The behaviour change wheel." *A guide to designing interventions. 1st ed. Great Britain: Silverback Publishing* (2014): 1003-1010.

Appendix K

Identifying BCT's worksheet

Intervention function	COM-B component	Individual BCTs	Does the BCT meet the APEASE criteria (affordability, practicability, effectiveness/ cost effectiveness, acceptability, side-effects/ safety, equity)?
Education		**Most frequently used BCTs:** **Information about social and environmental consequences** **Information about health consequences** **Feedback on behaviour** **Feedback on outcome(s) of behaviour** **Prompts/ cues** **Self- monitoring of behaviour** Less frequently used BCTs: Biofeedback Self-monitoring of outcome(s) of behaviour Cue signalling reward Satiation Information about antecedents Re-attribution Behavioural experiments Information about emotional consequences Information about others' approval	
Persuasion		**Most frequently used BCTs:** **Credible source** **Information about social and environmental consequences** **Information about health consequences** **Feedback on behaviour** **Feedback on outcome(s) of the behaviour**	

		Less frequently used BCTs: Biofeedback Re-attribution Focus on past success Verbal persuasion about capability Framing/ reframing Identity associate with changed behaviour Identification of self as role model Information about emotional consequences Salience of consequences Information about others' approval Social comparison	
Incentivisation		**Most frequently used BCTs:** **Feedback on behaviour** **Feedback on outcome(s) of behaviour** **Monitoring of behaviour by others without evidence of feedback** **Monitoring outcome of behaviour by others without evidence of feedback** **Self-monitoring of behaviour** Less frequently used BCTs: Paradoxical instructions Biofeedback Self-monitoring of outcome(s) of behaviour Cue signalling reward Remove aversive stimulus Reward approximation Rewarding completion Situation-specify reward Reward incompatible behaviour Reduce reward frequency Reward alternate behaviour Remove punishment Social reward	

		Material reward Material reward (outcome) Self-reward Material reward Material reward (outcome) Self-reward Non-specific reward Incentive Behavioural contract Commitment Discrepancy between current behaviour and goal Imaginary reward	
Coercion		**Most frequently used BCTs:** **Feedback on behaviour** **Feedback on outcome(s) of behaviour** **Monitoring of behaviour by others without evidence of feedback** **Monitoring outcome of behaviour by others without evidence of feedback** **Self-monitoring of behaviour** Less frequently used BCTs: Biofeedback Self-monitoring of outcome(s) of behaviour Remove access to the reward Punishment Behaviour cost Remove reward Future punishment Behavioural contract Commitment Discrepancy between current behaviour and goal Incompatible beliefs Anticipated regret Imaginary punishment	
Training		**Most frequently used BCTs:**	

		Demonstration of the behaviour **Instruction on how to perform a behaviour** **Feedback on the behaviour** **Feedback on outcome(s) of behaviour** **Self-monitoring of behaviour** **Behavioural practice/ rehearsal** Less frequently used BCTs: Biofeedback Self-monitoring of outcome(s) of behaviour Habit formation Habit reversal Graded tasks Behavioural experiments Mental rehearsal of successful performance Self-talk Self-reward	
Restriction		No BCTs linked to this function because they are focused on changing the way that people think feel and react rather than the way the external environment limits their behaviour	
Environmental restructuring		**Most frequently used BCTs:** **Adding objects to the environment** **Prompts/ cues** **Restructuring the physical environment** Less frequently used BCTs: Cue signalling reward Remove access to the reward Remove aversive stimulus Satiation Exposure Associative learning Reduce prompt/ cue	

		Restructuring the social environment	
Modelling		**Most frequently used BCTs:** **Demonstration of the behaviour**	

Taken from: Michie, Susan, Lou Atkins, and Robert West. "The behaviour change wheel." *A guide to designing interventions. 1st ed. Great Britain: Silverback Publishing* (2014): 1003-1010.

Appendix L

Worksheets from slides

Defining the problem in behavioural terms

What behaviour	
Where does the behaviour occur?	
Who is involved in performing the behaviour?	

Selecting a target behaviour (rate as unacceptable, unpromising but worth considering, promising, very promising)

Potential target behaviours	Impact of behaviour change	Likelihood of behaviour change	Spillover score (impact on other behaviours)	Measurement score (how easy is it to measure?)
Selected behaviour(s):				

1.2 TEACHING AND TRAINING CASE STUDY

COM-B analysis

COM-B component	What needs to happen for the target behaviour to occur?	Is there a need for a change?
Physical Capability		
Psychological Capability		
Physical Opportunity		
Social Opportunity		
Reflective Motivation		
Automatic Motivation		
Behavioural Diagnosis (where are the deficits?):		

1.2 TEACHING AND TRAINING CASE STUDY

Identify intervention functions (see “linking COM-B components to intervention functions” table)

Intervention Functions	COM-B component/s (as identified in your com-b analysis and using the matrix)	Does this meet the APEASE criteria?
Education	(e.g. Psychological capability (knowledge of importance of eating fruit/ veg))	
Persuasion		
Incentivisation		
Coercion		
Training		
Restriction		
Environmental Restructuring		
Modelling		
Enablement		
Selected intervention functions:		

1.2 TEACHING AND TRAINING CASE STUDY

Identify policy categories

Intervention Functions (identified in previous section)	COM-B component/s (as identified in your com-b analysis and using the matrix)	Policy categories	Does this meet the APEASE criteria?
E.g. education	E.g. Psychological capability (knowledge of importance of fruit and veg intake)		
Selected policy categories: Communication/ marketing, guidelines, service provision			

1.2 TEACHING AND TRAINING CASE STUDY

Identify Behaviour Change Techniques (See “BCT taxonomy table” “identify BCT’s” table for most frequently used)

Intervention Functions	COM-B component	Most frequently used BCT’s	Does this meet the APEASE criteria?
E.g Education	E.g. Psychological capability (knowledge of importance of fruit and veg intake)	E.g. information about health consequences Prompts/ cues	
	.		
Selected BCTs			

1.2 TEACHING AND TRAINING CASE STUDY

Identify Mode of Delivery

Mode of delivery				Does this meet the APEASE criteria?
Face to Face	Individual			
	Group			
Distance	Population level	Broadcast Media	TV	
			Radio	
		Outdoor media	Billboard	
			Poster	
		Print media	Newspaper	
			Leaflet	
		Digital media	Internet	
			Mobile app	
	Individual level	Phone	Phone helpline	
			Mobile phone text	
		Individually accessed computer programme		

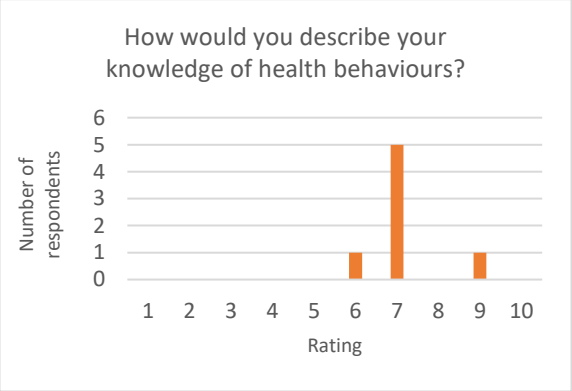
Appendix M

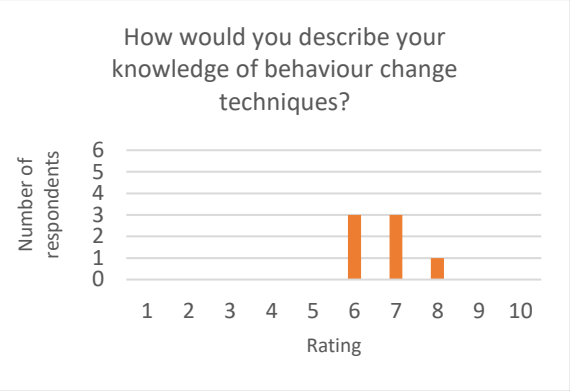
Feedback survey results

Q1. This series provided four live zoom classes and one pre-recorded video. Please select how you engaged with the sessions:

Session Number	Attended live	Watched video	Looked at slides only	Not engaged but planning to	Not engaged
1	6		1		
2	6		1		
3	5		1		
4	6		1		
5	3		1	2	1

Q2. and Q3.





Q4. Please take a look at the following statements and rate the extent to which you agree. (Please note Strongly agree is on the left and strongly disagree is on the right)

	Strongly agree	Slightly agree	Neither agree nor disagree	Slightly disagree	Strongly disagree
The content was interesting	6	1			
The content was easy to understand	5	1		1	
The sessions were engaging	4	3			
The subject was relevant to me	5				
The delivery of the sessions was effective and clear	6	1			
The objectives of each session were clearly identified	6	1			
The objectives of the sessions were met (if not, please explain below)	5	2			
The host was clear and easy to understand	6	1			
There was a suitable level of interaction	6	1			

Q5. What is the biggest thing that you have taken away from the series?

24. I really liked the thought of the COM-B model. The session (4 I think?0 where we looked in detail at the Capability, Opportunity and Motivation was really good using healthy eating as a practical example. It made it a lot easier to understand and actually relate to!
25. Such a useful set of tools
26. I am planning to use what I've learned to craft interventions and guidance that meet the needs of my stakeholders and help them understand how to craft interventions that are likely to be more successful.
27. a good solid understanding of behaviour change techniques, theory and practice. Raised my awareness of people's behaviours and how this can influence achieving personal health change.
28. This was already an area of interest for me and I really enjoyed the sessions

Q6. Is there anything you will do differently as a result?

1. It probably wasn't a goal of the training, but I think it will make me recognise the reason for lots of my own behaviours surrounding food! :)
2. I'm now building behaviour change into planning of a future work programme
3. Yes -- LOTS! I'm going to ask myself questions about the specifics of changes (replicable, irreducible, etc,) and the techniques I use to support change (nudges, goal setting, etc.)
4. Think much more from a person centred approach. Change implementation style of projects and innovations.
5. I have already thought about how we can use some of the techniques in sessions I am working on

Q7. How could this series have been approved?

1. Maybe spread over more sessions? I felt like we always had a lot to talk about in the break out sessions and then afterwards when we all discussed what we'd come up with in the chats. I think we ran out of time in session 3! Either a bit longer per session, or tag an extra one on
2. Improved? only doing them in person
3. More time :)
4. There was a lot of content, which was all really good. But for new people to this area the sessions could may be have been delivered slightly slower and covered less detail so that we would have a bit more time to take it in and absorb it.

Q8. Any other comments?

1. Great course that was well delivered. Kate was really engaging and the subject matter was really interesting. I would recommend it to people :)
2. Thank you
3. Thanks Kate -- I'm smarter for having participated.
4. Very good slides, great content, well presented - an enjoyable and beneficial course in exploring behaviour change.

3. CONSULTANCY

This section includes one case study. It is linked to the teaching and training case study (section 2.2) and demonstrates the achievement of the following learning outcomes:

7. Assess requests for consultancy and establish the needs of a Client group.

8. Plan, manage, monitor and evaluate consultancy in Health Psychology at the forefront of professional practice.

9. Formulate recommendations to Clients based on evidence collected and disseminate information effectively to Clients on the processes and outcomes of consultancy.

3.1 Consultancy Case Study

Learning outcomes achieved:

7. Assess requests for consultancy and establish the needs of a Client group.

8. Plan, manage, monitor and evaluate consultancy in Health Psychology at the forefront of professional practice.

9. Formulate recommendations to Clients based on evidence collected and disseminate information effectively to Clients on the processes and outcomes of consultancy.

3.1 CONSULTANCY CASE STUDY

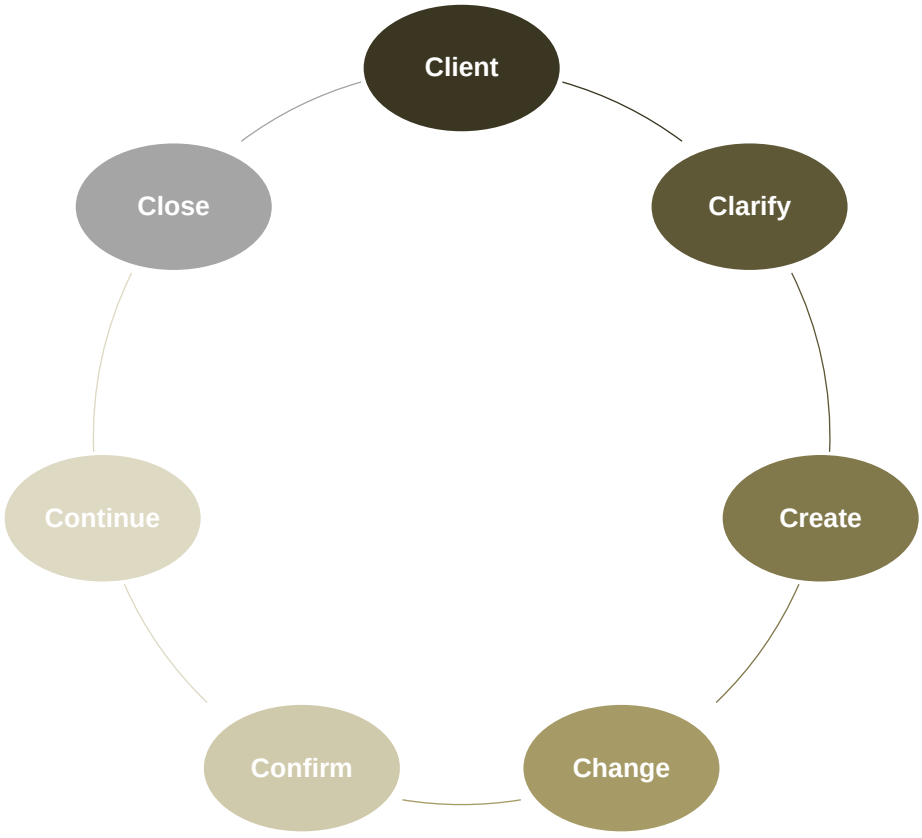
Overview

This Case Study describes and evaluates work undertaken in fulfilment of the Consultancy competency. Contact commenced in June 2020, the contract was agreed in August 2020 and the work was delivered between 9th October 2020 and 6th November 2020 In line with the Client's in-house training programme. The Client was The Innovation Agency, an Academic Health Science Network for the North West Coast which acts as an "innovation arm of the NHS " (Innovation Agency, 2020). They work with innovative small and medium-sized businesses to deliver transformation and improvement in healthcare across Cheshire, Merseyside, Lancashire and South Cumbria.

Consultancy Framework

I chose to use the Seven Cs of Consulting framework (Cope, 2010) to run the consultancy project (see Figure 1). The framework is centred around seven phases that a project should follow and stages can be undertaken jointly, independently, or run in parallel.

Figure 1. Seven Cs framework



It is important to note that for this project, the Client requested training sessions only specifically in this area, and they did not request assistance with organisational change, therefore there were some stages of the model that did not hold as much relevance, particularly "continue". Nevertheless, I did examine each phase, and using the Seven Cs, ensured that I took a systematic approach to the project. The model will be referred to throughout this case study.

Introductions and contract negotiation

Assessing request for consultancy: "Client"

By way of background, I provided a short teaching series early-to-mid 2020 as part of the Client's coaching programme, under my employment at Damibu. After providing the first session in which I introduced Health Psychology and behaviour change models, I was approached by the course facilitator who requested that I provide a similar series internally. The Client provides internal training to their staff on a weekly basis and she wanted me to provide some sessions based around health psychology and the COM-B model. The hoped outcome was that employees could use knowledge in behaviour change to support their Clients in delivering innovation to the NHS effectively.

Though the Client initially requested three sessions, I identified that there was an opportunity to turn the sessions into a more detailed series, providing a more substantial background to health psychology and delivering the COM-B model stage by stage; something which required more than the three sessions suggested. I had an established relationship with the Client through the provision of the earlier teaching series and the course facilitator was aware that I was enrolled on the Professional Doctorate. I mentioned the consultancy competency and suggested that I could provide the series in fulfilment of this if they were comfortable in doing so.

In this case, as I had undertaken similar work previously for the Client in the capacity of my work for Damibu, I had some information already and knew what the company offered. However, I did arrange a meeting with the Client and this, together with email communication, was used to establish if and how to move forward.

I requested payment of £200 for the series in part renumeration of time spent preparing and delivering the series under the premise that I would be required to take annual leave to run each session. The Client was happy to move forward in this way without negotiation.

Understanding time restraints as demonstrated by the Client, I suggested that I could provide four one-hour sessions face-to-face and a final fifth session as a pre-recorded video for attendees to watch at their convenience. This was agreed via telephone and I advised that a contract would be drawn and submitted prior to continuation of any work.

Drawing and negotiating the contract: "Client"

I drew up a simple contract which detailed the nature of the contract; standards of conduct; time scales; payment; illness, disability or death; modification of agreement; intellectual property and confidentiality; and early termination (see Appendix A). I had previously drawn a contract for a separate, unrelated piece of work and I used this as a base alongside a number of contract templates to ensure that I had included everything that was required.

I understood that consultancy work cannot always be predictable (Michie et al., 2004) and I needed the contract to reflect that. I therefore only provided a brief description of the work undertaken, which allowed for further discussion surrounding learning objectives:

3.1 CONSULTANCY CASE STUDY

> "The Consultant agrees to provide five 1-hour training sessions including one pre-recorded webinar. The sessions will be grounded in Health Psychology and behaviour change, the content of which will be agreed with the Client prior to commencement."

The contract was submitted to the Client on 18th June 2020. As the work to be delivered was a teaching series to complement an in-house training programme, an in-depth delivery plan with timescales was not required.

Following submission of the contract, the Client asked for an outline of the sessions, including draft learning outcomes. I drew the learning outcomes based on the initial request from the Client and by building on content of the series previously delivered. The sessions were to include a general introduction and to introduce a number of theories with a focus on the COM-B model. Learning outcomes produced are set out below:

1. Introduction to Health Psychology

- To understand what Health Psychology is and where it is used.
- To know what a health behaviour is.
- To understand the barriers to carrying out a health behaviour including how socioeconomic differences can impact

2. Introduction to models of behaviour change

- To understand the basic mechanisms of 2-3 models of behaviour change

3. COM-B behaviour change wheel

- To understand facets of the behaviour change wheel
- To be able to apply elements to real life applications

4. Applying the COM-B model to an intervention

- To be able to create an intervention based on facets of the behaviour change wheel

5. Evaluating the effectiveness of an intervention (provided as a pre-recorded video)

- To be able to apply evaluative measures to understand whether an intervention is effective

I suggested to the Client that learning outcomes could change but would not differ greatly from the set agreed. Outcomes were agreed in June without negotiation following which the Client proceeded to agree and plan for the sessions internally. The series was approved on 17th August 2020 when dates were set weekly commencing 9th October 2020. The contract was signed and agreed without amendments on 18th August 2020.

Delivery of the consultancy

The terms of this consultancy contract were to deliver a teaching series. As such, full details surrounding delivery of the work are set out within the teaching/ training case study. For the purpose of this case study, I will provide a brief overview of the process followed.

Assisting recruitment

I was asked by the Client to provide a brief overview of why attending the sessions would be beneficial to employees. This was part of contract negotiations but it was mostly used to recruit the Client group:

> Learning about health psychology and behaviour change can help us to understand the underlying factors that might lead a person to behave in a certain way. If we understand these mechanisms, we can create better interventions that enable long term change and we can consider how to address disparities and inequalities. Behaviour change can be applied to a huge number of health outcomes, a few of which I've listed below:
>
> - Public health outcomes (including weight management, smoking cessation, and other health promoting behaviours)
> - Management of long-term conditions
> - Pain management
> - Stress reduction

Establishing group needs: "Clarify"

Following agreement of the contract, I set out to establish the needs of the Client group in line with the "Clarify" stage of the Seven Cs of Consultancy. To do this, I shared a questionnaire with the Client which I requested be distributed to those invited to the series. I understood from prior communication that participants would likely come from a range of backgrounds, and where some may be clinical, others would have no experience clinically at all. I therefore asked for participants' job roles alongside two further questions; "How would you describe your knowledge of health behaviours?" and "How would you describe your knowledge of behaviour change techniques?". Understanding the level at which to pitch content allowed me to tailor the sessions specifically to those attending. In order to fully establish needs and tailor the experience further, I also asked participants what they were hoping to gain from the sessions and if there were any specific areas of interest. General consensus among responses was that there was an interest in improving knowledge of behaviour change and the application of this to current and future projects. This confirmed that the teaching series was warranted and wanted within the organisation.

Planning and delivery: "Create" and "Change"

To ensure that Client needs were met at every stage of the process, I opted to create and deliver the sessions concurrently, meaning that "create" and "change" were addressed together. Sessions broadly remained in line with learning outcomes previously provided to the Client as it was understood that they were the basis on which the contract was agreed. However, by running these two phases alongside each other, I was able to monitor group learning and thus their ongoing

needs. This also meant that any sessions that overran could be remedied. Learning outcomes were therefore slightly modified for sessions three to five.

Sessions were rooted in learning theory, using the theories of andragogy (Knowles et al., 2005) to tailor to adult needs and Kolb's experiential learning cycle (Kolb, 1984) to structure the sessions. Using learning theory when planning, alongside survey results, meant that I was able to think critically to meet the needs of the group. I have detailed how the theories were used in the teaching and training study but I found that it not only helped me to identify how to create the content and pitch the sessions at the right level, it also helped me to organise my own thought processes. Evidence based teaching methods have been assessed to produce better learning outcomes (Dunn et al., 2013) and I think that without this structure and the use of theory, the series would have risked not meeting the needs of participants and thus the Client.

Due to the coronavirus pandemic, the sessions were unfortunately not able to be provided face to face. As such, they were designed to be delivered using Zoom videoconferencing software; utilising its features to provide an interactive learning experience. Again, I have reflected on the impact of this on delivery of the sessions in the teaching and training case study, but it was worth noting here as I was required to add this stipulation into the consultancy contract. Having to work around social distancing measures is entirely novel but learning to use technology can strengthen the provision of long-distanced consultancy work, especially teaching and training.

Delivery of session content itself ran smoothly and I used outcomes of the session prior to inform delivery of the subsequent sessions whilst remaining broadly in line with the learning objectives as agreed. Though the contract provided for five 1-hour sessions; session five consisted of a 20-minute video. I chose to provide this as a shorter video with the understanding that all other sessions were complemented with discussion and tasks and that participants would need time to reflect either by pausing the video during or after they had watched the recording. As mentioned in the teaching and training case study, pre-recorded sessions do allow more flexibility (Luongo, 2018; O'Callaghan et al., 2017), but student engagement can lack as a result if motivation is lacking (Islam et al., 2020). Literature does suggest a blend of the two (Azlan et al., 2020), which is what I did here, but in running the last session in this way, accountability to engage could have been reduced as participants would have known that they did not need to enter any further discussion at a future date. It therefore may have been more suitable in this instance to build into the contract the provision of a pre-recorded session at the start or in the middle of the series.

Evaluation of outcomes: "Confirm" and "Continue"

Outcomes were evaluated using a questionnaire distributed both before and after the sessions, and through the monitoring of group-based tasks and discussion throughout the course. The questions asked prior to starting the course were put to all attendees again at completion, together with additional questions surrounding content delivery, achievement of objectives and presentation of myself as a teacher. A comprehensive breakdown of these evaluation measures can be found in the teaching and training case study.

With regards to the two evaluation questions, average ratings increased substantially. For the question “how would you describe your knowledge of health behaviours?”, rating increased from 4.4 to 7.7 out of 10 and for “How would you describe your knowledge of behaviour change techniques?”, rating increased from 4.5 to 7.7 out of 10. This confirmed an increase in perceived knowledge in application of behaviour change techniques and behaviour change generally.

In order to confirm whether the change in knowledge could be translated to real-life change, the survey also included the question “Is there anything you will do differently as a result?”. Responses indicated a general intention to look at projects with a different approach in light of their learnings, with some participants putting this into action already. Responses to this question can be found below:

“I’m now building behaviour change into planning of a future work programme”

“Yes—LOTS! I’m going to ask myself questions about the specifics of changes (replicable, irreducible, etc,) and the techniques I use to support change (nudges, goal setting, etc.)”

“Think much more from a person-centred approach. Change implementation style of projects and innovations.”

“I have already thought about how we can use some of the techniques in sessions I am working on”

A potentially influencing factor that may have an impact in long-term change here is prosocial motivation, which is a motivation driven by an effort to benefit other people (Grant, 2008). Although I didn’t directly measure this, I used conversation with participants, initial survey responses and discussion through services to identify that participants in this case wanted to help others (participants often reflected in person that any learning would help them to support their clients to build behaviour change into their interventions). Research also suggests that when people perceive change as meaningful for their Clients, their motivation to sustain change is higher (Van der Voet et al., 2017). As participants in this case saw opportunity to add behaviour change theory to influence how they support their Clients to adopt change themselves, it is hoped that any change will be effected.

Though participants had intention to change, in order to measure whether long-term change has taken place, it would have been useful to build a repeated evaluation after into the contract, and

this is something that I intend to bring to any future projects. It has been suggested that long-term measures on a regular basis could in themselves act as a maintenance intervention (Foxx, 2013) and so taking these measures could also support change.

Consultancy Report: "Continue" and "Close"

Following completion of the work, I compiled a short consultancy report which summarised the work delivered and highlighted the increase in perceived knowledge as measured by the change in rating for the two evaluation questions (see Appendix B). This was submitted to the Client and approved without amendments.

As the Client did not request a detailed report, I produced this separately to evidence how I would have prepared this comprehensively (see Appendix C). This includes breakdown of the work undertaken and future recommendations.

Evaluation

Preparing for and delivering a consultancy project was completely novel to me and I was grateful that the process ran smoothly so I could learn the basics. Equally, I think that a project providing more complications would have been just as beneficial and would have equipped me with the knowledge of how to handle it at an early stage in my career. I think one reason that I was able to act autonomously throughout the project was that there was a low stake in it for the Client- financial cost was low and there was no requirement for organisational change following completion.

I believe another great influencing factor on this was the relationship between myself and the Client. I had worked with the Client before under contract from my employer, though I had not interacted with employees in this nature previously. In this way, the Client knew what I was able to do and approached me to do the work initially. Due to this existing relationship, I felt that there was an element of trust which underpinned contract negotiations. Trust has been identified as useful to allow for flexible contracting (Savolainen & Ikonen, 2015) and in this case it definitely allowed for ease of negotiations and openness to the nature of content to be delivered.

However, I should acknowledge that the situation in this circumstance may be rare. Reaching out to potential new Clients with no prior relationship would have presented as more of a challenge to me. Cold calling new organisations is an aspect of my role that I don't enjoy. I often struggle not to take any rejection personally, feeling like a negative response often means that I should have done something different to start off. Whilst researching in an attempt to understand this, I identified that individuals who are highly agreeable are more likely to feel rejection when a sale is unsuccessful (Furnham & Fudge, 2008). As someone who scores highly in agreeableness in accordance with the Five Factor Model of personality (McCrae & Costa Jr, 2008), this could offer an explanation as to why I feel this way and avoid cold calling where I can. However, if I am to progress as a Consultant, I should work on building a resilience and reflecting on why a rejection is not a highlight of my own personal flaws. An aspect to reflect on to build this is in my own experience as a potential customer; if I receive a cold call or email, I often don't give more than a thought to the sender and instead briefly skim the content and delete if not relevant.

Following initial receptiveness for future projects with Clients of zero-acquaintance, trust development may also be more of a challenge. A study undertaken by Belkin and Rothman (2017) found that emotional expression can be an important influence, and that expressions of happiness can positively influence trust and the Client-consultant relationship generally. The same study found initial inferences of sociability, morality and competence to be important shapers of trust-related judgements. It would therefore be important to be aware of these stereotypes when initiating new relationships and to take steps to express these on first contact. It would also be beneficial to draw down on these factors throughout any consultancy process and beyond to maintain rapport and create mutually beneficial, long-standing relationships.

Asking for renumeration in exchange for the teaching sessions was something that I felt uncomfortable with. Even though I had to take annual leave to be able to deliver the sessions and spent around 10 hours preparing and delivering each one, I felt that my expertise wasn't worth the cost of £200 that was requested, and I was worried that asking for money would result in the Client taking away the opportunity. Not feeling "good enough" seems to be a personal running theme throughout the doctoral programme, and sits well in line with impostor phenomenon (IP) (Clance & OToole, 1987). IP is generally accepted as a part of academia (Cisco, 2020), and is noted more amongst women (Jöstl et al., 2015; Vaughn et al., 2020) and although it is something I am aware of and aiming to actively address, I have personally noticed it impact on my self-esteem and motivation to seek out opportunities due to fear of rejection as highlighted earlier. In this case, I managed to push through these feelings of self-doubt to request renumeration and although it fell below minimum wage in terms of hours worked, the outcome highlighted that I do have the knowledge and skills to deliver teaching and training.

A trait of IP is that successes are seen as "luck" (Clance, 1985) and so reflecting on the work surrounding it, the fact that the Client requested the work themselves, and the positive feedback received will be important so I can look back at this if I am put in a similar position when undertaking consultancy work in the future. Although some literature has found a significant association between reflective practice and perceived self-competence (Loades & Myles, 2016), it has also been linked to an under-evaluation of competence amongst trainees (Hitzeman et al., 2020), and so I need to be aware that my own anxieties and lower exposure to such experiences should be taken into account when reflecting.

Running the consultancy project in line with the seven Cs consulting model was a challenge, particularly as the proposed project was simple- the Client had specifically requested delivery of a teaching series. However, using the model as a loose structure did mean that I established the Client's needs and put a detailed process of evaluation in place; something that I may not have considered doing before. It's definitely something that I can see the benefit of moving forward, using "rapid mapping" to quickly evaluate suitability for uptake of any new consultancy project as well as planning the project with the steps in mind.

Overall, this project has taught me to take things systematically from start to finish. This is something that has appeared throughout the doctorate repeatedly and was in fact also a central

part of my teaching series. Taking things systematically, especially at the start of my career, will ensure that I cover everything that I need to, and that everything I do is justified by evidence and, eventually, experience.

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Appendices

Appendix A

Consultancy contract

Consultancy Contract – Behaviour Change Training

This Agreement has been drawn up to help protect the interests of: Innovation Agency (the "Client") and Kate Atherton, Health Psychologist in Training (the "Consultant").

This contract is made on this date, 18.08.2020, between Innovation Agency, hereafter known as **the Client**, and Kate Atherton, hereafter known as **the Consultant** (individually **the Party** and collectively **the Parties** to this Agreement).

The Client and Consultant agree as follows:

BACKGROUND

A. The Client is of the opinion that the Consultant has the necessary qualifications, experience and abilities to provide the services to the Client.
B. The Consultant is agreeable to providing the services to the Client as set out in the terms and conditions of this agreement.

NATURE OF THE CONTRACT

The Consultant agrees to provide five 1 hour training sessions including one pre-recorded webinar. The sessions will be grounded in Health Psychology and behaviour change, the content of which will be agreed with the Client prior to commencement.

STANDARDS OF CONDUCT

Both parties agree to be bound by the ethical codes of conduct published by the British Psychological Society and the Health and Care Professions Council.

TIME SCALES

Preparatory work will be commenced by the Consultant upon the date of this Agreement. Session dates will be arranged and agreed between the Client and the Consultant within no more than 14 days from commencement of the Agreement. Any changes in session dates due to unforeseen circumstances will be agreed between Parties.

The Consultant will inform the Client if work should be delayed due to illness and commitments arising from the Consultant's main place of employment. The Client will keep the Consultant informed of any delays which may impact upon the Consultant's ability to carry out the work.

COMPENSATION AND PAYMENT

3.1 CONSULTANCY CASE STUDY

The Consultant agrees to provide the work detailed in this Agreement for a fee of £200.00. In addition the Consultant will be reimbursed for reasonable and necessary expenses incurred by the Consultant in connection with providing the Services. All expenses must be pre-approved by the Client.

The Client will be invoiced when the Services are complete. Invoices submitted by the Consultant to the Client are due within 30 days of receipt.

ILLNESS, DISABILITY OR DEATH

In the case of a medically certificated long-standing illness or disability which prevents either party from continuing with this arrangement, the contract shall terminate. In the case of incapacity or death of the main point of contact provided by the Client, the Client will make reasonable arrangements to locate and arrange for an alternative point of contact. In the case of incapacity of the Consultant will result in either a temporary suspension of the contract or in termination of the contract, to be decided by the Consultant depending upon his/her circumstances. Death of the Consultant shall result in termination of the contract. In all cases, any fees paid will be non-refundable.

MODIFICATION OF AGREEMENT

Any amendment or modification of this Agreement or additional obligation assumed by either Party in connection with this Agreement will only be binding if evidenced in writing signed by each Party or an authorised representative of each Party.

INTELLECTUAL PROPERTY AND CONFIDENTIALITY

Any intellectual property created by the consultant for the work undertaken set out in this Agreement is owned by the Client, or is held on trust by the Consultant for the Client.

The Consultant shall keep confidential all Confidential Information disclosed to it and shall take all necessary precautions against unauthorised disclosure of the Confidential Information. The Consultant shall not directly or indirectly disclose, permit access to, transmit or transfer any Confidential Information to any third party without the prior written consent of Client. The Consultant shall not use or copy any Confidential Information except as may be reasonably required to perform the Services.

TERMINATION

Either Party may terminate this Agreement at any time by providing the other Party with a thirty (30) day written notice.

Either Party may terminate this Agreement at any time, with or without notice, if the other Party breaches any material term of this Agreement.

Authorised to sign for and on behalf of Innovation Agency (The Client):

Signature 

Date _____18.08.2020_____

Name in CAPITALS __JULIETTE KUMAR_____

Position in Organisation __ASSOCIATE DIRECTOR FOR IMPROVEMENT AND EDUCATION_____

Consultant:

Signature 

Date 26/08/2020

Name in CAPITALS KATE ATHERTON

Appendix B

Brief end of consultancy report

END OF CONSULTANCY REPORT

The contract provided for five one-hour training sessions including one pre-recorded webinar. The sessions were to be grounded in Health Psychology and behaviour change, the content of which was to be agreed with the Client prior to commencement.

It was agreed that sessions would be arranged on a weekly basis from 9th October 2020. Learning objectives were loosely set prior the sessions.

On commencement of the sessions, learning objectives broadly remained the same but session three and four were combined to run through each stage of the behaviour change wheel and a basic introduction to the theoretical domains framework was included into session five. Feedback suggested that all participants agreed that learning objectives were clearly identified and met throughout.

Two questions were asked of participants both before and after the sessions: a) how would you describe your knowledge of health behaviours and, b) How would you describe your knowledge of behaviour change techniques? Particpants were asked to rate their knowledge on a scale of 1-10. 11 participants responded to the questionnaire before the sessions and seven after. Average rating for question a) rose from 4.4 to 7.7 and average rating for question b) rose from 4.5 to 7.7, showing an increase in knowledge and or confidence in behaviour change and behaviour change techniques as a result of the sessions.

Signed:

2nd January 2021

Appendix C

Detailed end of consultancy report

CONSULTATION REPORT: DELIVERY OF TRAINING IN HEALTH PSYCHOLOGY

Work undertaken: October 2020

Consultant: Kate Atherton, MSc, MBPsS

CONTENTS

EXECUTIVE SUMMARY

This report provides an overview of a five-part training series provided to the Client; consisting of four virtual training sessions and one pre-recorded webinar. Sessions were grounded in Health Psychology and behaviour change and equipped participants with the knowledge to build and evaluate a basic behaviour change intervention, and to identify barriers and facilitators to behaviour change.

Learning about health psychology and behaviour change can help us to understand the underlying factors that might lead a person to behave in a certain way. If we understand these mechanisms, we can create better interventions that enable long-term change and we can consider how to address disparities and inequalities. Behaviour change can be applied to a huge number of health outcomes, including those listed below:

- Public health outcomes (including weight management, smoking cessation, and other health promoting behaviours)
- Management of long-term conditions
- Pain management
- Stress reduction

As an academic health science network, Innovation Agency NWC support SMEs to deliver transformations and improvements in healthcare. Successful adaption of innovations into organisations, systems or on a public health scale requires behaviour change, and it is important that employees of Innovation Agency NWC are able to understand how to effect this when supporting businesses to develop and deliver their innovations.

IDENTIFYING NEEDS AND DEFINING LEARNING OBJECTIVES

The Consultant considered the Client's initial brief to provide training in health psychology and use of the COM-B model to build interventions when identifying appropriate learning objectives. To tailor the series to

the needs of participants, the Consultant distributed a short questionnaire which included questions on job role, existing knowledge in behaviour change and behaviour change techniques and expectations of content. Participants generally wanted to understand behaviour change and how this could be applied to their role in supporting projects, though there were some more specific scenarios (see future recommendations).

Results from the survey were considered alongside initial instruction from the Client to define a loose set of learning objectives which were shared with the Client prior to commencing the work.

SESSION CONTENT

On commencement of the sessions, learning objectives broadly remained the same but session three and four were combined to run through each stage of the behaviour change wheel and a basic introduction to the theoretical domains framework was included into session five. Interactive elements were used throughout to enable participants to reflect on their learning alongside real life experiences. Feedback suggested that all participants agreed that learning objectives were clearly identified and met throughout. Each session is outlined below:

Session One.

- To understand what Health Psychology is and where it is used.
- To know what a health behaviour is.
- To understand some barriers and facilitators to carrying out a health behaviour including how barriers including socioeconomic differences can impact.

Session one provided an introduction to health psychology as a subject and explored barriers and facilitators to undertaking health behaviours. This provided participants with a base on which to build knowledge and reflect throughout the series.

Session Two

- To understand the basics of three theories of behaviour change:
    - The Health Belief Model
    - Self-determination Theory
    - COM-B Model

Session two built on session one by introducing a number of behaviour change models in preparation for the detailed application of one model in sessions three and four.

Session Three

- To understand and identify a target behaviour using the COM-B model.
- To identify suitable intervention functions to move forward.

Session three was the first of two sessions used to introduce the COM-B model in more detail, teaching participants how to apply the first two stages of the model to real-life situations.

Session Four

- To identify suitable intervention functions and policy categories for an intervention.
- To understand and identify suitable behaviour change techniques.
- To understand and identify a suitable mode of delivery.

Session four introduced the final stages of the COM-B model, running with the examples identified by participants in the previous session.

Session Five

- To understand the concept and domains of the Theoretical Domains Framework.
- To understand methods to evaluate an intervention.
- To understand what can influence reliability of an evaluation.

Due to availability of sessions, session five was provided as a pre-recorded video. This session introduced the theoretical domains framework as an optional tool to use alongside the COM-B model, and introduced techniques for successful evaluation of an intervention.

EVALUATION

Feedback suggested that all participants agreed that learning objectives were clearly identified and met throughout.

Two questions were asked of participants both before and after the sessions: a) how would you describe your knowledge of health behaviours and, b) how would you describe your knowledge of behaviour change techniques? Participants were asked to rate their knowledge on a scale of 1-10. 11 participants responded to the questionnaire before the sessions and seven after. Average rating for question a) rose from 4.4 to 7.7 and average rating for question b) rose from 4.5 to 7.7, showing an increase in knowledge and or confidence in behaviour change and behaviour change techniques as a result of the sessions.

FUTURE RECOMMENDATIONS

Participants responded positively to the training series and planned on building behaviour change theory into their roles in supporting stakeholders to effect change. To evaluate that this learning is applied to practice, it is suggested that employees are encouraged to regularly reflect on the support offered to their Clients to identify where they have been able to include behaviour change theory, and that this also be built into any evaluation of services.

It's acknowledged that due to time restraints, there were aspects of the series that were delivered in brief. To encourage person-centred design further, it is suggested that any future training include discussion of

barriers and facilitators to behaviour change, including socioeconomic differences and their impact on health and ability to change health behaviour.

4. BEHAVIOUR CHANGE INTERVENTIONS

This section contains two pieces of work: a One-to-One Intervention Case Study, which describes and reflects on my experience in designing, delivering and evaluating a face-to-face sleep hygiene intervention; and an Online Intervention Case Study, describing and reflecting on my experience in designing, delivering and evaluating a group intervention, delivered online. Both case studies demonstrate the achievement of the following learning outcomes:

10. Assess, formulate, intervene and evaluate in a formal behaviour change intervention with an individual client where the intervention is delivered face to face.

12. Work with clients, respecting them, respecting professional boundaries and laws and codes of conduct, and reflecting on the experience in a structured fashion.

4.1 One-to-one Intervention Case Study

Learning outcomes achieved:

10. Assess, formulate, intervene and evaluate in a formal behaviour change intervention with an individual client where the intervention is delivered face to face.

12. Work with clients, respecting them, respecting professional boundaries and laws and codes of conduct, and reflecting on the experience in a structured fashion.

4.1 BEHAVIOUR CHANGE INTERVENTION ONE CASE STUDY

Background

Alex[1] is a 47-year-old female with a diagnosis of PTSD and stroke-associated depression. At the point of intervention, she was experiencing low mood, anxiety, suicidal ideation, pain and disability caused by long-term conditions including Fibromyalgia, Lupus and Raynaud's disease.

Professional Practice and Seeking Supervision – a Foreword.

It is important to note that Alex, as is the case with many other patients accessing a community mental health team (CMHT), presented as high risk. Aligning with HCPC and BPS standards of conduct, I made sure to take reasonable steps to mitigate this risk. I utilised weekly clinical supervision and MDT discussion throughout this process to carefully assess and manage this risk. Whist Alex did present with suicidal ideation and ongoing self-harm behaviour, this was chronic, and Alex shared a number of protective factors. There was no indication throughout our time working together that Alex was in danger. Understanding my own boundaries as an Assistant Psychologist, I was careful to keep within my scope of practice and at no point did I make a clinical decision without input from my Clinical Supervisor. Protected time was given for discussion surrounding this intervention in addition to my usual weekly hour-long supervision due to the nature of the work undertaken. Throughout the intervention, Alex also remained under the care of the wider CMHT.

Assessment and Formulation

Initial sessions were used to conduct a detailed assessment and formulation. I chose to use a cognitive behavioural therapy (CBT) model in formulation (Williams & Garland, 2002), taking a biopsychosocial approach (Borrell-Carrió et al., 2004) to obtain a holistic view of Alex's ongoing difficulties.

Alex presented with low mood, lack of motivation and suicidal thoughts which had worsened following the first lockdown. She shared with me details of abuse she had experienced as a child. She understandably held a lot of anger around this, and it was evident that thinking about it took up a lot of space in her mind. She spoke of reporting the abuse a number of years prior to our meeting but being unable to continue with the process due to her mother becoming ill and Alex subsequently suffering a stroke. Though Alex spoke of her suicidal thoughts, she also shared with me a number of protective factors, including her sister and young niece and her faith.

At the next session, I offered Alex some support around the reporting of her abuser and we spent some time completing a referral form to a local charity. It was suggested that they could support Alex in the reporting of her crime and with further therapeutic support.

As Alex wanted support with her low mood, I explained to her the CBT model. As we discussed the relationship between thoughts, emotions, behaviours and physical symptoms, Alex expressed that she had never made this link before and exclaimed that having it displayed in front of her helped her

[1] Names have been changed to protect anonymity

to see the link in her own experience. We discussed how the cycle can be broken at any point, and how behavioural activation was one way to do this. Alex shared that she enjoyed gardening, knitting and listening to music and doing things for others. We spoke about why Alex struggled to do any of the things she enjoyed.

I asked Alex the 'miracle question' to understand her values. She expressed that the first thing she would notice would be that her pain was gone. We explored goals and Alex said that she wanted to be able to screenwrite again and feel better about life. I asked Alex what was stopping her and she cited that it was partly her disability and partly time. Understanding that Alex was unemployed, I probed this more and it appeared that much of Alex's days were taken up sleeping. She acknowledged that she did want to change and a good night's sleep made a big difference. For her, sleep became affected during lockdown when her habits changed and she couldn't see anyone. Alex didn't do anything specific to wind down- she would have a late dinner and would watch television in her living room or bedroom until she felt tired, which was around 2am, both of which have been identified as maladaptive to sleep according to definitions of sleep hygiene[2] (Stepanski & Wyatt, 2003)

Using this information, I prepared a formulation:

Presenting problem	Low mood, suicidal thoughts, ongoing pain.
Predisposing factors	Previous history of stroke and pulmonary embolism, history of sexual and physical abuse, loss of father at young age.
Precipitating factors	Introduction of lockdown measures led to increased social isolation and loss of routine. Anticipated winter period when she experiences more pain and low mood.
Perpetuating factors	Presence of chronic illnesses including chronic pain leading to disability. Low psychological awareness and motivation to maintain self-care. Poor sleep schedule leading to perception of no time. Lives alone at distance from sister and niece who is protective factor. Hasn't reported abuser and continues to hold anger about this.
Protective factors	Able to use public transport to travel. Ongoing support from GP and Consultant for physical conditions. Open to new experiences. Has hobbies. Lives near some family members and friends, strong Christian faith, pet cat.

I understood that if Alex managed to practice better sleep hygiene, and if this in turn helped her to get to sleep and wake up earlier, she could potentially find more time to partake in pleasurable activities, which could improve mood. Improving sleep itself could also have an impact on low mood and pain

[2] "A set of general recommendations about lifestyle (eg, diet, exercise, substance use) and environmental factors (eg, light, noise, temperature) that may promote or interfere with sleep. Sleep hygiene may include some education about what constitutes "normal" sleep and changes in sleep patterns with aging." (Edinger et al., 2021)

(Haack et al., 2020; Scott et al., 2021), thus enhancing motivation. Further, understanding the potential link of poor sleep and suicidal risk (Bernert & Joiner, 2007), a sleep intervention could also have a positive impact on Alex's level of presenting risk.

At the next session, I explained my formulation and asked Alex her thoughts of participating in an up-to-12-week sleep hygiene intervention with the primary goal of giving her more time in her day to do things pleasurable to her to help her mood. It was acknowledged that although improvement of low mood was in itself important for Alex and would help to reduce self-harm behaviours and suicidal thoughts, it may also help to reduce pain (Stroemel-Scheder et al., 2020). Therefore, improvement of pain was to be seen as a secondary outcome.

Alex was happy with what was discussed and wanted to continue with the intervention. Detailed exploration of Alex`s current sleeping practices indicated several barriers to sleep:

1. If Alex had no set plans, she would not get up. Alex didn't think that she would be able to get up if she added more plans to her day due to her ongoing fatigue, which differed daily.
2. Alex worried that someone would break into her house at night (she lived alone). This could sometimes lead to her struggling to get to sleep.
3. Alex experienced pain through the night but she did say that she could often manage this with painkillers.

Designing the intervention

I used the COM-B model with the Theoretical Domains Framework (Michie et al., 2011) to identify where change was needed and in what domains and identified that, to improve sleep hygiene practices, there should be a focus on improving psychological capability and reflective and automatic motivation (Appendices a-c). I worked through the relevant stages of the model to produce four intervention components (Table 2).

Psychoeducation sessions on sleep hygiene and mindfulness with information sheets

I understood from conversations surrounding sleep habits that Alex had lower health literacy and would benefit from education to improve knowledge and provide a base for building skills. Evidence suggests that although sleep hygiene education alone can improve sleep, other interventions such as CBT-I and mindfulness based therapy can be more effective (Chung et al., 2017; Ong & Moore, 2020), and mindfulness training can be effective for sleep problems specifically in those with fibromyalgia (Amutio et al., 2018). Although it was not possible for me to deliver these interventions with the training and resources available to me, I took aspects of these approaches. I produced a sleep hygiene education session to raise awareness of helpful techniques and any current behaviours that may be unhelpful; and a mindfulness session to introduce the concept generally for low mood and anxiety, and as a relaxation technique in the evenings.

As Alex had shared with me that she struggled with memory, I also produced information sheets. For session plans and information sheets (Appendices d-g).

4.1 BEHAVIOUR CHANGE INTERVENTION ONE CASE STUDY

Goal setting and sleep diary

Goal-setting has been identified as an effective behaviour change technique, particularly when delivered in person (Armitage et al., 2021), thus I included this component in the intervention. The same paper concluded that the effectiveness of goal setting is strengthened when accompanied by monitoring the behaviour or outcome. Self-monitoring can be effective in improving sleep hygiene (Mairs & Mullan, 2015), thus I wanted to introduce a sleep diary to understand Alex's current sleep patterns and impact on daily mood and pain, and to track changes. As Alex struggled to write due to stroke-associated weakness, I adapted a questionnaire (Appendix h) which she could complete on her phone. The plan was to introduce the diary to be used for one week after delivery of psychoeducation, and again for one week at the end.

Weekly check in sessions

I planned weekly sessions with Alex as a space for her to share and reflect on progress and challenges. In this way, we could identify barriers and reformulate together.

Table 2. Intervention functions aligned with the COM-B model

Intervention component	Behaviour change techniques	Intervention function	TDF construct	Com-B construct
Psychoeducation sessions on sleep hygiene and mindfulness 1. One session discussing unhealthy sleep habits and discussing healthy sleep hygiene practices as adapted from NHS.uk "10 tips to beat insomnia" (NHS.uk, 2021) 2. One session on mindfulness, developed using existing session resources in my service which are rooted in DBT. (Appendix c)	• Instruction on how to perform a behaviour • Information about emotional consequences • Restructuring physical environment	• Education • Persuasion • Enablement	• Knowledge • Skills • Goals • Reinforcement • Beliefs about consequences	• Psychological capability

Information sheets on sleep hygiene and mindfulness See Appendices d-f	• Instruction on how to perform a behaviour • Information about emotional consequences • Restructuring physical environment	• Education • Enablement	• Knowledge • Beliefs about consequences • Memory, attention and decision processes	• Psychological capability
Goal setting	• Goal setting • Information about antecedents • Habit formation/ reversal	• Persuasion • Enablement	• Behavioural regulation • Beliefs about capabilities • Optimism • Intentions • Goals	• Psychological capability • Reflective motivation
Sleep diary	• Information about antecedents • Self-monitoring of behaviour • Self-monitoring of outcome • Prompts/ cues	• Education • Environmental restructuring • Enablement	• Knowledge • Memory, attention and decision processes	• Reflective motivation • Automatic motivation
Weekly check in sessions	• Feedback on behaviour/ outcome • Problem solving • Action planning • Review behaviour goals • Social support • Monitoring of emotional consequences • Self-belief	• Persuasion • Enablement	• Knowledge • Skills • Beliefs about capabilities • Optimism • Beliefs about consequences • Intentions • Goals	• Psychological capability • Reflective motivation

Intervention delivery

This section provides an overview of the intervention and focuses on the first few sessions as introduction of the intervention content.

Session one – sleep hygiene psychoeducation

We talked about current sleep routines and options for standardising Alex's schedule, which has been linked to sleep improvement (Edinger et al., 2021). Alex's beliefs surrounding her ability to practice good sleep hygiene continued to be low. She expressed that sometimes she fell asleep in the middle

of the day, and she was worried that this would impact on her new routine. I validated her feelings surrounding this, naming her physical diagnoses as barriers to quality sleep and we explored what happened for her after she had a good night's sleep. We discussed how sleep hygiene was important in the management of these conditions, but how associated symptoms could also interact with this.

Session two – mindfulness psychoeducation

This session commenced with a discussion about Alex's week. She had been sleeping well and had followed more of a routine, although she acknowledged that this was assisted by her commitments to her church. Alex shared that she had been having hot showers nightly and had stopped watching TV 30 minutes before bed, opting to listen to bible readings. She expressed that she found this routine difficult, but wanted to maintain consistency.

After delivery of mindfulness psychoeducation, Alex told me that she would check whether she could practice mindfulness with her church leaders, and explained that it may go against her faith. We explored this, and following the session it felt important to reflect on this as this barrier hadn't occurred to me (Appendix i).

Session three – goal setting and sleep diary

At the start of the session, Alex exclaimed that she felt happier and less stressed, which she attributed to getting enough sleep. Over the last week, she had been going to bed at 1am and waking up at 10am. She also shared that she had required less pain relief. Alex shared that normally, during colder months, her pain is much worse, but that she felt more able to wait longer before taking medication. We talked about mindfulness and explained that it wasn't an option for her.

During this session I asked Alex about what she enjoyed and she shared that she wanted to be able to get up earlier to engage in her old hobby of screenwriting. We talked about how this could be possible and, although Alex was eager to change her routine, she struggled with motivation. She shared that it would be easier to take a gradual approach, changing sleep and wake times by a small amount at a time. Although sleep-based literature in this area is sparse, this approach is supported in behaviour change literature; setting small achievable goals has been shown as effective in enabling long term behaviour change (Michie et al., 2011). Allowing Alex to take control of how she would change her routine was important for her autonomy, which is vital in behaviour change (Ryan et al., 2008).

Alex decided that she would continue to practice good sleep hygiene and aim to start her bedtime routine and wake up 30 minutes earlier over the following week. I introduced the sleep diary during this session, and Alex agreed that she would fill this out once a day using her phone.

Intervention sessions 4-8

During these sessions, we discussed where Alex was struggling and what had happened in her day-to-day life. I think these sessions helped somewhat to keep Alex on track by giving her the space to reflect (Appendix i).

Evaluation

To understand the effectiveness of the intervention, I used both quantitative and qualitative measures. As is required of my service, I used the CORE-OM and CORE-10 questionnaires to understand psychological distress and wellbeing. I used the CORE-OM measures at the start and end of the intervention, and the CORE-10 after session 4. (see Figure 1).

It is important to highlight that, prior to our final session, Alex discovered news that had a psychological impact on her. Understandably this could have influenced the outcome measures which were completed in this session; the Core outcome score saw only a small reduction, despite the Core-10 showing more positive results. It's important to consider that, although outcome measures ask the responder to recall the past two weeks, there is a potential that recall bias may affect accuracy. This potential is heightened in the case of people with PTSD, who have been shown to harbour attentional biases towards negative information (Fani et al., 2012). Alex had also already told me that she was nervous for the intervention to end, which could have led to reduction in mood.

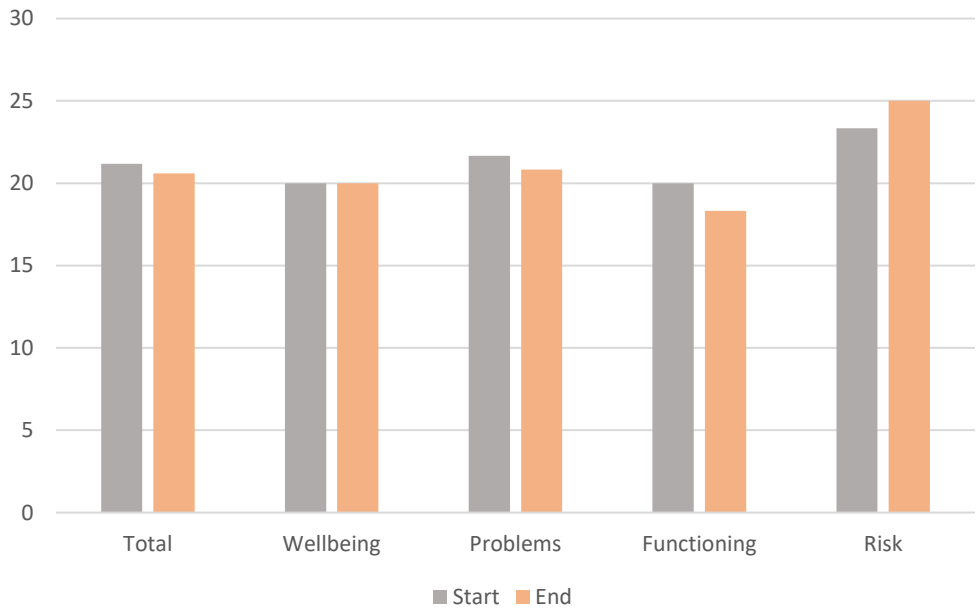

Figure 1. Comparison of CORE-OM results taken at the start and end of the intervention

I had also intended to use the sleep diary as a second quantitative measure. I had considered using SMS-reminders as a BCT to encourage compliance in line with evidence (Choe et al., 2015), but chose not to use these following a conversation with my supervisor in which it was suggested that they could take too much responsibility away from Alex, enforcing reliance. For this reason, I completely dismissed them, rather than taking that suggestion into account alongside evidence. if I were to repeat this, I would incorporate reminders, as evidence does support this (Liu & Willoughby, 2018; Stawarz et al., 2015). I think it's important to listen to other viewpoints, but I could use this as a space for reflection, understanding that I have my own expertise.

The week following introduction of the sleep diary, Alex cancelled the session as she planned to report her abuse to the police. It was positive that Alex felt empowered to do so, as it was something that clearly impacted on her mental health. Alex subsequently cancelled a number of sessions and two sessions were not scheduled over the festive period. When Alex did return, she shared that she did not use the diary as things changed for her every day and she struggled with her memory. I explored whether Alex had felt some unease around failing to use the diary and she agreed that she had felt the need to please me. I used this time to reassure Alex that I would not judge her, and although I explained what the diary was for, we agreed that it was not helpful for her, and we could discuss sleep in sessions instead. Although it felt uncomfortable for me to bring up the issue of non-attendance, I do know that it was important to address, even just to help Alex process why she may have opted to do different things, and to remove barriers for future attendance.

I think that if I were to do this again, I would work with Alex in a person-centred way to understand any barriers and hesitations to the sleep diary. Getting Alex more involved in this process, and ensuring that she knew that I wouldn't think badly of her for not maintaining it, may have also stopped the gap in sessions. Looking back, I know that I could have considered using a validated sleep scale instead, such as the Sleep Quality Scale (Yi et al., 2006) which I could have worked though with Alex in session and which would have helped me to understand sleep initially. I also could have introduced a more accurate objective measure, such as an activity tracker or a mobile phone app, although I understand that these results would need to be interpreted with caution (Piccinini et al., 2020).

I would also have used more measures to understand other outcomes. Although pain was a secondary outcome of the intervention, I did not measure this quantitively. I am aware of a number of measures that are available and are easy to deliver, such as the Numerical Pain Rating Scale or the Brief Pain Inventory as recommended by The British Pain Society (2019).

I used weekly check-in sessions to ask how Alex's sleep and mood had been and what she had done the week prior. As the sessions went on, although Alex did hit setbacks, generally I noticed an improvement in her mood, pain, sleep and how much she engaged with the world, though I was aware that reporting of her abuser could have interacted with these outcomes. I kept in mind Alex's reflection of wanting to please people, including myself, and understood that although it was important to her, she told me that she wouldn't do anything she didn't want to do. At the time I interpreted this as her saying 'no' when she didn't want to do something, but on reflection this could also mean that she might indicate she would try something and then not do it, as with the sleep diary and at times her sleeping schedule. It was important to make Alex aware that I was not there to judge her. This was why weekly check-ins were important. Without keeping these qualitative measures, the intervention would have appeared unsuccessful.

Due to the nature of the service, I was unable to take delayed evaluation measures. This means that I was unable to identify whether Alex had managed to maintain change. Considering the circumstances of the last session, this was particularly hard for me. I wrote an end of intervention letter which described the intervention and detailed what would happen next (Session Eight, Appendix j). This letter not only

allowed me to show how I had listened to her over the three months and to highlight her progress, but it helped me to feel more confident that she knew how to continue moving forward in spite of her worries of ending the sessions, and that she was able to access support should her mental health deteriorate.

Final reflections

Throughout the intervention process, I regularly used self-reflection and clinical supervision to understand what I had done well and what could be improved, as well as to carefully monitor ongoing risk. This process also allowed me to have an ongoing formulation, which gave some flexibility in how the intervention was delivered. For example, week six identified that a barrier to Alex's sleep was that she wasn't doing anything with her day, and I was able to reintroduce physical activity as a sleep hygiene technique and doing small things to fill days. I was also able to provide further education on achievable-goal-setting when it became apparent that Alex was focusing on making big changes.

Overall, I am pleased with the outcome of this intervention. I learned a lot about practically applying intervention techniques and managing real life expectations. When Alex stopped attending the sessions, I couldn't help but feel that the intervention had failed. Selfishly, I felt that this would impact on my doctoral training, however, it was important for me to reflect on this and put Alex first. Interventions are not a one-size-fits-all and designing and delivering this intervention helped me to understand that expecting it to work perfectly was unrealistic. Looking at the bigger picture, Alex made improvements in her sleep hygiene, which she maintained for at least the length of the intervention. Although parts of the intervention, including mindfulness practice and the sleep diary, were unsuccessful, having weekly check-ins helped me to identify this and work with Alex to keep moving forward with other intervention components. Managing to look at the bigger picture was an important step for me, as I am often aware of my tendency to focus on the negative. This is something that I will take forward.

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Appendices

Appendix a – Identification of com-b components in which change is required

Com-B components	What needs to happen for the target behaviour to occur?	Change needed?
Physical capability	Is physically able to sleep at these times	N/A - has some disturbance which could be ascribed to fibromyalgia
Psychological capability	Know how to structure a healthy sleep schedule	Yes
Physical opportunity	Has the time and a place to sleep	No change needed – bed comfortable, has pain but managed by pain killers
Social opportunity	Not relevant	N/A
Reflective motivation	Hold beliefs that improving sleep hygiene will allow her to get up earlier and improve quality of life	Yes
Automatic motivation	Have established sleep hygiene habits	Yes

Appendix b- identification of relevant theoretical domains

Com-B component	TDF construct	What would this involve?
Psychological capability	Knowledge	An understanding of the importance of good sleep hygiene and what this involves
	Skills	Develop skills required to support sleep e.g. mindfulness
	Memory, attention and decision processes	Remember to stick to routine every day – has struggled with previous direction around doing things for pleasure

	Behavioural regulation	Develop skills of goal setting, sleep monitoring and evaluation
Reflective motivation	Social/ professional role	Not applicable
	Beliefs about capabilities	Believing in abilities to change sleep routine and get out of bed earlier
	Optimism	Confidence that she can stick to new schedule and that desired goals will be attained
	Beliefs about consequences	Belief that changing routine will improve mood and availability of time
	Intentions	Intention to change routine
	Goals	A want to change routine to improve mood
Automatic motivation	Reinforcement	Develop new routines
	Emotion	Not relevant

Appendix c - Identification of relevant intervention functions

Intervention Function	Does the intervention meet the APEASE criteria
Education	Yes
Persuasion	Yes
Incentivisation	Not practicable, effective or acceptable- not a specific outcome
Coercion	Not acceptable for individual intervention
Training	Not practicable- limited timescales and practitioner availability
Restriction	Not relevant for this behaviour
Environmental restructuring	Yes
Modelling	Not practicable due to timescales and available resources
Enablement	Yes

Appendix d – Mindfulness session guide

WISE MIND

I thought that I would start by introducing something called the wise mind, have you heard of it before?

Comes from a therapy called DBT, and this says that there are three emotional states: reasonable mind, emotional mind, and wise mind.

The **reasonable mind** is calculated and acts with no emotion before. So times you might need your reasonable mind might be when you're working out a bill, or following a recipe, or buying a train ticket. It just looks at the facts and nothing else.

The **emotional mind** is completely run by emotions. It distorts facts to fit with how we're feeling and it makes it really difficult for us to think rationally and logically. It can come with really distressing thoughts and can lead to behaviour that we wouldn't do if we didn't feel these strong emotions.

Venn diagram

Sometimes, we can live more in our emotional mind and sometime more in our reasonable mind. And there are pros and cons of both. Ideally, we want to be living in our wise mind, which is a mix of the two, so we can consider what we want and also what is rationally the best decision. Does that make sense?

If not – t-shirt scenario. Wise mind might see the first pair t-shirt in the shop and buy that, because it fits and you can afford it. The emotional mind might see a t-shirt and think that's amazing I love it, and buy it even though you can't afford it, or you buy the wrong size because they don't have yours. Now wise mind would pick a top that you really liked, but that you could also afford.

Wise mind is something that we can aim to move towards in mindfulness and I'll talk more about wise mind in some of our other sessions as well.

MINDFULNESS INTRO

Mindfulness just means paying attention to what is happening in the present and observing what's happening without any judgement. It can be really effective for depression and anxiety.

The human mind wanders off on tangents and that's completely normal. When we're not able to bring our mind back to what we want to focus on, that's were it can cause problems, for example when we can't stop thinking about things in the past that upset us, or worrying about the future, or when we're not able to focus on what we're doing.

Mindfulness is all about learning to notice when the mind has wandered off and then choosing to bring it back by paying attention to what is happening in the moment and choosing what we focus on. It's

unlikely that after learning more about it today you'll be a master, it's a skill that needs regular practice.

BOAT AND ANCHOR

There's a nice analogy called the boat and anchor. Strong emotions can make us feel like we're in a storm and we're being battered by waves that we can't control. We can't stop the waves, they're inevitable, but what we can do is learn how to stay afloat or even learn to surf them. What mindfulness does is it helps you to drop an anchor when things are bad, so when you're feeling really strong emotions, and that anchor keeps us steady until the emotion passes. And emotions always pass, that's the nature of them. In time with practice, you can get better at noticing these moments, and staying in the present.

In mindfulness its helpful to have an anchor to come back to which helps us to just ground ourselves in the present moment. When our minds wander, which they always do, we don't want to struggle against them and instead all we do it accept what we're thinking and then refocus on the anchor. Anchors can be your breath, they can be points of contact, so where your body is touching say a chair, or even your clothes, they can be sounds around you, and they can also be things you can see.

TWO TYPES

There are two types of mindfulness - informal and formal. Formal practice can involve breathing techniques and regular set practice, and informal focuses on just bringing awareness into your day to day life. Practicing both is ideal but everyone is different and some people can find formal mindfulness really difficult.

EXERCISES

Would you like to try a 3 minute exercise with me?

Run through breathing exercise

How did you find it? What did you notice? Was it difficult?

MINDFULNESS PRINCIPLES

There are 3 skills, observing, describing and participating.

Observing – attending to thoughts, emotions and behaviours without doing anything, including stopping them.

- You can use your five senses to observe what's going around you fully.. I will talk some more about how you can do this towards the end of the session.

- To observe what's going on inside, you can take notice of your emotions, but the key is to just notice. It can be really easy to judge ourselves for having strong emotions, feelings of jealousy, or anger, or anxiety. But actually everybody experiences emotions, and everybody has thoughts. Our thoughts don't make up who we are.
- The most common mindfulness practice to start with is observing your breath. You can think of your breath as an anchor- you will always have it. If you feel like you can't focus on anything, draw your attention to your breath first and notice how it feels.

Describing – describing these things in words and that important to communicate them but also for self control.

- When you do something, or a feeling or thought pops up, tell yourself what is happening. For example you could say in your mind "I am thinking about what happened yesterday", or "I am feeling sad", or "My heart is beating faster than usual". It's a way of noticing unhelpful thoughts are just thoughts, and not facts.
- We can't describe what is going on in someone's head.

Participating – To participate without self consciousness, so giving all of your attention to what you're doing in that moment

- To participate fully is to become one with the experience and almost forgetting yourself, which can be classed as an informal meditation.

Every day mindfulness exercise

Is there anything you do that you feel you can completely immerse yourself in and you can just focus on that?

To practice these principles, we can also look at HOW skills

How skills look at how we can observe, describe and participate. I've mentioned these as I've described observe, describe and participate. Keeping these in mind can make things easier

<u>NON-JUDGEMENTAL</u>

- Taking a **non-judgmental outlook** is important in reducing anxieties around thoughts.
- It's important to look at things as neither good nor bad, they're just things. You can replace things that are good or bad with just "it is".
- If you forget something, you can just say to yourself "I forgot to do this", and accept that it isn't a bad thing to forget something!
- If you're kinder to yourself in this way, you can really easily make a mental note to write it down next time without causing you any distress.

- Making judgements can have damaging effects on your emotions, and they can also affect relationships with others too. There is always something going on under the surface. You don't have to react to everything.
- Do you think you can listen without agreeing or disagreeing, or liking or disliking? Have you found yourself making any judgements today?

FOCUS ON ONE THING

A big part of participate is to **focus on one thing in a moment.** Try to not split your attention between different activities. You might think that you need to multitask but actually it does end up taking longer, and it isn't done as efficiently.

If your thoughts stray to what's going on, worries for the future, something that happened last month, just use that non-judgemental acceptance and say, this is just a thought, I'm doing this right now. You can always arrange a specific time to worry too.

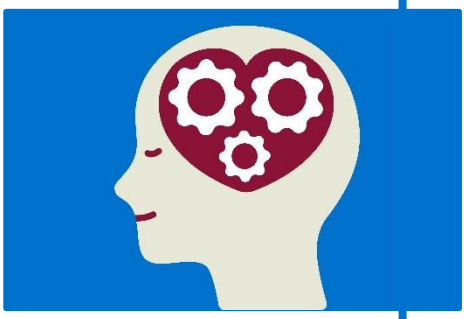
BE EFFECTIVE

Finally **be effective**. Mindfulness allows us to slow down so we can think about how to react to the actual situation and to do what is actually needed or called for. It can be tempting to give someone a piece of our mind or completely withdraw, but that isn't usually the best thing you can do for yourself or others, especially in the long run.

Say have sheet with mindfulness practice on, might feel silly but keep at it.

Appendix e – Mindfulness information sheet one

MINDFULNESS



Have you ever found that when you are trying to do something, your mind is busy thinking of something else? It might be worrying about something that could happen or thinking about what happened in the past. It could be thinking about something you need to do, or just daydreaming. When this happens, you're not focused on the here and now.

Mindfulness is about choosing to focus on the now and observing what's happening without any judgement. This information sheet gives a quick introduction in how you can use mindfulness in a way that works for you.

What is mindfulness?

Mindfulness is all about learning to notice when the mind has wandered off and then choosing to bring it back to what is happening around you. It can be really helpful if you are struggling to cope with unhelpful thoughts and emotions. Just like driving a car, or playing a sport, mindfulness is a skill that takes time to learn and it needs regular practice.

Practicing this awareness helps us to understand that our thoughts are just thoughts, and that they don't control us. This means that we can learn to respond to something in the way that we want to.

How does it work?

There are three steps to mindfulness: Observing, describing and participating.

Observe.

Observing is all about experiencing something without reacting to it. The idea is to let thoughts and feelings come and go, and to not judge them. By observing, you don't have to leave or react to a situation and let your emotions take control.

Describe.

This step looks at describing what you have observed. When you do something, or a feeling or thought pops up, tell yourself what is happening. For example you could say in your mind "I am thinking about what happened yesterday", or "I am feeling sad", or "My heart is beating faster than usual". It's a way of noticing unhelpful thoughts are just thoughts, and not facts.

Participate.

Participating is about putting all of your focus into an activity. Let yourself get involved in the moment completely and let go of fear and judgement from yourself and other people. This step can seem hard, but the more you practice, the easier it will get.

Learning to observe, describe and participate needs regular practice. See the next page of this worksheet for some exercises you can do daily.

Let’s practice.

BREATHE.

When we’re distressed, our body’s alarm system releases adrenaline. This can cause us to breathe fast and shallow, using our chest muscles instead of the diaphragm (belly breathing). Practicing our breathing can help us to be more aware when this happens.

- Set a timer for five minutes.
- Sit comfortably, with your back straight.
- Gently close your eyes or look down and soften your focus.
- Notice your breathing. Imagine that you have a balloon in your stomach. Every time you breathe in, the balloon inflates. Every time you breathe out the balloon deflates. Notice how your stomach feels as the balloon inflates and deflates. Your stomach should rise when you breathe in and fall when you breathe out. Place a hand on your stomach and notice how it moves.
- Thoughts will come into your mind, and that’s okay. That’s what our minds do. Notice these thoughts, and gently bring your attention back to your breathing. You don’t have to judge yourself for having these thoughts, and it’s okay for them to be there. It can help to visualise these thoughts drifting away, and just gently focus on your breathing again.
- If thoughts keep popping into your head, know that this is completely normal and natural. As you practice this exercise, this might happen less.
- As you get used to this exercise, you can set your timer for longer, or even practice without it.

A MINDFUL CUP OF TEA.

You can bring mindfulness into everything you do. This exercise focuses on making a cup of tea, but you can use it when you’re doing anything. Try it when you’re eating your dinner, going for a walk, or washing the dishes. It’s all about using your five senses, being present and noticing.

- Turn the tap on, watch the water come out of the tap, listen to how it sounds, and feel the cold temperature against your fingers.
- Pay attention to the water going into the kettle. When you turn the kettle on, listen to the sound of the water boiling, and notice the steam rising as the water heats.
- Pour the boiled water into your mug. Watch the colours change as the tea brews, notice the smell, and feel the heat coming from the mug. When you pour the milk in, pay attention to how the colours swirl. If you have sugar, feel how the water moves against the spoon.
- When your tea is ready to drink. Taste the tea as if it was your first time. Savour every sip. How does it taste? What does the temperature feel like on your tongue?
- It’s okay if your thoughts wonder, this will probably happen many times. Just notice these thoughts without judgement and let them drift away. Gently bring your attention back to the tea. This moment is for you.

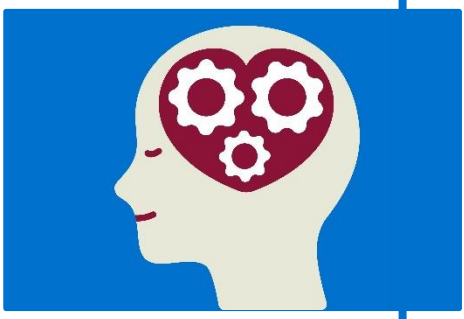
You can find other opportunities to practice mindfulness using apps like Smiling Mind and Headspace, or by searching “mindfulness exercises” on Youtube. You can find some great resources by searching “mindfulness exercises” on www.mind.org.uk.

Appendix e – Mindfulness information sheet two

WISE MIND

Your mind has three states; The reasonable mind, the emotional mind and the wise mind. Everybody has all three states but most people tend to live in one state most of the time.

This information sheet explains a little more about the three states, and how we can try to live more in our wise mind.



Reasonable Mind.

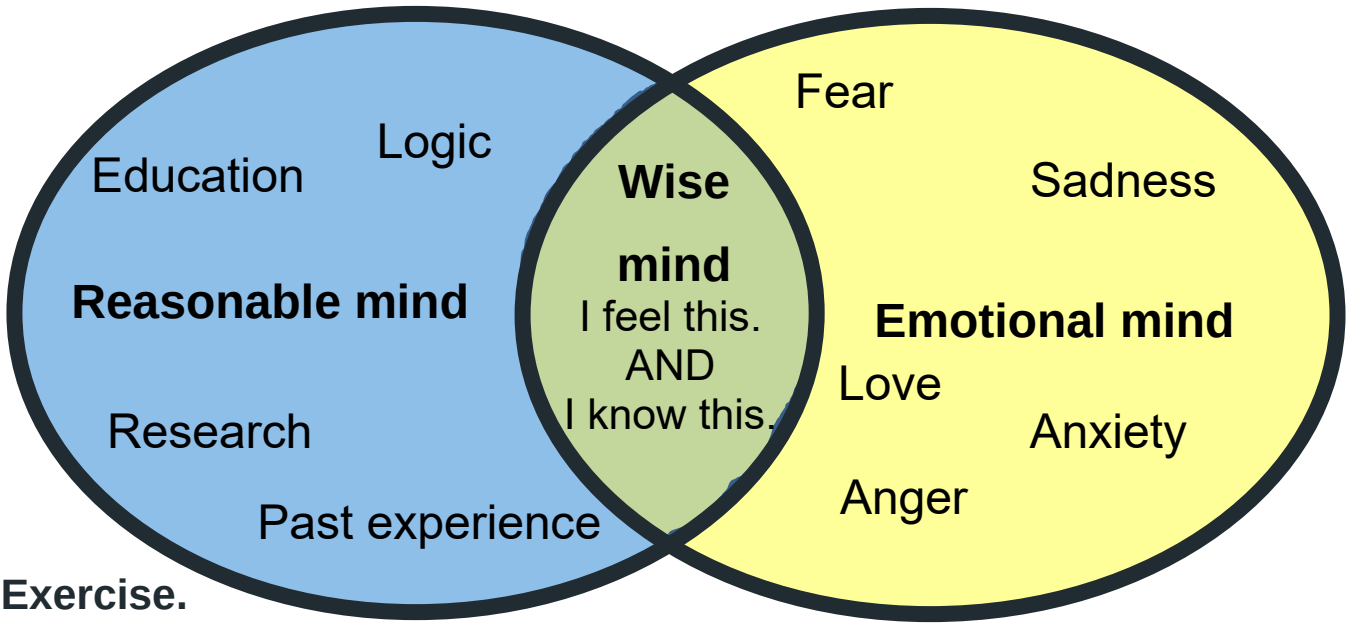
The reasonable mind is calculated and acts with no emotion. It bases its decisions on fact. Times you might need to use reasonable mind might be when you're working out a bill, or following a recipe, or buying a train ticket.

Emotional Mind.

Emotional mind is completely run by emotions. It can distort facts to fit with how we're feeling and it makes it really difficult for us to think rationally and logically. It can come with distressing thoughts and can lead to behaviour that we wouldn't do if we didn't feel these strong emotions.

Wise Mind.

Sometimes, we can live more in our emotional mind and sometime more in our reasonable mind. However, when we live in our wise mind, we're able to recognise and accept our feelings, and respond to them rationally. Mindfulness helps us to take a step back and live more in our wise mind.



Exercise.

Can you think of a time where you have used wise mind? How did you balance your emotions and your knowledge?

Appendix f – Sleep hygiene session (discussion of information sheet)

SUPPORTING YOUR SLEEP

Lots of people struggle to sleep, but it's more important than you think. A good night's sleep can help to improve your mood and improve your energy and motivation. There are things that you can do to help yourself to get the best nights sleep you can.

We know that some things work for some people and not others, and it's important to try different things to find out what works best for you.

1

Sleep at regular times.

When we're struggling to sleep, it can be tempting to try and catch up in the morning or by napping. Making sure we go to bed and get up at the same time can help our bodies know when its time to sleep. Most adults need between 6-9 hours every night.

A great first step is to work out what time you need to go to bed and get up. Set an alarm to start your bedtime routine. Set another alarm in the morning and make sure you get up, even if you're tired. This can be difficult at first. It's important you keep at it until you notice a difference!

2

Make your bedroom sleep friendly.

Your bedroom should be as relaxing as you can make it. You should keep your bedroom for sleep and sex/ masturbation. This will make your mind think of sleep when you're in it. There are some things that can weaken the link between the bedroom and sleep like having a TV, too much light or noise and having an uncomfortable bed. Your bedroom should be dark, quiet, tidy and at a comfortable temperature.

3

Wind down.

An important part of getting ready to sleep is winding down. There are some things you can do to relax before you head off to bed.

- Take a warm bath or shower.
- Do gentle relaxation exercises like some light stretching or yoga.
- Read a book or listen to an audiobook.
- Listen to some relaxing music.
- Take a look at sleeping apps on the NHS apps library.
- Listen to a relaxation track or a CD.

4

Avoid screens.

The light from the screen of your smartphone, tablet or television can trick our bodies into thinking that it's morning. Even though you may feel tired after watching videos, it can lead to a poor-quality sleep. It's a good idea to avoid using your phone or watching the TV for an hour or so before you go to bed.

5

Get up.

If you can't sleep, you should get up and do something relaxing and then go back to bed when you feel sleepy. Take a look at the suggestions in the wind down exercises for some ideas. If possible, you should do this in another room. This way your mind links your bedroom with feeling sleepy.

6

Write it down.

If you find yourself in bed thinking about what you have to do tomorrow, it might help to write a list. Set some time every night to write a to do list for the next day. This means that you don't need to plan these things in your head when you're trying to sleep.

7

Say no to caffeine and alcohol before bed.

Things with caffeine in should be avoided at least 4 hours before bed. This includes things like tea, coffee, chocolate, and soft drinks like coke and pepsi. Caffeine can stop us from falling asleep and having a restful sleep when we do. Try having some water, herbal tea or a warm, milky drink instead.

8

Cut down on smoking.

Nicotine is a stimulant. This means that if you smoke, you might take longer to fall asleep. You might also wake up more often and have a more disrupted sleep. If you can't stop smoking completely, try to cut down as much as you can.

9

Exercise regularly.

Exercise can help to get rid of tension that builds up through the day. If we do this regularly, we can feel more relaxed when it comes to bedtime. Try not to do exercise that means you can't catch your breath easily too close to bedtime as this might keep you awake.

10

Keep a sleep diary.

A good start to changing your routine is to keep a sleep diary. This can help you to track when you get up, when you get to sleep and when you nap. A diary might help you to understand any habits that stop you from sleeping well. You could track your sleep, daily medication, exercise and alcohol and caffeine intake.

This information is adapted from NHS 10 tips to beat insomnia - https://www.nhs.uk/live-well/sleep-and-tiredness/10-tips-to-beat-insomnia/ (Accessed 15/11/2021)

Appendix g – Sleep diary – taken from

https://www.nhs.uk/livewell/insomnia/documents/sleepdiary.pdf

Daily Sleep Diary

Complete the diary each morning ("Day 1" will be your first morning). Don't worry too much about giving exact answers, an estimate will do.

Your Name_____ The date of Day 1_____

		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
	Enter the Weekday (Mon, Tues, Wed, etc.)							
1	At what time did you go to bed last night?							
2	After settling down, how long did it take you to fall asleep?							
3	After falling asleep, about how many times did you wake up in the night?							
4	After falling asleep, for how long were you awake during the night in total?							
5	At what time did you finally wake up?							
6	At what time did you get up?							
7	How long did you spend in bed last night (from first getting in, to finally getting up)							
8	How would you rate the quality of your sleep last night? 1 2 3 4 5 V. Poor V. Good							

Loughborough Sleep Research Centre

Appendix I – Further Reflections

I searched the literature and found that, although the Bible values meditation, it focuses on "purposeful thinking on wholesome topics, such as God's qualities, standards, and creations" (Jehovah's Witnesses, 2014). Discussion with a friend who practiced the faith and reflection with my clinical supervisor, who is also a practicing Christian, was more reflective; they agreed that some forms of meditation would not comply with their faith, but that mindfulness for them was different as it did not have a religious focus and did not focus on emptying the mind. Further, in a paper produced by Hoover (2018), it is discussed that although the non-judgemental practice of mindfulness could stand in contrast to the Christian view of what is right and what is wrong, mindfulness could be practiced by Christians without compromising their faith or conscience, and culturally sensitive adaptations to mindfulness have been proposed to take this into account (Garzon et al., 2022; Trammel, 2018). Understanding different beliefs is important to me as, evident from this case, not taking these into account could create barriers to change and compromise the therapeutic relationship.

Session four

Alex attended the session and presented with a noticeably different mood and outlook, which was reflected in the Core-10. She had spent some time with her sister and niece over the festive period and she attributed her change in mood to the reporting of her abuser. She shared with me that her pain had reduced and she had needed less painkillers, though she had been using CBD oil. She shared that she had been seeing friends and engaging with activities she enjoyed, including gardening, knitting, painting and listening to music. She shared that for her, gardening was time for her; it was space for her to reflect.

When talking about the sleep intervention, Alex told me that she had been making an effort to wind down by taking warm showers and listening to audiobooks before bed instead of watching television. She shared that she did not enjoy using the diary as things changed for her every day and she struggled with her memory. I addressed absence from sessions and whether Alex had felt some unease around failing to use the diary and she agreed that she felt the need to please me. I acknowledged this and reassured Alex that different things work for different people, and that I would never judge what she was and wasn't able to do. She shared that she was relieved by this.

During this session, Alex also shared that understanding the CBT model had helped her to see a positive side and to understand where she had control to change things and do things that she enjoyed.

Session five

During this session, Alex shared that although her schedule remained away from what she wanted it to be, she had been achieving around 8 hours of sleep per night, starting her day at around 11.45am. She intended to try to move this by 30 minutes. She also told me that although she had been feeling tired, she had used her time to see friends regularly as well as attending bible study and meetings. She also shared that she continued to follow a wind down routine of taking a warm shower and listening to stories. At this time, Alex did also tell me that she had been referred for a sleep apnoea assessment and was curious about how this could be impacting her. I acknowledged that I was not a medically trained professional but shared with her what I knew on the subject.

With regards to outcomes, Alex told me that in comparison to when we first met, things were easier for her. She shared that over winter she usually feels depressed, tired and in pain, but this year she had been feeling "not so depressed". She attributed this partly to the ongoing police investigation and shared that images of her abuser were not so intrusive.

Session six

Alex shared that although she had been trying to go to bed slightly earlier, she had been struggling with getting to sleep over the past week. We went through her daily routine and she shared that she had been eating her main meal of the day at around 10pm, drinking coffee before bed, and starting her wind down routine around 12.45- 1.30am. She told me that the reason she had been doing this was "laziness"; although she had been doing things every day, she found everything boring. This

had led to a feeling of lethargy which meant that she would put off doing anything, including eating and going to bed. I asked Alex whether her goals remained the same, and she told me that changing her schedule was still something that she “desperately” wanted.

On days when Alex had poor sleep, she had noticed changes in her memory, including her ability to spell. At this point, I suggested that she could speak to her GP about these changes. I acknowledged here that being able to notice and attribute changes meant that she was having good nights and bad nights, and not just bad nights now.

I ran through the sleep hygiene information again with Alex, mentioning the impact of eating a meal late, and also not getting much physical activity, can have. I also provided a brief education on setting achievable goals, and how making a goal SMART could help with this. Alex decided that she would try and walk a little more each day, keeping in mind her physical boundaries as someone with chronic pain and disability. She also decided to eat her main meal a little earlier and to choose a different drink before bed. She decided to do this alongside her existing wind down routine.

Due to Alex’s presentation in mood and pain, we had a conversation about what would happen after the sessions. Finishing the sessions was something that worried Alex; she acknowledged that she was in a much better place, but was worried after a month or so of not intervention that she would deteriorate again. I explained that we could put a relapse prevention plan in place, and that she would continue to have support from the CMHT should she need it. We talked about her interaction with other services, including RASA, and discussed her reservations about this.

Session seven

Alex shared that over the past week, she had been walking to friends instead of taking the bus, and shared that although this had helped her to sleep better, she was still feeling tired during the day. She had also been making an effort to eat slightly earlier and had noticed that she doesn’t feel as “heavy” on these days, was able to sleep better, and had more energy when she woke up. She told me that she knew when she shouldn’t just stay in bed and that she had been getting out of bed to do things during the day.

Prior to this session, I had done some research online and had spoken to members of the CMHT to find out about any local support available to help Alex to do more things that she was interested in doing. I shared with Alex this information and she was keen to find out more and engage with these services.

Alex told me during this session that recently she had been feeling “normal”, which was a word that she hadn’t experienced for a long time. Alex accepted that our sessions did need to come to an end but she wanted more support as she followed the judicial service. I directed Alex to the support that she did have and advised around future referrals should she need more help.

Session eight

The final session was intended to focus on a relapse prevention plan and to do the final outcome measures. During this session, I explained to Alex what would happen next in terms of the CMHT, and also what could be the next steps for her. Alex expressed that she was hesitant to finish the

intervention, and was worried that she would return to a place in which her mental health would deteriorate again. We talked about how Alex could continue to set small goals, and Alex's intention was to continue to practice her newly implemented wind down routine. We created a plan for Alex to engage with local support services offering social activities in different areas (e.g. gardening, painting), and what Alex would do should she need more support for her mental health. Additionally, I left some space to talk about commencement of therapy with RASA, which was due to start after the intervention had finished.

One thing also important to note was that in the week prior, Alex had received some news about a member of her family that had led to a regression in her mental health, due to its nature closely aligning with her own past. This had also impacted on her sleeping patterns and she had experienced a return of suicidal ideation. It was important that part of this session be used as a safe space for Alex to talk about these feelings.

4.2. Online Intervention Case Study

Rationale

Fruits and vegetables (FV) are an important element in the maintenance of a healthy diet, with increased intake being linked to a lower incidence of the development of a number of long-term illnesses (Angelino et al., 2019; Farvid et al., 2019; Tian et al., 2018), improved mental wellbeing (Ocean et al., 2019)and a lower incidence of depression (Saghafian et al., 2018).

UK guidelines suggest that individuals should aim to eat at least five portions of FV every day (Public Health England, 2018), however, the proportion of those achieving this target is low nationally. There is variation in reports of FV consumption, ranging from just 28% to 55.4% of those consuming five portions regularly (NHS Digital, 2019a; Office for Health Improvement and Disparities, 2022).

FV consumption across the Liverpool City Region (LCR) is lower than this national average, with less than half of adults reaching the 5-a-day guidelines in the year 2019/20 (Office for Health Improvement and Disparities, 2022). Although this differs across authorities, the figure for all authorities within LCR is at least 2.6% lower than the England average of 55.4%. Though this is not a large difference, there are clear disparities within regions (see table 1). Further, it should be noted that a recent study investigating FV consumption in Liverpool suggested that this figure could be lower, estimating that just 25% of those aged over 16 meet the 5-a-day target, and 7% consume less than 1 serving a day (Schwaller et al., 2021).

Table 1.

Percentage of adults consuming 5 or more portions of fruits and vegetables a day

Liverpool	Knowsley	Wirral	St Helens	Sefton	Halton	England
46.7%	43.8%	52.8%	47.5%	51.9%	45%	55.4%

It's important that work is undertaken to encourage increased FV intake (FVI) in LCR. This case study demonstrates how I assessed, formulated, intervened and evaluated an online behaviour change intervention aimed at increasing FVI in this population.

Assessment and Formulation

Intervention Focus

There are many biopsychosocial barriers that can impact on an individual's propensity to eat FV, and it is important that we are able to remove or reduce these barriers to improve intake. Barriers previously identified have included time, taste, price, availability, willpower, hedonics and knowledge (Kearney & McElhone, 1999; Mc Morrow et al., 2017; Rekhy & McConchie, 2014). For this intervention, I chose to focus on knowledge and willpower:

Knowledge. Though evidence is mixed, increased knowledge has been associated with increased behavioural intent, and in turn with increased FVI (Clark et al., 2019; Pem & Jeewon, 2015). However,

public health campaigns aiming to increase this knowledge through sharing the “5-a-day” message have seen limited success (NHS Digital, 2019b). There may be a lack of clarity surrounding exactly what this means, with confusion existing surrounding portion sizes, variety needed and types of food contributing to the target (Rooney et al., 2017). I therefore wanted to focus on obtaining this clarity, alongside introducing mental and physical benefits of increased FVI.

Willpower. In literature, perceived lack of willpower has been associated with lower consumption of healthier foods, including FV (Pinho et al., 2018), and with decreasing goal-consistent behaviour generally (Francis et al., 2021). One way lack of willpower can be addressed is through establishing habits (Ashton et al., 2019; Neal et al., 2013). I therefore chose to implement behaviour change techniques (BCTs) identified as useful in habit formation, with the intention that this would foster longer term maintenance. These were BCTs which promoted repetition of behaviour to cue a habitual response.

Length of Intervention

It is understood that establishing a new habit can be a long-term process; a study by Lally et al. (2010) found that participants took between 18 to 254 days to automate a new habit, with the median time being 66 days. Taking this into account, I chose to run the intervention for a total of 10 weeks (70 days).

Method of Delivery

Due to time restraints and availability of resources, I chose to deliver this intervention online. Although face-to-face contact can be an important part of behaviour change (see one-to-one case study), online interventions can also be effective (Rodriguez Rocha & Kim, 2019) and have the propensity to reach more people. I also understood that time availability of participants could act as a barrier, and so making the intervention accessible in this way was important. Keeping this in mind, I also wanted to ensure that components of the intervention itself did not demand excessive time from participants.

Intervention Design and Components

One model that has been useful in the understanding of healthy eating behaviour is the Health Belief Model (HBM) (Deshpande et al., 2009), and researchers using the model as part of an educational intervention have been successful (Hatami et al., 2018; Keshani et al., 2019). The HBM posits that an individual is more likely to change their behaviour when they perceive a threat from a disease and judge the perceived benefits of carrying out a preventative behaviour to be higher than the barriers faced. It also accounts for moderating factors including demographic characteristics and cues to action. Below have detailed each component of the intervention and how they fit in with the HBM. All relevant materials can be found in Appendices A-E.

Goal-setting

Goal-setting can be a valuable tool in health-related behaviour change (Michie et al., 2011; Nelis et al., 2018). Setting SMART goals (specific, measurable, achievable, relatable and time-bound), which have been used with success in dietary behaviour change (Chan et al., 2021), is a useful way in

which to set specific goals that are challenging yet achievable for the individual, aiding habit development (Lally et al., 2008). I wanted to take into account that there may have been some participants who could start the intervention eating little to no portions, and setting a goal of five may have felt too large. Encouraging participants to set a SMART goal was a way in which to increase self-efficacy to improve FVI, which has seen success in health behaviour change (Olander et al., 2013).

Self-monitoring

I included a self-monitoring component as a way in which to increase "cues to action" and to promote habitual behaviour. Self-monitoring is another BCT identified in Michie et al. (2011) refined behaviour change taxonomy to support and it is suggested that it is a key element in diet-related behaviour change (Mandracchia et al., 2019; Teasdale et al., 2018).

I produced a printable habit tracker which users were encouraged to display in a prominent place. Users were required to submit daily intake weekly to increase accountability. The weekly survey also gave participants the opportunity to record an updated SMART goal should they want to modify it. "Prompt review of behavioural goals" is included in the aforementioned refined behaviour change taxonomy (Michie et al., 2011), and allowing participants to change their goal should it be too challenging was an opportunity for them to set something more achievable.

Educational Videos

I produced two, short videos to be watched at the beginning. The first video educated participants on the benefits of increasing FV and to provide guidance on portion sizes. This video targeted perceived benefits v barriers, and perceived susceptibility. The second video was designed to educate participants on habit formation. It introduced SMART goal setting and habit tracking as concepts to be used throughout the programme and educated participants on how to implement these techniques, using complementary worksheets.

I understood that engagement here could be an issue due to time constraints and concentration span. Video length is a significant indicator of engagement, with the likelihood of someone watching a full video reducing after a length of six minutes (Guo et al., 2014). Both videos were therefore short; the first was 5 minutes and 13 seconds, and the second was 6 minutes and 59 seconds.

Weekly reminder Emails

I incorporated weekly reminders and a habit tracker to address cues to action and to record progress for the evaluation. Each Sunday evening, I sent an email which included details of the intervention progress to date and prompted participants to keep going. The email also included a link to the weekly survey.

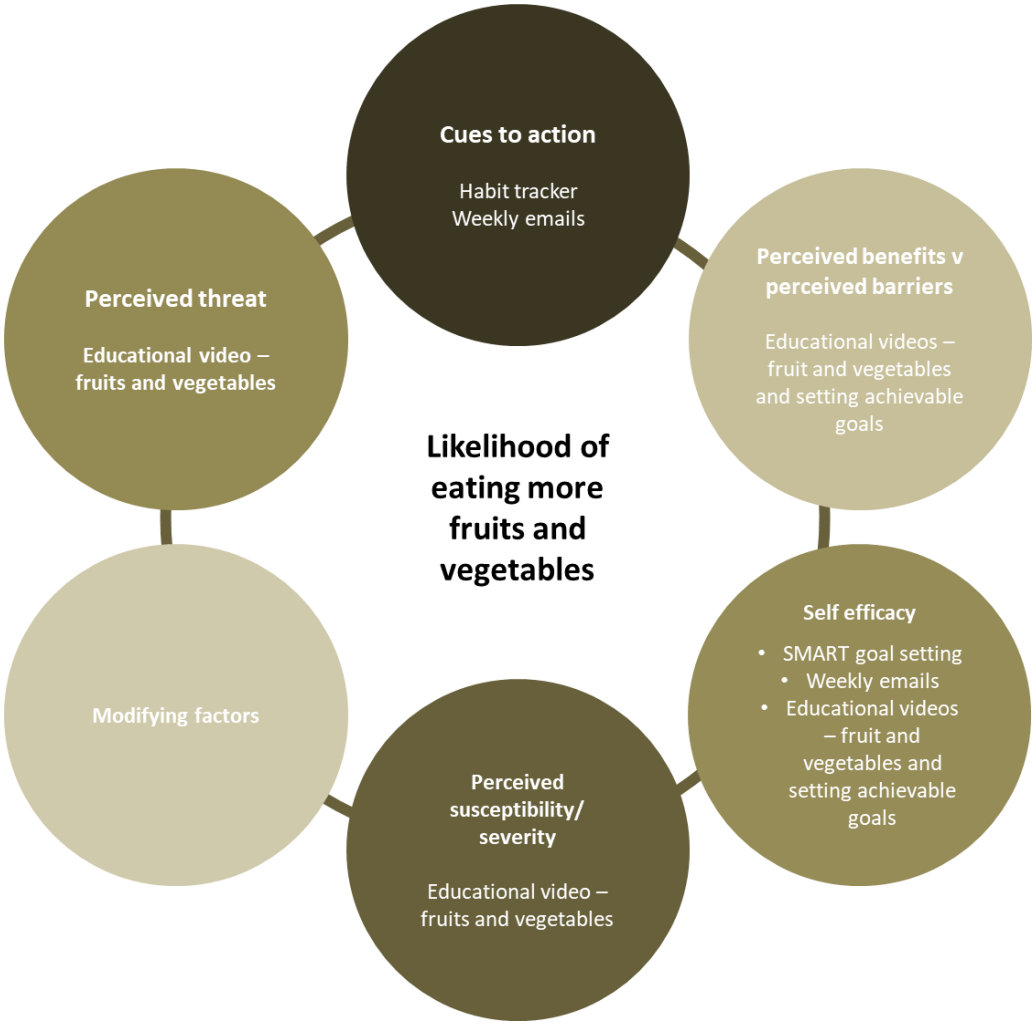


Figure 1. Intervention components alongside the Health Belief Model

Delivery and Evaluation

Recruitment and Participants

A sign-up survey was distributed in February 2022 via social media and through email contacts, requesting that this be shared with others (Appendix F). This survey collected data on age, gender, ethnicity, employment status, dependents and average estimated FVI. Additionally, the survey explored value of physical health, energy levels and wellbeing (through Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS), see Appendix G). Sixty-two responses were received.

Following recruitment, an email was distributed on 19/03/2022 (Appendix H) containing links to the videos, a portion guide (Appendix I), habit tracker and SMART goals worksheet, together with a link to a second survey to be completed immediately after watching the videos, which asked what their estimated FVI was following video viewing and gave a more accurate intake figure (Appendix J). For those signing up to the intervention after this date, the email was sent on an individual basis. A total of 39 responses were received to the second survey and 33 participants completed at least one week of

the intervention (including 3 participants who did not complete the second survey). Several further participants dropped out of the intervention over its course (figure 2.), and the number completing the intervention (reaching minimum week nine) stood at 19. See Table 2 for sample demographics. Participants were also sent a final survey two weeks post intervention which asked average daily intake over the previous week.

Table 2.

Sample Demographics

	N	Age		Gender		Ethnicity		Employment status					Children under 18	
		Mean	Range	M	F	White British	Other	F/T	P/T	Student	Retired	Unemployed	Y	N
Group one Participants completing sign up questionnaire only	22	37.9 (n=21)	24-69 (n=21)	4	18	22	0	16	4	0	1	0	9	13
Group two Participants who completed survey two only	9	33.3 (n=13)	23-45 (n=13)	0	9	9	0	9	0	0	0	0	1	8
Group three Participants completing at least one week of the intervention	14	35.4	20-58	1	13	11	3	8	3	3	0	0	8	6
Group four Intervention finishers	19	39.2	24-61	3	16	19	0	13	4	1	1	0	3	16
Total	**62**	**37.2 (n=61)**	**20-69 (n=61)**	**9**	**55**	**60**	**3**	**45**	**12**	**4**	**2**	**0**	**19**	**43**

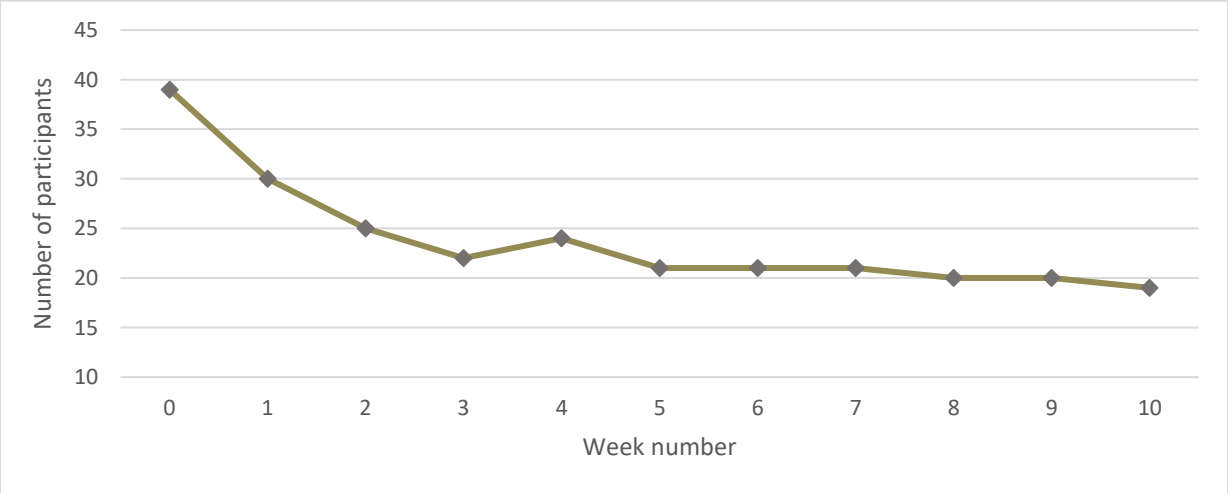


Figure 2. Intervention attrition rates

Managing Missing Data

Baseline scores were identified as either estimated FVI inputted after watching the video or original estimated intake stated if no entry was recorded. To record weekly FVI, I calculated the mean daily intake. Over its course, some participants failed to complete the weekly survey at different times. Should I have removed those participants, I would have only 55% of the dataset to evaluate. I researched methods for handling missing data and considered using multiple imputation, but numbers generated did not align with the dataset. In order to evaluate changes, I therefore chose to compare data at baseline, the start of the intervention (week one), at the midway point (week five) and at the end (week 10), where there were only 16% of participants with missing data (one at week five and two at week 10). I used last-observation-carried-forward (LOCF) method to impute missing values. I understand that LOCF can generate bias (Rioux & Little, 2019), but I could see from the data that differences were minimal week to week. As baseline was the participant's estimated FVI, rather than the self-monitored intake for the following weeks, results should be interpreted with caution.

Changes in Intake

Due to non-normality of the dataset, I ran a Friedman test to determine if there were any significant differences in FVI over time. Pairwise comparisons were performed with a Bonferroni correction. FVI was statistically significantly different across phases, $\chi2(2) = 15.921$, $p = .003$. Post hoc analysis revealed statistically significant differences at baseline (*Mdn* = 3.00) and week one (*Mdn* = 4.00) (p = .018), at baseline and week ten of the intervention (*Mdn* = 3.00) (p = .007) and at baseline and follow up (*Mdn* = 4.00) (p=.048)

A visual exploration indicated that most participants did increase their FVI from baseline to week one. Intake dropped slightly from week one to five, though remained significantly above baseline, and increased by week ten. This remained evident at follow up (see figure 2.)

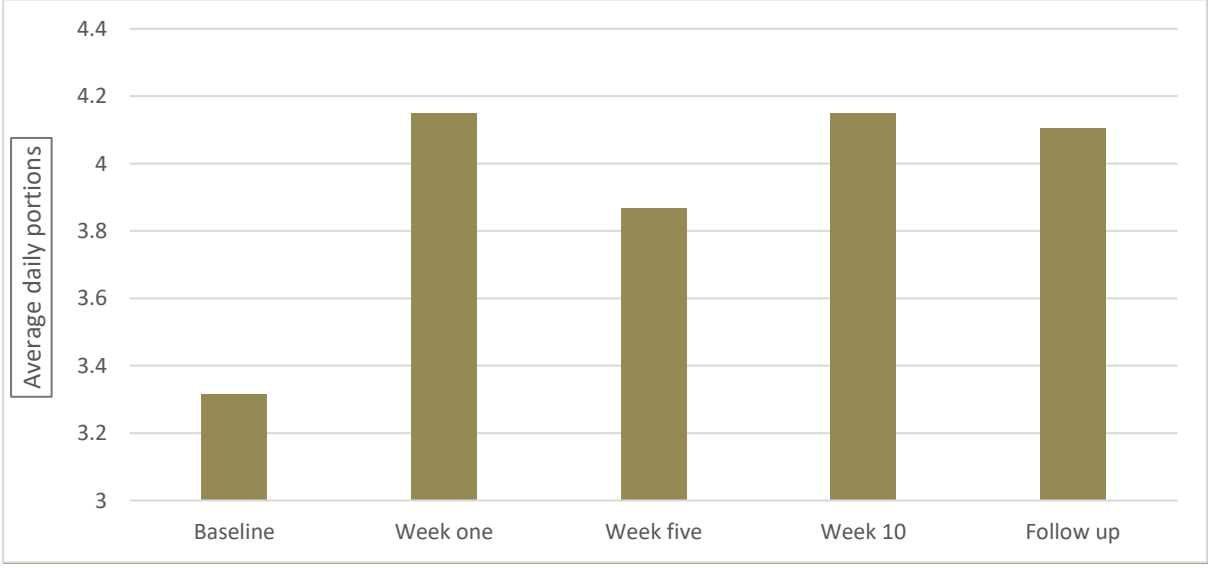


Figure 2. FVI over the course of the intervention

Fifteen participants increased their FVI at the end of the intervention by between 0.14 and 2.14 portions (*M* = 1.28, SD = .65), an average percentage increase of 46.07%. Fourteen participants maintained a change from baseline at follow up with an average portion increase of between 0.29 and 2.00 (*M* = 1.29, SD = .58) and a percentage increase of 46.43%.

Of the four who did not increase FVI, one participant maintained their intake of four portions and three decreased their intake. These three participants registered the highest initial daily portions; two at five and one at six. Two of these participants also recorded lower FVI in week one compared to prior to the intervention, which indicates that intake could have been overestimated.

Impact on Wellbeing and Energy

Seventeen participants completed final outcome measures (SWEMWBS and energy levels). This included 14 participants who had increased or maintained their FVI. I sought to understand if there were any differences in scores amongst these 14 participants to understand benefits of increasing intake.

As this dataset was normally distributed, I used paired samples t-tests. One outlier was detected for both SWEMWBS score and energy levels that were more than 1.5 box-lengths from the edge of the box in a boxplot. Inspection of the value identified that the scores were considerably lower at the end than start, and this differed greatly from the rest of the dataset (a difference of -6.44 in SWEMWBS and -57 for energy). As such, for this section of analysis this participant was removed. It is perhaps important to consider that participants likely had other life experiences that may have interacted with these scores that were outside of the intervention's control.

The difference scores for SWEMWBS were normally distributed, as assessed by Shapiro-Wilk's test (p = .341). Difference scores for energy levels, however, were not (p = 0.005) and thus results should be interpreted with caution. Participants SWEMWBS scores were higher at the end of the intervention (*M* = 23.03, *SD* = 1.99) than the start (*M* = 21.56, *SD* = 2.59), a statistically significant mean increase of 1.47, 95% CI [0.138, 2.802], t(12) = 2.405, p < .033. This supports existing literature (Tuck et al., 2019). Similarly, energy was ranked higher at the end (*M* = 69.92, *SD* = 14.58) in comparison to baseline (*M* = 51.62, *SD* = 12.48), a statistically significant mean increase of 18.31, 95% CI [10.221, 26.394], t(12) = 4.933, p < .005.

Understanding the Population

Though it may have been enlightening to understand whether any differences existed across demographics, and data were collected on age, gender, ethnicity, employment status and dependants, I could see from the dataset that there was a non-normal distribution of data for these groups (see Table 2). I therefore haven't utilised demographics in the analysis, but I am aware that these may have interacted with outcomes.

Utilising Qualitative Feedback

One thing I hadn't anticipated, but which was useful, was participants using the comments to share how they were finding the intervention and why they had struggled to hit their intake ("*Poor week* -

overall eating routine was bad"). Some key themes were developed, including a number of participants sharing how they found it harder to increase FVI when they were busy or at weekends or on holiday:

> *"Weekend let me down again"*
>
> *"Hen do on the weekend"*
>
> *"I was on a sailing holiday with others so achieving the goal was very difficult"*

This aligns with existing literature, which indicates that FVI is lower at weekends (An, 2016; McCarthy, 2014), although there is some evidence to suggest the opposite (Appleton et al., 2009). I used this information to tailor weekly emails, bringing attention to the fact that multiple participants were struggling on weekends and holidays and to approach this with self-compassion (Appendix K). I intended for this to act as a reminder to focus on weekend FVI but also to imply that participants were not alone in their experience and to provide a tailored approach. I also applied this to comments highlighting the difficulty of the intervention by indicating that SMART goals could be modified to become more achievable to the individual.

Some participants also provided positive feedback, indicating that the weekly emails were helpful and that they were close to or achieving their goals:

> *"Thanks to the survey, I continue to try to ensure that my portion sizes of fruit and veg are bigger than they were"*
>
> *"I made my goals everyday this week for the first time"*
>
> *"Great so far. Definitely making me more aware of intake and planning it into the day"*

It was nice to read that the intervention was having a positive impact and it helped me to understand that even if overall the intervention were to not be successful, I had helped some people to make changes for the better. A particularly enjoyable-to-read piece of feedback was received at the end of week 10, when participants were asked what they had learned:

> *"That I really enjoy eating more fruits and vegetables and it's been easier to incorporate than I expected. It has helped me feel healthier and generally happier about my diet."*

Dropout from start to end of the intervention were 38%. This was frustrating, and seeing the numbers reduce, particularly at the rate they did at the start of the intervention, caused me to question whether I had done something wrong. Looking into this further, however, this rate of dropout is similar, if not lower, than other e-health interventions (Meyerowitz-Katz et al., 2020). Though this seems inevitable, it would be important to understand attrition rates and how to address them to reduce health

inequalities. With the number of participants in my intervention, it would be unreliable to draw any conclusions about attrition, particularly as there were no obvious patterns. One thing I had could have done to reduce attrition was to reach out to participants individually, something that has been shown to reduce rates (Geraghty et al., 2013). Whilst in this case due to the sample size this would have been possible, I had aimed to recruit a much larger cohort and so this was not planned.

Conclusions and Suggestions

Though dropout from start to end of the intervention was high, it is clear that the majority of those who progressed through the intervention increased FVI and saw improvements in wellbeing and energy levels, and I am of the view that this was a successful intervention. However, I do think there are a number of ways in which this intervention could be designed and delivered differently and I have highlighted some suggestions below:

Adding an Interactive Element to Videos to Check Understanding

Although I could see from changes in baseline FVI and qualitative feedback gathered at week 10 that participants had gained new knowledge from viewing the videos (Appendix L), it was evident from viewing some of the SMART goals (see Appendix M) that not all participants had fully understood the concept. I had considered adding questions at the end of the video to check understanding when designing the intervention but was unable to find appropriate means to do so. Although this has been linked to increased knowledge and test performance in education (Rice et al., 2019), I would do this with caution, as adding quizzes could reduce self-efficacy, an important aspect of the HBM (Mirriahi et al., 2021).

Using SMS/ Push Notifications

I understood that people may not link their emails to their mobile phone or may not have notifications switched on. This could have meant that participants may not have received a prompt for the weekly survey, and thus may have missed an important component of the intervention. I did look at ways in which to manage SMS prompts but was unable to identify a way I could do this whilst maintaining data security. For future interventions, I would investigate how to overcome this.

Increasing Social Aspect

When planning the intervention, I also considered establishing a social space, where participants could interact, however, due to time availability on my behalf to moderate a space and facilitate discussion- something identified as important (Pereira et al., 2020)- I opted not to include this. I understand that social support is an important influence on self-regulatory behaviour (Zhou et al., 2017) and I would look to build this into any smaller scale interventions I produce in future.

Fostering Positive Affect

This intervention sought to increase FVI to improve diet, adding something rather than encouraging participants to stop doing something that was habitual for them. Upwards spiral theory of lifestyle change posits that positive affect experienced when enacting behaviour change predicts future

engagement (Van Cappellen et al., 2018), and I think I achieved this through avoiding removal of palatable foods. I think to foster positive affect further, I could have introduced a practical aspect, suggesting appetising recipes or encouraging FVI in social environments.

Final Words

I've learned a lot throughout this process, including applying health psychology models to a real-life intervention, creating easily accessible educational content, producing resources and managing expectations regarding attrition and intervention success rates. I feel more confident applying these skills to interventions in the future and will apply this level of reflection on an ongoing basis.

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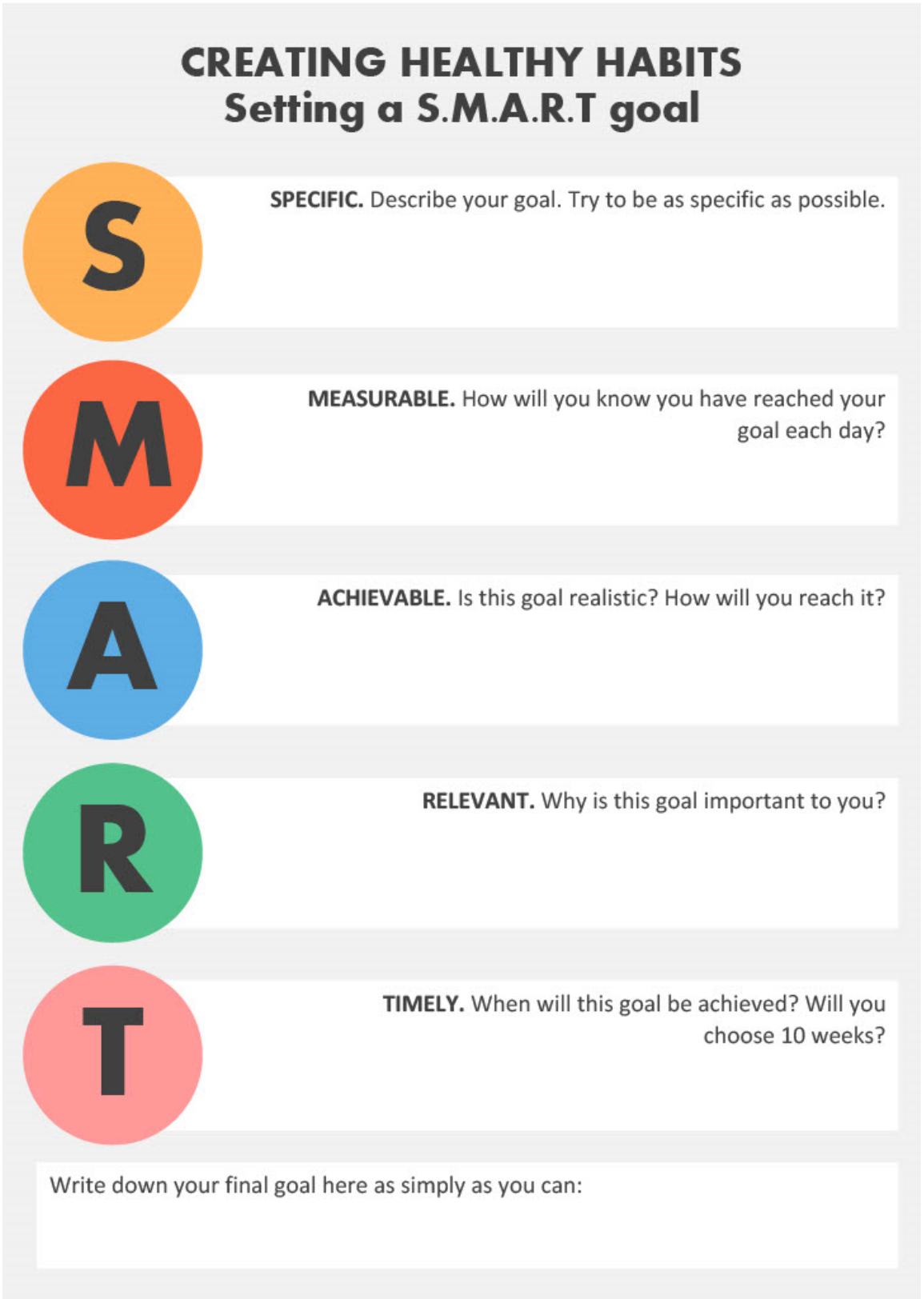
Appendices

Appendix A

Feedback Survey Results



Appendix B

Habit Tracker

MY HABIT TRACKER

My SMART goal:

		Mon	Tues	Wed	Thurs	Fri	Sat	Sun
Week One	SMART goal							
	Portion count							
Week Two	SMART goal							
	Portion count							
Week Three	SMART goal							
	Portion count							
Week Four	SMART goal							
	Portion count							
Week Five	SMART goal							
	Portion count							

Appendix C

Weekly Questionnaire Example

4.2 ONLINE INTERVENTION CASE STUDY

Q1. What is your username or email?

If you're struggling to remember your username, it might be the day and month of birth and the first three letters of your street name (i.e. if your birthday is 26th June and you live on Main Street, your username would be 2606MAI).

Q2. Please tick below the days that you have achieved your goal. If you have set yourself a weekly SMART goal, just let us know if you've achieved it/ taken steps towards achieving it in the comment box.

	Achieved goal?
Monday	☐
Tuesday	☐
Wednesday	☐
Thursday	☐
Friday	☐
Saturday	☐
Sunday	☐
I have a weekly goal	☐
Other (please tell us more)	☐

Q3. Please enter roughly how many portions of fruits and vegetables you have eaten each day this week.

Monday	
Tuesday	
Wednesday	
Thursday	
Friday	
Saturday	
Sunday	

Q4. If your SMART goal has changed, you can enter it here. Otherwise, you can skip this question.

Q5. Any comments?

Appendix D

Links to Educational Videos

Video one (5 minutes long) - "Why do we need fruit and veg, and what is a portion size?"
https://youtu.be/MFPImtCyLzM

Video two (7 minutes long) - "Setting SMART goals and tracking habits"
https://youtu.be/FunLzVth38M

Appendix E

Weekly Email Example

Hello,

You've made it to the end of week two on your journey to eating more fruits and vegetables! This is your weekly reminder to keep going, you're kale-ing it!

Please click on the survey link below to enter your SMART goal and record your weekly intake.

Take the Survey

Or copy and paste the URL below into your internet browser:

https://ljmupsych.qualtrics.com/jfe/preview/SV_erIA6b3pwkqxOjI?Q_CHL=preview

Remember, if you've forgotten to record for a few days, or if you haven't managed to achieve your goal, that's okay. Just mark it on your tracker and in the survey and keep on going! Creating a new habit is hard, and it's still really helpful for us if you record this in the weekly surveys.

Warmest wishes,

Kate Atherton

Trainee Health Psychologist

To leave this programme at any time, and unsubscribe from this email list, please email k.atherton@2019.ljmu.ac.uk

Follow the link to opt out of future emails:

Click here to unsubscribe

Appendix F

Sign-up Questionnaire (Survey One)

This is “Creating Healthy Habits – Increasing your intake of fruits and vegetables” - a 10-week programme designed to help you to improve your diet by including more fruits and vegetables. It's aimed at people living in the Liverpool City Region and day one is 28th March 2022.

This programme was created by me, Kate Atherton. I’m a final year doctorate student of Health Psychology at Liverpool John Moores University. I’ve been trained to a high level to create and deliver behaviour change interventions that are evidence-based (based on what works).

The programme includes

• Two bitesize videos surrounding fruit and vegetable intake, setting an achievable goal and creating habits.

• An information pack including details on portion sizes, a habit tracker, and a worksheet to create your own achievable goal.

• Weekly email reminders and a quick (<1 min) weekly questionnaire.

This programme is designed to fit in with your life. You'll need about 20 minutes to watch the two videos and choose your achievable goal. After this, apart from making the conscious effort to include more fruit and veg into your diet, it needs no more than about 2 minutes of your time each week.

This sign up survey should take no more than 5 minutes to complete.

Q1. If you'd like to take part, please create a memorable username. This will be your unique identifier and will be used throughout the programme, so make a note of it now. It can also be used to withdraw from the programme at any time.

We suggest using your day and month of birth and the first three letters of your street name (i.e. if your birthday is 26th June and you live on Main Street, your username would be 2606MAI).

Q2. Do you live in Liverpool City Region? (Liverpool, Sefton, St Helens, Knowsley, Wirral and Halton)

- ○ Yes
- ○ No

Q3. What is your email address?

Your email address will be used to send the programme resources and to send you one email each week for 10 weeks, and one final email 2 weeks after the programme has finished.

It will not be shared with any other organisations and will not be used for any purposes other than the intervention.

This next set of questions will ask a little bit about you. This is so we can understand whether there are any differences between different groups of people.

Q4. How old are you?

Q5. Which of the following most accurately describes you?

- ○ Male
- ○ Non-binary
- ○ Transgender
- ○ Intersex
- ○ Let me type
- ○ Prefer not to say

Q6. Which of the following best represents your ethnic group?

- ○ White - British
- ○ White - Irish
- ○ White - Gypsy or Irish Traveller
- ○ White - Other
- ○ Asian or Asian British - Indian
- ○ Asian or Asian British - Pakistani
- ○ Asian or Asian British - Bangladeshi
- ○ Asian or Asian British - Chinese
- ○ Asian or Asian British - Any other Asian background
- ○ Mixed/ multiple ethnic groups - White and Black Caribbean
- ○ Mixed/ multiple ethnic groups - White and Asian
- ○ Mixed/ multiple ethnic groups - Any other mixed/ multiple ethnic background
- ○ Black or Black British - Caribbean
- ○ Black or Black British - African
- ○ Black or Black British - Any other black background
- ○ Any other ethnic group
- ○ I do not wish to disclose my ethnic origin

Q7. What best describes your employment status over the last 3 months?

- ○ Working full-time
- ○ Working part-time
- ○ Unemployed and looking for work
- ○ A homemaker or stay-at-home parent
- ○ Student
- ○ Retired
- ○ Other

Q8. How many children under 18 live with you?

Q9. On an average day, how many portions of fruits and vegetables do you eat?

Please take a look at the below statement and rate on the scale how much you agree with it:

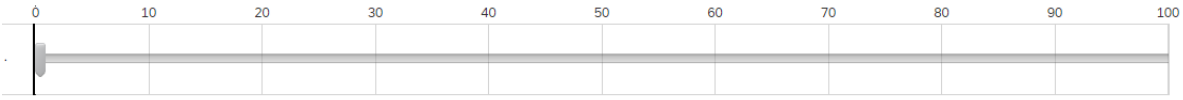
"I value my physical health"

- ○ Strongly disagree
- ○ Slightly disagree
- ○ Neither agree nor disagree
- ○ Slightly agree
- ○ Strongly agree

Q10. Below are some statements about feelings and thoughts. Please select the answer that best describes your experience of each over the last 2 weeks.

	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	○	○	○	○	○
I've been feeling useful	○	○	○	○	○
I've been feeling relaxed	○	○	○	○	○
I've been dealing with problems well	○	○	○	○	○
I've been thinking clearly	○	○	○	○	○
I've been feeling close to other people	○	○	○	○	○
I've been able to make up my own mind about things	○	○	○	○	○

Q11. On the below scale, rank your average energy levels over the last week.



Thanks for signing up to Creating Healthy Habits - Increasing your intake of fruits and vegetables. You'll receive a welcome email before Sunday 20th March which will include the resources you'll need to start your journey.

Remember, you can withdraw from this programme at any time. Just send an email with your unique username to k.atherton@2019.ljmu.ac.uk.

Appendix G

SWEMWBS Questionnaire

Short Warwick Edinburgh Mental Wellbeing Scale (S) WEMWBS

Below are some statements about feelings and thoughts.

Please select the answer that best describes your experience of each over the last 2 weeks.

	None of the Time / Rarely		Some of the Time / Often		All of the Time
I've been feeling optimistic about the future	**1**	**2**	**3**	**4**	**5**
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been dealing with problems well	1	2	3	4	5
I've been thinking clearly	1	2	3	4	5
I've been feeling close to other people	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5

Appendix H

Welcome Email

Hi,

Thank you for signing up to “Creating Healthy Habits – Increasing your intake of fruits and vegetables”.

This programme was created by me, Kate Atherton. I’m a final year doctorate student of Health Psychology. I’ve been trained to a high level to create and deliver behaviour change interventions that are evidence-based (based on what works).

This is a 10-week programme designed to help you to improve your diet by including more fruit and veg. It’s designed to fit easily into your life and doesn’t require too much time or effort!

All you need to do to complete the intervention is to complete these simple steps. Please note, you'll need to complete the first three steps by Monday 28th March 2022. This is classed as day one of the intervention. You should start tracking your habits on this date. The first weekly reminders and questionnaire will be sent 7 days after this date:

1. Watch the two short videos linked below.

Video one (5 minutes long) - "Why do we need fruit and veg, and what is a portion size?" https://youtu.be/MFPImtCyLzM

Video two (7 minutes long) - "Setting SMART goals and tracking habits" https://youtu.be/FunLzVth38M

2. Click here to complete a short questionnaire.

You should do this after watching the videos. This should take less than 1 minute to do.

If the link isn't working copy and paste this text into your browser - https://ljmupsych.qualtrics.com/jfe/form/SV_blqrqmOIIwnqAsK

3. Set your SMART goal.

After watching video two, use the worksheet in your information pack attached to this email to set yourself an achievable goal for increasing your fruit and veg. If you don’t have Word or a printer, you can do this yourself on a sheet of paper, or on your phone.

4. Use your habit tracker.

You can find your habit tracker in the information pack attached, but if you’d rather create your own, that’s fine too. Record your SMART goal at the top, and put your tracker somewhere you can see it. Try to keep this up to date as you’ll be inputting this information into the weekly questionnaire.

5. Complete the weekly questionnaire.

A very short questionnaire will be sent to you at the end of each week with your weekly reminder. Please click on the link and record your SMART goal and weekly intake- it should take no longer than 2 minutes. At the end of the intervention, you'll be sent a different questionnaire to see how the intervention might have helped you.

Remember, you'll need to complete the first three steps before 28th March 2022.

There are some great online resources for recipes including more fruit and veg. Check out this one from British Heart Foundation, which has some tips for adding more veg without noticing.

That's all there is to it! It's time to make some real, healthy changes. If you have any questions, just reply to this email.

Best of luck,

Kate Atherton

Trainee Health Psychologist

LIVERPOOL JOHN MOORES UNIVERSITY

To leave this programme at any time, and unsubscribe from this email list, please email k.atherton@2019.ljmu.ac.uk

Appendix I

Portion Guide (shared from https://www.nhs.uk/livewell/5aday/documents/downloads/5aday_portion_guide.pdf

Rough guide - Fruit & vegetable portion sizes

FRUIT - Adult portion size = 80g	
Fruit	**Adult portion size examples - approximately equivalent to 80g in weight** (As eaten, edible portion, drained if canned)
Apple: fresh	1 medium apple
Apple: unsweetened 100% apple puree	2 heaped tablespoons
Apricot: canned	6 halves
Apricot: fresh	3 apricots
Avocado	Half an avocado
Banana: fresh	1 medium banana
Blackberries	1 handful (9 to 10 blackberries)
Blackcurrants	4 heaped tablespoons
Blueberries	2 handfuls (4 heaped tablespoons)
Cherries: canned	11 cherries (3 heaped tablespoons)
Cherries: fresh	14 cherries
Clementines	2 clementines
Damsons	5 to 6 damsons
Fig: fresh	2 figs
Fruit juice: 100%, unsweetened	1 small glass (150ml) of unsweetened 100% fruit and/or vegetable juice can count as a maximum of one portion. It is recommended that we limit 100% fruit/vegetable juices and smoothies to a combined total of 150ml per day (one portion) and consume with meals to reduce the risk of tooth decay.
Fruit salad: canned	3 heaped tablespoons
Fruit salad: fresh	3 heaped tablespoons

Rough guide - Fruit & vegetable portion sizes

Fruit smoothie: 100%, unsweetened	1 small glass (150ml) of unsweetened 100% fruit and/or vegetable smoothie can count as a maximum of one portion. A portion of unsweetened 100% fruit and/or vegetable smoothie includes 150ml of fruit/vegetable juice; puree; edible pulp or a combination of these. It is recommended that we limit 100% fruit juices and smoothies to a combined total of 150ml per day (one portion) and consume with meals to reduce the risk of tooth decay.
Grapefruit segments: canned	3 heaped tablespoons (8 segments)
Grapefruit: fresh	Half a grapefruit
Grapes	1 handful (14 grapes)
Kiwi fruit	2 kiwi fruit
Kumquat	6 to 8 kumquats
Lychee: canned	6 lychees
Lychee: fresh	6 lychees
Mandarin orange: canned	3 heaped tablespoons
Mandarin orange: fresh	1 medium orange
Mango: fresh	2 slices (2-inch / 5cm slice)
Melon	1 slice (2-inch / 5cm slice)
Nectarine	1 nectarine
Orange	1 medium orange
Passion fruit	5 to 6 fruit
Pawpaw (papaya): fresh	1 slice
Peach: canned	2 halves or 7 slices

Rough guide - Fruit & vegetable portion sizes

Peach: fresh	1 medium peach
Pear: canned	2 halves or 7 slices
Pear: fresh	1 medium pear
Pineapple: canned	2 rings or 12 chunks
Pineapple: fresh	1 large slice
Plum	2 medium plums
Prune: canned	6 prunes
Prune: ready to eat	3 prunes
Raspberries: canned	20 raspberries
Raspberries: fresh	20 raspberries
Rhubarb: canned chunks	5 chunks
Rhubarb: cooked	2 heaped tablespoons
Satsuma	2 small satsumas
Sharon fruit	1 sharon fruit
Strawberry: canned	9 strawberries
Strawberry: fresh	7 strawberries
Tangerine	2 small tangerines
Tomato puree: concentrated	1 heaped tablespoon
Tomato: canned plum	2 whole
Tomato: fresh	1 medium, or 7 cherry

Rough guide - Fruit & vegetable portion sizes

DRIED FRUIT Adult portion sizes = 30g	
Dried fruit	**Adult portion size examples - approximately equivalent to 30g in weight** **(Approximately 80g fresh weight equivalent)**
Apple: dried rings	4 rings
Apricot: dried	3 whole
Cherries: dried	1 heaped tablespoon
Cranberries: dried	1 heaped tablespoon
Currants: dried	1 heaped tablespoon
Dates: dried	3 dates
Fig: dried	2 figs
Mango: dried	1 heaped tablespoon
Mixed fruit: dried	1 heaped tablespoon
Peach: dried	2 halves
Pear: dried	2 halves
Pineapple: dried	1 heaped tablespoon or 2 rings
Prune: dried	3 prunes
Raisins	1 heaped tablespoon
Sultanas	1 heaped tablespoon
Tomato: sundried	4 pieces

Rough guide - Fruit & vegetable portion sizes

VEGETABLES Adult portion size = 80g	
Vegetable	**Adult portion size examples - approximately equivalent to 80g in weight** **(As eaten, edible portion, drained if canned)**
Ackee: canned	3 heaped tablespoons
Artichoke	2 globe hearts
Asparagus: canned	7 spears
Asparagus: fresh	5 spears
Aubergine/Eggplant	One third of an aubergine
Beans, borlotti: cooked	3 heaped tablespoons Beans and pulses count as a maximum of one portion a day, however much you eat. This is because, while pulses contain fibre, they don't give the same mixture of vitamins, minerals and other nutrients as fruit and vegetables.
Beans, black eye: cooked	3 heaped tablespoons Beans and pulses count as a maximum of one portion a day, however much you eat. This is because, while pulses contain fibre, they don't give the same mixture of vitamins, minerals and other nutrients as fruit and vegetables.
Beans, broad: cooked	3 heaped tablespoons
Beans, butter: cooked	3 heaped tablespoons Beans and pulses count as a maximum of one portion a day, however much you eat. This is because, while pulses contain fibre, they don't give the same mixture of vitamins, minerals and other nutrients as fruit and vegetables.
Beans, cannellini: cooked	3 heaped tablespoons Beans and pulses count as a maximum of one portion a day, however much you eat. This is because, while pulses contain fibre, they don't give the same mixture of vitamins, minerals and other nutrients as fruit and vegetables.

Rough guide - Fruit & vegetable portion sizes

Beans, French: cooked	4 heaped tablespoons
Beans, kidney: cooked	3 heaped tablespoons Beans and pulses count as a maximum of one portion a day, however much you eat. This is because, while pulses contain fibre, they don't give the same mixture of vitamins, minerals and other nutrients as fruit and vegetables.
Beans, pinto: cooked	3 heaped tablespoons Beans and pulses count as a maximum of one portion a day, however much you eat. This is because, while pulses contain fibre, they don't give the same mixture of vitamins, minerals and other nutrients as fruit and vegetables.
Beans, runner: cooked	4 heaped tablespoons
Beans, soya: cooked	3 heaped tablespoons Beans and pulses count as a maximum of one portion a day, however much you eat. This is because, while pulses contain fibre, they don't give the same mixture of vitamins, minerals and other nutrients as fruit and vegetables.
Beetroot: bottled	3 'baby' whole, or 7 slices
Beetroot: fresh	3 'baby' whole, or 7 slices
Broccoli	2 spears, or 8 florets
Brussels sprouts	6 to 8 Brussels sprouts
Butternut squash: diced and cooked	3 heaped tablespoons
Cabbage: cooked	4 heaped tablespoons
Cabbage: shredded	3 heaped tablespoons
Carrots: canned	3 heaped tablespoons
Carrots: fresh slices	3 heaped tablespoons
Carrots: shredded	3 heaped tablespoons
Cauliflower	8 florets

Rough guide - Fruit & vegetable portion sizes

Celery	1 stick
Chickpeas: cooked	3 heaped tablespoons Beans and pulses count as a maximum of one portion a day, however much you eat. This is because, while pulses contain fibre, they don't give the same mixture of vitamins, minerals and other nutrients as fruit and vegetables.
Chinese leaves: shredded	4 heaped tablespoons
Courgettes	Half a large courgette
Cucumber	2-inch / 5cm piece
Curly kale: cooked	4 heaped tablespoons
Karela	Half a karela
Leeks	1 medium leek (white portion only)
Lentils	3 tablespoons Beans and pulses count as a maximum of one portion a day, however much you eat. This is because, while pulses contain fibre, they don't give the same mixture of vitamins, minerals and other nutrients as fruit and vegetables.
Lettuce (mixed leaves)	1 cereal/dessert bowl
Mange-tout	1 handful (22 mange-tout)
Marrow: diced and cooked	3 heaped tablespoons
Mixed vegetables: frozen	3 tablespoons
Mushrooms	14 button or 3-4 heaped tablespoons
Mushrooms: dried	2 tablespoons
Okra	9 medium
Onion	1 medium onion

Rough guide - Fruit & vegetable portion sizes

Pak choi (Chinese cabbage): shredded	4 heaped tablespoons
Parsnips	1 medium
Peas: canned	3 heaped tablespoons
Peas: fresh	3 heaped tablespoons
Peas: frozen	3 heaped tablespoons
Pepper: fresh	Half a pepper
Pigeon peas: canned	3 heaped tablespoons Beans and pulses count as a maximum of one portion a day, however much you eat. This is because, while pulses contain fibre, they don't give the same mixture of vitamins, minerals and other nutrients as fruit and vegetables.
Pumpkin: diced and cooked	3 heaped tablespoons
Radish	10 radishes
Spinach: cooked	4 heaped tablespoons
Spinach: fresh	1 cereal bowl
Spring greens: cooked	4 heaped tablespoons
Spring onion	8 onions
Swede: diced and cooked	3 heaped tablespoons
Sweet potato	1 medium
Sweetcorn: baby	6 to 8 baby corn
Sweetcorn: canned	3 heaped tablespoons
Sweetcorn: on the cob	1 cob
Tomato puree: concentrated	1 heaped tablespoon

Rough guide - Fruit & vegetable portion sizes

Tomato: canned plum	2 whole
Tomato: fresh	1 medium, or 7 cherry
Turnip: diced and cooked	3 heaped tablespoons
Vegetable juice: 100%, unsweetened	1 small glass (150ml) of unsweetened 100% fruit and/or vegetable juice can count as a maximum of one portion. It is recommended that we limit 100% fruit/vegetable juices and smoothies to a combined total of 150ml per day (one portion) and consume with meals to reduce the risk of tooth decay.
Vegetable smoothie: 100%, unsweetened	1 small glass (150ml) of unsweetened 100% fruit and/or vegetable smoothie can count as a maximum of one portion. A portion of unsweetened 100% fruit and/or vegetable smoothie includes 150ml of fruit/vegetable juice; puree; edible pulp or a combination of these. Government advice is to limit 100% fruit juices and smoothies to a combined total of 150ml per day (one portion) and consume with meals to reduce the risk of tooth decay.
Watercress: fresh	1 cereal/dessert bowl

Appendix J

Post-Video Survey (Survey Two)

Q1. What is your unique username?

If you're struggling to remember, it might be the day and month of birth and the first three letters of your street name (i.e. if your birthday is 26th June and you live on Main Street, your username would be 2606MAI). If you are still unsure, please email k.atherton@2019.ljmu.ac.uk and you will be sent a reminder.

If you did not create a username when you signed up, please input your email address followed by a username of your choosing (i.e. healthyhabits@email.com, 2003AB). You will need to remember this for future questionnaires.

Q2. Please tick to confirm you have watched each video.

- ☐ Video One - Setting SMART goals and tracking habits
- ☐ Video Two - Why do we need fruit and veg and what is a portion size?

Q3. Now you have watched the videos, please answer the following question:

On an average day, how many portions of fruits and vegetables do you normally eat?

Appendix K

Tailored Email Example

Hello,

You've made it to the end of week three on your journey to eating more fruits and vegetables! This is your weekly reminder to keep going.

Please click on the survey link below to record your weekly intake.

Take the Survey

Or copy and paste the URL below into your internet browser:

https://ljmupsych.qualtrics.com/jfe/form/SV_0uYTnFncRmjiozI?Q_DL=WuAlusMXWqCROOp_0uYTnFncRmjiozI_MLRP_8cYQL8OfItF3x1c&Q_CHL=email

Remember, if you've forgotten to record for a few days, or if you haven't managed to achieve your goal, that's okay. Just mark it on your tracker and in the survey and keep on going! From the survey results received so far, it looks like it's common to struggle to hit that goal on weekends or holidays. On days like this, try not to be hard on yourself and know that not hitting your goal one day or a couple of days doesn't mean that you have failed. Just take a look at the bigger picture and see how far you've come.

If you're struggling to consistently reach your goal, it might mean that it's not achievable for you just yet. In this instance, it might be helpful for you to take a look at your SMART goal and see if making any changes could make things easier. Remember, creating healthy habits is about getting more of the good stuff in, even if that means just one or two extra portions a day than you did before.

Warmest wishes,

Kate Atherton

Trainee Health Psychologist

LIVERPOOL JOHN MOORES UNIVERSITY

To leave this programme at any time, and unsubscribe from this email list, please email k.atherton@2019.ljmu.ac.uk or click here to unsubscribe

Appendix L

Qualitative Feedback

Responses received to the question “Have you learned anything new since starting this programme?”

- What a portion is
- How little fruit and veg I was previously eating
- How hard it is to eat 5 portions a day. Also how having a tracker helps me eat more portions.
- I know now that juice accounts as one portion all day.
- Since following this program I’ve managed to eat more fruit & veg daily and it has taught me to be more mindful in what i eat. I have managed to loose a few pounds , thankyou
- I have found the programme difficult because I am currently writing up my thesis and so haven’t been looking after myself in the usual way. I have noticed that a healthy, balanced diet is the first thing to go when I am tired or busy
- A good reminder re appropriate portion sizes for fruit and veg
- What constitutes a portion
- I didn’t know beans were a fruit or veg
- Food tracking helps to increase fruit and veg because you take responsibility for what you are eating
- I have learnt what a portion consists of for each fruit and veg.
- All carton fresh juice is not the same. Eating fruit and veg regularly is essential for health but not to be too disheartened if can’t always keep to my goal
- That I really enjoy eating more fruits and vegetables and it's been easier to incorporate than I expected. It has helped me feel healthier and generally happier about my diet.

Appendix M

SMART Goals Created by Participants at Week One

- fruit and veg with every meal plus one extra
- At least 2 portions veg a day
- Eat more fruit and veg (4)
- To eat 5 fruit and veg everyday
- Lose weight
- Eat at least 5 fruit/veg per day.
- Eat 4 portions of fruit and veg a day
- To eat 5 portions of fruit or vegetables every day
- To eat fruit and/or veg with every meal plus 2 extra
- To increase the size of my lunchtime side salad and the portion size of my teatime veg each day
- consistent 3 pieces
- Eat at least 4 portions of fruit and veg per day
- Eat 1 fruit or veg in every meal
- Eat at least 3 pieces a day and work up to 5 a day
- To increase portions of fruit and veg.
- Not yet achieved
- Eat fruit and/or vegetables in at least 3 out of 4 meal times (breakfast, lunch, tea and snacks) each day for 10 weeks.
- To eat 4 fruit and veg
- green veg with every evening meal
- Drink 1 litre of water per day
- 3 portions of fruit or veg a day
- To eat more fruit and veg. A portion with breakfast
- 1 portion of fruit or veg every tea time
- To eat one portion of fruit at breakfast, two portions of veg during lunch and two portions of veg during tea. One additional portion of fruit as a snack.
- Eat 5 fruit/veg per day
- 5 a day
- Lose weight eat fruit
- To eat 5 portions of fruit and veg every day.
- To eat five daily portions of fruit and vegetables and 3 weekly portions of spinach
- To try eat more fruit and vegetables more than 3 portions a day

5. RESEARCH

This section contains four pieces of work: a multi-methods research paper investigating the impact of lockdown on women engaged in team sports; a readability analysis investigating online health information in the UK pertaining to migraine and headache; a systematic review understanding the evidence in relation to walking interventions for symptoms of anxiety; and a research commentary detailing my reflections and progress through the research process.

Papers were prepared to journal guidelines. For the purpose of presentation of this portfolio, papers are presented here in APA format.

Submitted papers demonstrate the achievement of the following learning outcomes:

1. Demonstrate skills in conceptualisation, design, development, implementation, and analysis of a study to investigate a pertinent research question in Health Psychology

2. Review systematically a substantial body of knowledge in an area of Health Psychology

3. Create and interpret new knowledge through original research or advanced scholarship in Health Psychology

5.1 Empirical Paper One

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Impact of Lockdown on Women in Team Sports; Exploring Physical Activity and Motivation

Abstract

The COVID-19 pandemic resulted in widespread cancellation of team sports across the UK. The purpose of this study was to understand the impact of lockdown on physical activity and intention to return to sport across women actively participating in team sports, and to explore general experience and factors influencing long-term maintenance. This multi-method study used individual questionnaires (*n* = 254) and semi-structured interviews (*n* = 12) with women actively participating in team sports prior to lockdown. Quantitative results identified a significant drop in physical activity following introduction of lockdown measures which, although was on an upwards trajectory, had not significantly recovered at the time of data collection. Despite this, results found that most participants intended to return to their sport. Alongside identifying mental health benefits, qualitative results indicated a number of autonomy-promoting protective factors that assisted long-term motivation in the face of adversity, including social relatedness and maintaining sports-specific fitness and competence.

Keywords: physical activity, team sports, women, COVID-19, coronavirus, lockdown, autonomy

5.1 EMPIRICAL PAPER ONE

Impact of Lockdown on Women in Team Sports; Exploring Physical Activity and Motivation

Background

March 2020 saw the World Health Organization declare COVID-19 a global pandemic (Cucinotta & Vanelli, 2020), and the UK government declared a national lockdown in which it imposed a range of social distancing measures to control the rise in cases, including the introduction of guidelines to stay at home and restrict leaving the house with a few exceptions including to exercise outdoors for one hour per day. This resulted in a reduction in physical activity (PA) across the nation (Spence et al., 2021), observed across all intensities of PA (Christensen et al., 2022).

Physical inactivity (PI) is the fourth leading global risk factor for mortality, estimated to be responsible for the burden of up to 25% of breast and colon cancers, 27% of diabetes and 30% ischemic heart disease (World Health Organization, 2009). Increasing PA is an effective strategy for lowering the risk of mortality (Mok et al., 2019) and reducing the risk of developing depression and anxiety (Siefken, 2019). Despite this, data suggest that only 62.8% of adults in England regularly achieve government-recommended PA levels (Sport England, 2020).

PI is generally consistently higher in women than in men, and this disparity is increased in the face of sport; less than 29% of women compared to 38.6% of men regularly engage (Sport England, 2019). Sports participation has been linked with improved general health and subjective wellbeing (Downward et al., 2017) and increased engagement in other physical and emotional health-promoting behaviors (Shores et al., 2015). It has also been linked to the fostering of autonomy-promoting behaviors (Pluhar et al., 2019), important in the long-term maintenance of PA.

Participation in club-based or team-based sports have been linked to further improved health outcomes due to the social nature of participation when compared to those engaging in individual sports (Eime et al., 2013). As women are typically more

reliant on social support to engage in PA (Oliveira et al., 2014), participation in team sports could therefore be an important influence in fostering the long-term maintenance of PA in this population. This is supported by existing literature on women participating in team sports, which found the social experience to be a strong indicator of continued participation (Whitehead et al., 2019).

As the practice of team sports were halted across the UK, the opportunity for women to participate in this particular social experience was also removed. Martin et al. (2021) found a greater impact of lockdown restrictions on mental health for female than male athletes, suggesting that this loss of social opportunity, among others, was profound. Lautenbach et al. (2021) also found that female amateur and recreational team and individual sport athletes experienced a greater reduction in motivation to exercise during the pandemic.

Research investigating lockdown experience and PA in recreational athletes is sparse. However, one Canadian study which looked at lockdown experience of PA in the general population found that where 40.5% of inactive participants became less active during lockdown, this was the case for only 22.4% of active participants. Active participants also reported significantly more autonomous motivation (Lesser & Nienhuis, 2020). Additionally, the study found that inactive participants who were more or similarly active during lockdown were more likely be active with others than already-active participants. Findings suggest two things: that social support may contribute to the behavior change process in initiation of PA; and that there could be a protective effect of leading an active lifestyle on maintenance of PA when circumstances have changed. Findings may also explain similar results in the UK which noticed a simultaneous increase and decrease in PA among participants (Robinson et al., 2021).

It is clear that the natural social experience of team sports, in particular, could be beneficial for initiation and maintenance of PA, although research on how this can be applied to lockdown or similar restrictions is lacking. Additionally, there is no qualitative evidence investigating the experience of lockdown on PA motivation amongst sports

participants. In order to understand how to reduce the disparity in PA between men and women, it is important to understand the mechanisms of motivation in this environment, for which qualitative data could provide a richer understanding of this human experience.

The aim of this study was, therefore, to understand the impact of UK COVID-19 related lockdown restrictions on women's team sport, the influence of this on PA amongst its participants and the impact of any PA changes, including changes in mental health. A pragmatic approach was taken to gain a richer understanding of the experience and the complexities of motivation, understanding that perceptions are shaped by experiences (Kaushik & Walsh, 2019). Authors therefore used a multi-methods approach, gathering quantitative data to understand changes in PA and motivation to return to the sport, and qualitative data to explore experiences surrounding lockdown and sports participation. It was hypothesized that PA levels would decline sharply following lockdown, but that intention to return to the sport would remain high, due to motivators associated with sport specifically.

A secondary aim was to explore general experience and reasons for participation to understand any mechanisms which underpinned players continued engagement with their sport long-term.

Methods

This multi-method study used questionnaires (stage one) and interviews (stage two) to measure PA, lockdown experience and sport participation:

Stage One

Design

Quantitative analysis involved a within-subjects observational design. The dependent variable was PA and the independent variable was recall period ("before lockdown", "at the start of lockdown" and "now").

Participants

The sample consisted of 254 participants, all of whom identified as women, were aged over 18 years and resided in the UK. Two hundred and fourteen participants provided their age; ages ranged between 18 and 59 years (M = 30.75, SD = 8.71). Two hundred and forty-three participants provided their ethnicity; 90.8% were White, two were Asian or Asian British, five were from mixed/ multiple ethnic groups and five were Black or Black British. One hundred and sixty-five participants were in full time employment, 30 were in part time employment, 44 were students, 13 were furloughed and 17 were unemployed.

Measures

Data collection took place between 23rd July 2020 and 24th September 2020. A questionnaire was administered to participants which collected demographic data and investigated sport participation, impact of lockdown on sport, intention to return to sport and impact of lockdown on PA. Participants were given details of the study and were made aware that participation was voluntary and that they were free to withdraw at any time. Participants were asked what team sports they participated in and could select more than one. The questionnaire included an "other" box in which participants could enter their sport if it did not appear on the list.

Other questions included "How long have you participated in team sports (before lockdown)?" ("6 months – 1 year", "1-2 years", "2-3 years", "3-4 years", "4-5 years", "5+ years"), "On average, how many days a week did you participate in team sports before lockdown?" (free entry), "On the below scale, how much has lockdown impacted on your ability to participate in team sports?" ("a great deal", "a lot", "a moderate amount", "a little", "not at all") and "Do you intend to return to team sports once lockdown restrictions are lifted?" ("definitely yes", "probably yes", "might or might not", "probably not" and "definitely not). To measure impact of lockdown on PA, participants were asked how often they reached recommended levels of PA at three time points; "before lockdown", "at the start of lockdown" and "now" ("less than once a month", "once a month", "2-4 times a

month", "every week").

Procedure

Convenience sampling was used to recruit participants. Due to the ongoing lockdown, survey details were shared online publicly via social media and messaging to sports clubs, community sports initiatives and study recruitment accounts. Participants were provided with a participant information sheet prior to starting the survey and informed consent was obtained.

Data Analysis

Descriptive statistics were run to understand participants' involvement in team sports and impact of the pandemic. Due to non-normality, a Friedman test was used to test for differences in PA levels over the course of lockdown.

Stage Two

Design

Qualitative data were collected and analyzed using protocols and an epistemological position consistent with Reflexive Thematic Analysis (Braun & Clarke, 2012).

Participants

After completing the stage one questionnaire, all participants were invited to take part in an interview. Fifty-three participants provided further information and were contacted via email to arrange an interview. Of these, twelve women, aged 23-59 (M = 37.3, SD = 11.6) responded and consented to the second stage. Should more participants have responded, the lead researcher planned to take a sample reflective of the demographic data collected at stage one. All participants were White. Nine participants were in full or part-time employment and two were full-time students. One participant did not opt to provide this information.

Measures

Interviews focused on participants' thoughts, feelings and experiences surrounding team sport participation before and during lockdown. Interviews were semi-structured to ensure full exploration of the experience, including reactions and adaptions to the change in environment. Questions focused on engagement in sport before lockdown, reasons for playing and experience of lockdown's impact on PA, mental health and future participation (e.g. "Could you start with telling me a little bit about how long you've been playing your sport and how did you start?", "Have you continued to exercise through lockdown? Why/ what have you done?", "What do team sports mean to you?").

Procedure

Following survey completion (stage one), participants were invited to participate in a follow-up interview and were directed to a new form to provide their contact details to protect anonymity. Interviews were held in August 2020. Though lockdown restrictions had eased somewhat at the time of data collection and people were able to convene indoors, it was the primary researcher's responsibility to mitigate risk of COVID-19 transmission and so *Zoom* videoconferencing software was used to conduct interviews. Interviews were performed at a convenient time for the participant to create comfort and trust.

Interviews were arranged via email and participants were provided with the participant information sheet beforehand together with a short survey to measure demographics. The researcher outlined the process again at the start of each interview, and participants were asked to give verbal consent. Participants were told that they could withdraw at any time. Participants were informed that interviews would be recorded and transcribed for analysis.

Data Analysis

Qualitative data were analyzed in Nvivo using Reflexive Thematic Analysis (Braun & Clarke, 2012) to understand the collective experience of the participants. The primary researcher familiarized herself with the data by listening to the audio recordings, transcribing all interviews, and reading and re-reading the transcript in Nvivo. Codes were

then developed and analyzed to identify themes both within individual transcripts and throughout the dataset. The resulting themes were reviewed alongside the dataset.

The data were analyzed using a primarily inductive approach, allowing themes to be developed from the data based on the participants' experiences of team sport participation and lockdown. However, complete removal of bias through the primary researchers background, knowledge, experience and theoretical leanings can be inescapable (Watling & Lingard, 2012). The primary researcher made effort to understand this potential bias and maintained a reflective diary throughout the process to record initial impressions, reasoning and to demonstrate reflexivity and confirmability of the process, and this diary was shared with other researchers involved. The primary researcher used reflections and summarized participant's experiences throughout interviews to check that interpretations of responses were in line with the participants' intended context and had not been distorted by the researchers' own beliefs. To enhance credibility, codes and themes were discussed and reflected upon amongst authors following each phase of analysis, to understand how different life experiences and perspectives could have contributed to any conclusions drawn.

Results

Stage One Analysis

Sports Participation. Of the participants, 73.2% had been participating in team sports for more than 5 years at the time of survey completion; 3.9% had participated for 4-5 years, 5.9% 3-4 years, 8.3% 2-3 years, 5.5% 1-2 years, 2.8% 6 months -1 year and 0.4% less than 6 months. Participants played team sports between 1-7 times per week before lockdown (Mdn = 3, IQR = 2-3).

Netball was most popular team sport that participants reported (*n* = 127), followed by football (*n* = 45) and Roller Derby (*n* = 22). Other popular sports included hockey (*n* = 18), volleyball (*n* = 16), rugby union (*n* = 13), basketball (*n* = 11) and cheerleading (*n* = 9). The remainder of sports (lacrosse, rounders, cricket, baseball, touch rugby, tennis doubles, target shooting, rugby league, gaelic football, futsal, tchoukball and dodgeball)

had five or less participants.

Impact of Lockdown. The majority of participants (86.2%) felt that lockdown had impacted on their ability to participate in team sports 'a great deal' and a further 10.6% believed that it had impacted on their ability to play team sports 'a lot'.

Physical Activity. A Friedman test was run to determine if there were differences in PA before and throughout the course of lockdown. Pairwise comparisons were performed with a Bonferroni correction for multiple comparisons. PA was statistically significantly different at the different recall periods, $\chi^2(2) = 112.621$, $p < .0005$. Plots demonstrated a large reduction in PA between time points one and two and a smaller increase between time points two and three (see Figure. 1). Post-hoc analysis revealed statistically significant differences in PA between the first month of lockdown (Mdn = 3.0, IQR = 2-3) and before lockdown (Mdn = 4.0, IQR = 4-4) ($p<.0005$) and the time of measurement ("now") (Mdn = 4, IQR = 2-4) and before lockdown ($p<.0005$), but not between the first month of lockdown and "now".

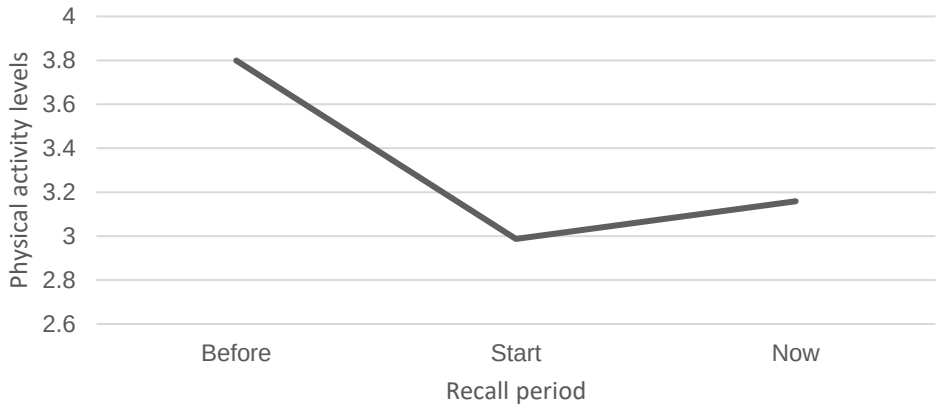

Figure 1.

Mean PA levels before and at the start of lockdown and at time of data collection.

Intention to Return. When asked if they intended to return to the sport once lockdown restrictions were lifted, most participants definitely would return (89.0%) and a further 7.1% of participants said they would probably return to the sport.

Stage Two Analysis

A number of themes were identified both in relation to the participants' general

experience surrounding PA and sport, and the impact of the pandemic. Due to the focus of this paper, themes which were not identified as impacted by lockdown, including general expectations in attendance and equal access to sport, have not been included. Names of participants have been changed to protect anonymity.

Lockdown's Halt on Team Sports and an Intention to Return

All participants felt the impact of lockdown; their sport was stopped almost instantly ("*I'd gone from playing baseball twice a week and then going to the gym three or four times a week to just not doing anything*." (Emily)). This theme explores participants experiences of lockdown, its physical impact, and intention to return to play when able to.

At the time of interview, participants were at different phases of returning to play- where some were almost back to normal, others were still a long way away from returning. Whilst Emily, who had returned to play, was happy that everyone was complying with rules, ("*I think it's been dead easy and because everyone knows that situation in terms of if we don't follow the COVID rules will get shut down. Everyone's been really good."*), Brianna saw a less compliant return with people not respecting social distancing:

> If you put in the effort into not, like, not speak to even, like, your family and stuff and then other people are just, like, hugging as soon as they get there and I was just, like, what's the point?

Of the participants who had not yet made a return, there was a general consensus that, whilst they would return to the sport, they did not want it to be rushed, preferring that the transition was safe and that everybody was comfortable:

> I want to get back out there. But at the same time, I'm, I'm trying to just stick to all the regulations and things and not push things if I don't need to because you know, obviously COVID is still around. (Melissa)

Despite this, the eagerness to return was apparent across the board, though Alison felt that, at the start of lockdown, playing sports was a low priority, and that the "*pandemic*

is so much more than a game of netball." (Alison). All participants who had not already returned were willing to as soon as they were able, and some were comfortable in putting trust in "likeminded" fellow players to respect social distancing and hygiene practices:

> I'm not anxious. I think erm- as long as everyone's sensible in terms of the rules, and their own personal hygiene, you know, as part of that whole process. (Jennifer)

Though all participants agreed that they would return to their sport, a number expressed concerns that teammates and others within their sporting community may not be ready to, especially those who worked in healthcare or who were shielding. Others worried that some may not return at all:

> Some of them were giving reasons that they didn't want to come during the pandemic, which is understandable erm, others were getting back into work (…) And then some just weren't replying, they had just decided to cut ties. (Diana)

A particular worry for a lack of return post lockdown for those who were newer to the sport was expressed by Alison:

> A lot of women who were attending those sessions were just finding themselves in regard to fitness. So maybe they weren't fit and maybe they weren't the best players, but they took the first step. And they were out there and they were in a community and they were with welcoming women, supportive women, who were ready to help them (…) Maybe them women won't go back and who's going to reach out to them?

Bonding

The quote "*welcoming women, supportive women*" paves the way to a major theme identified in the analysis: bonding. For all participants, team sport was an important part of their social life, and they had built friendships directly from playing. There was a clear social impact of lockdown and participants found themselves using innovative ways to stay in touch. To understand the social impact of lockdown, it was important to understand experiences prior to and post introduction of social distancing measures. This

theme incorporated two subthemes:

Social Experience of Team Sports. Team sports were seen by all as "*more than just the exercise*" (Alison), and the social aspect was an important driver for ongoing participation. For Alison, her reason to carry on playing initially was due to a "*good connection of older women engaging in something that they weren't being judged in*.". Though the initial aim of participation was as a form of exercise for most, for two participants the social experience itself was the reason they chose to start playing their sport:

> I thought it'd be a really good way because Liverpool was a new city to me erm to getting into meeting new people as well as doing some kind of exercise that was fun. (Freya)

A similar experience was relayed on behalf of others by Hallie, who's club valued diversity and inclusion. She found that her club acted as a safe space socially for some of its members:

> we do get still quite a lot of women that say, yeah, I joined your club because I wanted a safe space where I could be out and comfortable with being LGBT. (Hallie)

Emily, who played a mixed gender sport, found training to be more supportive and friendly when it involved solely women ("*the women are a lot more supportive of each other than the guys are*"). When asked what kept her coming back to her sport, Diana highlighted the importance of her teammates in her ongoing motivation, and feeling a sense of family:

> Just like I don't know the sense of having like a like a family outside your family, who are all into the same stuff as you are and all keep each other going.

This human connection was echoed by other participants, who found a sense of community and the formation of some of their strongest friendships by meeting likeminded women. Training was even seen as a social experience in itself:

> It's just like the routine of seeing your friends, you know, three times a week. You know, when you go and see a normal friend, you have to go plan around your week but this is sort of like a forced interaction. (Brianna)

Some participants made a conscious effort to engage away from the sport and to strengthen bonds further:

> During the season, because our home matches on a Friday night, we usually go for a drink afterwards. So it's always, like, an important part of the Friday night match. (Hallie)

There was also a share of negative social experiences within the group, with a few participants describing a time when their motivation had been negatively impacted by others within the sport, through one person or a general clique mentality ("*I used to say to my husband I don't really want to go and I'm not, not enjoying it.*" (Jennifer))

Impact of Lockdown and Retaining Contact in a Digital Realm. Friendship and social engagement was obviously very important to all participants, and most participants mentioned a social impact of lockdown. Some spoke about these impacts in a more general sense ("*Everyone was just a bit upset. I'd get like really like emotional because I just couldn't, I wasn't seeing anyone else bar like the, the three people I live with*". (Brianna)), others were more sports specific. Lockdown breaking a social routine was echoed by a number of participants:

> you miss people like you're just seeing the same four walls and same person that you live with. So it's more just getting back to a bit more normality and I think that's what netball was to me. (Melissa)

Whilst some had maintained contact successfully with their teammates/ friends throughout, others found that the contact was periodic or had "*petered out as we've gone along*" (Greta) over the course of lockdown. Three participants, who were part of multiple teams, noticed this difference:

> the Tuesday team, which was again social league, was intermittent contact. But I don't think that that was brought out of a place of any malice from any of those girls or anything, but it just didn't feel the same. (Jennifer)

A positive of lockdown for Freya was that it had actually given her the chance to become closer to friends from one of her teams:

> We've spent a lot more time getting to know each other more recently. So there have been some benefits of lockdown.

In a world where face-to-face contact was prohibited, the internet was solidified as a crucial mechanism by which to retain contact. *Facebook* and *Zoom* were commonly used tools and 7 out of 12 participants mentioned using *WhatsApp* groups to keep in touch:

> It was nice to do erm, quizzes, and *Zoom*, and all of those things that you know, just made, you still feel connected to the team. (Jennifer)

Despite this, Alison, who had returned to some face-to-face training with her team, noticed that there was something missing digitally and felt more of a social connection in person:

> Since we've been allowed out again in groups of six, we have weekly been meeting and connecting and safely distanced. Yeah, I'm using the equipment and spray and all the rest that we've got to do, but it's just about the face to face.

Keeping Physically Active

The internet was also a vital tool for which to maintain a level of PA with teammates and alone away from their sport during lockdown. Keeping physically active was important for all participants, who tried to maintain a level of it during lockdown. Some were more successful than others, and there were four subthemes that explored this further:

Drive to Improve and Maintain Fitness. Despite the loss of their sport during lockdown, participants saw keeping active as an important part of their life and most tried

to keep this up, especially at the start of lockdown. Some participants chose to do this alone, using home fitness regimes, running and cycling and others exercised with those they lived with. One way of exercising, both alone with others, was digitally, which six participants spoke of:

> So we would do (weightlifting) at the time, once you started, it was just the Saturday morning we would just do it at home, create it with weights. (Laure)

Others kept up exercise alone using different means:

> I've missed playing. But because I've substituted it, fitness wise, with something else and I also have my own bike so I've been out on that a couple of times. Erm, I've managed to not miss the actual fitness side of it (Melissa)

Loss of Motivation. For two participants, the start of lockdown inspired an increased motivation to exercise ("*we booked the tennis courts all week*" (Alison))**.** However, despite an increased motivation initially for some and though effort was made by all to maintain some level of PA, lack of motivation, associated with not having the sport made it a struggle for participants to maintain it:

> The first few months, not really, no because there wasn't really anything you could fill in with was there? And that I did try. I tried to follow like a workout plan, erm... but it was hard to get motivated. (Brianna)

For Claire, though she tried to maintain a running schedule, losing the routine after becoming ill led to a loss of motivation and a reduction in PA:

> I went from like everything to nothing. And then I did have a bit of a run where I tried to do a bit more exercise and go on some runs and I did race at your pace in May. (…) I did it again in July and then I was ill and just did, I did like three miles and then I just didn't do anything. I just lost the impetus. (Claire)

For Diana, she identified her loss of motivation as due to a lack of sports-related

goal. Football for her had restarted at the time of interview and she saw this as a motivation to "*do something fitness wise*" again:

> Waking up in the same place and then doing stuff in that same place and stuff like that, the motivation just went and with having no motivation for any other sport or not having a goal to achieve it was quite hard to keep it up.

Enjoyment of Sport. Keeping fit specifically for sport was echoed in the words of six other participants. For those who retained their level of PA, it was the future return sport that was their main driver and motivation to exercise and improve was always based around whether it would help to up their game:

> You know, after a while, you want to go and play the game or you get, started getting frustrated at just being fit for the sake of keeping fit. The reason why you want to be fit is because you want to play your sport (Nina)

Participants also spoke of a lack of enjoyment in other exercise, and a love of sport motivating regular PA before lockdown. For Freya, sport was a "hidden" method of getting exercise into her schedule ("*I exercise and don't feel like I've exercised*"). Exercise that doesn't *feel* like exercise was also something others agreed with:

> I figured that out in lockdown that I actually really don't like exercise. Um, I like the endorphins that I get from roller derby and it's a very specific like adrenaline and endorphins that I get. And I can't reach that with any other exercise. (Laure)

Another driver for PA associated with team sports was the team environment; where some would feel unmotivated alone, training with others added a level of support to not give up:

> If I go running, I feel like it's quite a lonely environment. And it's like, you know, you've got, you've got to be self-motivated in whatever sport you do, but it's easy to just give up. Whereas in a team environment, you're there you're supporting each other. (Emily)

Noticing a Lack of Routine. For seven participants, staying active was habitualized- it was a part of their routine- and this was removed by lockdown:

> At the time I was working full time, so it was like every day I wake up the same time Tuesdays, Thursdays, I'd finish at the same time, go to football, get home. And it was just like set every week. And then all of a sudden I had no routine. (Brianna)

For Laure, though she tried to maintain "some form of exercise" (Laure), the loss of routine in all parts of her life felt "*dysfunctional*":

> It's just the routine. I think I was just very, very attached to my routine to a point where I didn't really realize that losing it would mean quite, quite a dysfunctional life after that.

Mental Health

Losing routine and other lockdown changes impacted mental health, and this was discussed with all participants. Though lockdown affected some more than others, it was a clear theme within the group. Participants offered insight into how their mental health changed through lockdown and how they used PA to feel better. Two subthemes were identified:

Lockdown's Impact on Mental Health. There was a clear frustration; eight participants mentioned feeling frustrated by lockdown-induced situations ("*I've struggled in lockdown. I think everyone has*" (Melissa)). For some participants, it was clear that experience of the pandemic in general negatively impacted their mental health at the start of lockdown ("*lockdown's made my anxiety come back a lot*" (Diana)). For Emily, whilst she noticed a difference in her mental health, she didn't feel that she was as affected as others:

> I consider myself quite chilled out. So it wasn't that I don't think it affected me as much as it would have been a lot of people. But I did notice, like, I felt a bit more, like, depressed and just down in general, because I'm not doing anything that I enjoy.

Though the majority noticed a negative impact on mental health, for Freya, keeping

busy and staying active helped her to combat any detrimental effects to her mental health. This meant that she didn't notice a negative impact:

> I'm getting to the point now where I'm desperate to go back but to start with I kind of just accepted it and so I don't think it did have an impact on my mental health really.

Exercise and Team Sports to support Mental Health. A majority of participants identified exercise as a stress reliever, and a way to maintain good mental health. Alison noted an impact mentally at the start of lockdown- she, like Freya, identified that she needed to "*re-channel (her) frustration*" and shared how her sport helped her stress levels:

> You kind of realised how much you've relied on it, to reduce your stress levels and to just get that pent up frustration and just all those emotions that you do gain through just your daily grind how much that released them.

The positive impact of exercise on mental health generally was mirrored by other participants:

> I find that exercise personally it also helps me keep the happiness vibe as well. So, I've noticed when there have been days for some reason that I've not been able to do any physical activity I always feel a bit moody or a bit low. (Hallie)

Participants expressed that engagement in their sport helped them to feel better afterwards, even when they were unmotivated initially. Brianna found that exercise helped her to "*forget a bit*", and she was always happy that she had trained, even when she was initially nervous.

Discussion

The primary aim of this study was to understand the impact of UK COVID-19 related lockdown restrictions on women's team sport, and the influence of this on PA amongst its participants. The study also explored reasons for participation with a secondary aim of understanding the mechanisms underpinning players' continued

engagement with their sport long-term. Findings offer insight into how team sport participation can protect long-term maintenance of PA, even in the face of adversity.

Most participants (96.8%) felt a great impact of lockdown on their sport. Following the introduction of lockdown measures, as hypothesized, there was a significant drop in PA levels, with only 46.9% reporting achieving the recommended levels of PA weekly at the start of lockdown in contrast to 84.1% prior to lockdown. Other studies with UK participants have reported reduced PA (Spence et al., 2021), though the difference is not as great as found here. One explanation for this is that women could be disproportionately affected by lockdown through increased childcare responsibilities. However, our findings contrast those of Orlandi et al. (2021), who found that women had a lower tendency to reduce PA in lockdown than men and other studies have noticed little to no difference (Bu et al., 2021; Rhodes et al., 2020).

Greater reductions have also been found amongst those who were regularly active prior to lockdown (McCarthy et al., 2021) and specifically among those who chose to exercise with friends or in a sports club (Constandt et al., 2020). Although this may be due to less opportunity to exercise through no facilities and restrictions on time in public, this is worthy of further investigation. Contrasting literature found no difference in PA frequency amongst females who participated in team sports during lockdown (Aghababa et al., 2021).

In this study, 96.8% of participants noticed a big impact of lockdown on their sport, and another explanation for the reduction in PA could lie in habit formation. Maintenance of PA, particularly during leisure time, has been shown to be influenced through creation of habits (Rhodes & De Bruijn, 2010), even in the absence of intention (Di Maio et al., 2021). However, there is evidence of a negative association of autonomous motivation with some forms of PA during lockdown, suggesting the requirement for conscious decision making in light of the change in circumstances (Spence et al., 2021). This was echoed in the experience of stage two participants in this study; a number expressed that sport was their routine, and that not having that routine left them feeling unmotivated to

exercise, despite an initial increase in activity for some. Google trends data showed an all-time high interest in exercise immediately following lockdown which started to decline after two weeks, suggesting a very short-lived increase in interest around engagement with PA (Ding et al., 2020). This could explain the initial increase in exercise for stage two participants as they tried to find new ways of exercising, and perhaps find other ways to fill time over lockdown, however it does not reflect the larger sample.

Though PA had started to return to baseline levels somewhat at the time of data collection, it was not significant. At this time, some restrictions had been lifted and, as such, some participants had been able to return to their sport, be it in its entirety or with some form of modification. This could explain the small increase in PA levels, though the researcher was unable to test this assumption as data were skewed.

It is promising that, despite PA reduction and the loss of habit, intention to move back to the routine seemed unaffected, with 96.1% of participants intending to return to the sport once they were able, aligning with existing research (Martin et al., 2021). High intention has been linked to increased PA, regardless of habit strength (Di Maio, 2021), and findings therefore indicate a potential protective effect of team-sport participation on long-term maintenance of PA following adversity.

The question here would be what are these protective factors? On top of general lockdown experience and intention to return, qualitative data identified in stage two revealed three other key themes; “bonding”, “keeping physically active” and “mental health”.

Bonding

Self-determination theory is increasingly used to understand long term maintenance of PA, and self-determined motivation has been associated with reduced drop-out in sport (Jowett et al., 2017) and intention to engage in PA during COVID-19 lockdown (Chirico et al., 2020). Self-determination theory emphasizes the importance of intrinsic motivation and posits that for a person to engage in a behavior and internalize motivation, three basic needs should be met: autonomy, relatedness and competence

(Deci & Ryan, 2008). The theme “bonding” can be closely linked to the autonomy-promotive need of relatedness.

The sociability of team sports was the most prominent theme identified; participants recalled the friendships that they had built through sport as a key facet of their entire experience and a key driver for participation. This finding is not novel; recreational team sports have been associated with improved social experience compared to individual sports (Thorpe et al., 2014) and relatedness has in turn been identified as an influential factor in promoting long-term participation in netball (Walsh et al., 2018; Whitehead et al., 2019).

The importance of the social experience as a motivational factor has also been identified across other women’s sports (Choi et al., 2018; Kerr, 2021) and developing a sense of belonging in team sport has also been associated with increased confidence (Themen & van Hooff, 2017). This suggests that relatedness in women’s team sports could not only influence long-term PA but could also have a positive effect on personal development.

Though lockdown removed social connectedness for much of the population, participants in this study noticed a social impact in relation to non-participation in the sport specifically. Participants began to engage with their teammates outside of the sport. The digital maintenance of friendships could have satisfied relatedness and protected intrinsic motivation. This conclusion is supported by Podlog (2006, 2010), who found that athletes returning to sport following injury cited bonding and socializing with teammates as a motive to return to sport. Interestingly, injured athletes have also been found to experience negative impact on relatedness with feelings of isolation from teammates and this feeling of isolation could be translated to pandemic experience. However, isolation from teammates and the sport was a collective experience in this instance and so this may not apply directly.

Keeping Physically Active

Maintaining a level of fitness was identified as an important factor in keeping

physically active both pre and post lockdown amongst participants. Improving fitness can be key driver for participation in team sports, specifically for women (Moradi et al., 2020), and though some participants found other means to stay fit, the isolation of lockdown acted as a barrier to motivation. As discussed, this could partly be due to loss of habit but an interesting finding to add to that of Moradi et al. (2020) was that participants continued exercise to improve fitness for a future return to sport specifically. Participants had all been engaged in their sport for over a year and so would have developed competence; an important factor in fostering future participation (Downward et al., 2017).

Though improving skill was an external goal, it was the internalized enjoyment of sport that was drove participation. Engaging in PA can generate feelings of enjoyment (Steeves et al., 2016) which is an important factor in determining engagement in a behavior (Herens et al., 2016). Enjoyment in PA can be higher in those engaging in team/ group-based activities and can link to commitment. In this case, enjoyment is likely linked to an increase in relatedness that comes from the social experience (Wallhead et al., 2013). An explanation for the drastic reduction in PA during lockdown could be that participants did not feel motivated to engage in other forms of exercise because they did not enjoy it and had not internalized motivation for them.

Mental Health

Findings highlighted a detrimental impact of lockdown on mental health generally in line with current literature (Banks & Xu, 2020; Dib et al., 2020), though it has been suggested that severity of any mental health decreases lessened as lockdown continued (Chandola et al., 2020) .

Participants saw exercise, specifically sport participation, as a beneficial to their mental health; taking time specifically for them and often seeing it as positively impacting mood. Participants saw improvement in their mental health following attendance at sessions even when their motivation to attend was lower initially and knowing this pushed them to attend. This is reflected in literature, where increased levels of positive affect following exercise have been associated with an increased and sustained motivation to

exercise (Kwan, 2010).

When considering mental health away from motivation, whilst leisure time PA alone has been positively associated with mental health (De Sousa et al., 2021), team sports in particular have been associated with improved psychological health outcomes in comparison to individual forms of exercise (Andersen et al., 2019). Though this study did not compare team sports participants alongside others, results go some way to explain the mechanisms by which this conclusion can be made. Literature has found women to report higher anxiety scores pre-exercise than men but to gain more psychological benefit (Marques, 2020) so it is important that the mechanism behind motivation in this context be understood to encourage attendance and continue improvement on mental health.

Unfortunately, quantitative data were not collected surrounding mental health over time and so researchers were unable to draw conclusions about causation of the impact of the pandemic on mental health of participants. However, qualitative participants regularly cited mental health and stress reduction as a reason for participation and the removal of this method of release could be impactful.

Limitations

It is worth noting that at the time of data collection, though some restrictions were still in place, they were not as strict as those in the first national lockdown and some sport had resumed in a number of areas, either with normal rules or with added precautions. As geographical information was not collected, the researcher could not discern from the data whether participants were able to play at that time. However, all lockdowns resulted in cancellation of sports and social distancing measures, and any bigger changes were only reflected in the “now” recall period.

Most participants regularly hit PA guidelines prior to lockdown and so analysis was restricted due to the non- normal distribution. Though this study took place under a highly abnormal period, should a similar event reoccur, it would be beneficial to also collect data from individuals who do not regularly participate in team sports, and from different genders.

Self-reported historical data was used to measure changes in PA and so social desirability bias and recall bias should both be considered in this instance. Qualitative data, however, does indicate that the trends identified were representative of the population, as does similar literature (Constandt et al., 2020).

It should also be noted that that over 90% of participants in this study were white, and there was an uneven distribution between type of sport played. This sample may therefore not be representative of the target population.

Conclusions

This study addresses a gap in the literature by providing an insight into the impact of lockdown on women actively participating in team sports. Results indicate the strengths of motivating women's participation in team sports for long-term maintenance of PA, even in the face of adversity. Increase in moderate to vigorous PA specifically during the pandemic has been associated with better mental health (Jacob et al., 2020) and although team sports were found to have a protective effect on future motivation to exercise, removal of the sport significantly affected motivation to exercise during lockdown.

Nevertheless, qualitative outcomes suggest that team sports could support long-term maintenance of PA for women in general and have a beneficial impact on mental health and social connectedness.

Implications for Practice

The way in which the COVID-19 pandemic impacted opportunity is rare and difficult to replicate, but it could be suggested that habituating different types of regular exercise be promoted to reduce physical inactivity during adversity. Future research could investigate how different forms of leisure time PA could influence mid-term and long-term motivation to stay active in response to barriers to engage, such as injury, illness or lack of time. Additionally, outcomes from this research indicate team sports as could provide an autonomy-promotive environment in which to foster long-term PA amongst women, and future work should be undertaken to encourage uptake.

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5.2 Empirical Paper Two

This paper was prepared for and submitted to the British Journal of Pain as per its Author Guidelines (https://journals.sagepub.com/author-instructions/bjp). It was accepted for publication on 5th October 2022 and can be accessed here - https://doi.org/10.1177/20494637221134461

5.2 EMPIRICAL PAPER TWO

Readability of Online Health Information in the UK Pertaining to Migraine and Headache.

Abstract

An estimated 46% of the worldwide adult population live with an active headache disorder, and it is thought that there is a proportion of headache and migraine sufferers do not attend for medical care, instead choosing to manage their symptoms at home. The internet continues to act as a source of online health information for self-management, however, it is important that this information can be understood by the user. Research indicates that most health information online is written at a level too difficult for much of the UK population to understand. The aim of this study was to investigate the readability of online health information pertaining to headache and migraine for a UK-based internet user accessing the top four search engines. Searches for “headache” and “migraine” were performed on each search engine and results from the first page were selected for analysis. Five validated readability tests were used to analyse readability; Flesch-Kincaid Grade Level, Flesch Reading Ease, Gunning Fog Index, Coleman-Liau Index and Simple Measure of Gobbledygook index. We found that the majority of online health information about migraine and headache is too difficult for the UK adult population to read. Findings highlight work required to ensure that information from a wider variety of sources is easier to comprehend for much of the population in order for individuals to make informed decisions about health seeking and self-management of headache and migraine. Health information providers should weave readability analysis into their content design process, incorporating shorter sentences and simpler words in their description of conditions and treatment.

Keywords: headache, migraine, online health information, search engines, self-management, self-care, readability

5.2 EMPIRICAL PAPER TWO

Introduction

It is estimated that worldwide up to three quarters of adults have had headache in the last year (World Health Organization & Lifting the Burden, 2011), and 46% of the adult population are thought to live with an active headache disorder, for which the debilitating symptoms are estimated to be a major cause of disability and economic burden worldwide (Doane et al., 2020; Stovner et al., 2018). Of headache disorders, tension-type headache and migraine are most common (Ahmed, 2012); in the UK, migraine is thought to affect around 10 million adults (The Migraine Trust, 2020) and accounts for around 2.5 million consultations in primary care every year (NHS England, 2020). Migraine sufferers commonly report intrusive pain impacting on their ability to carry out daily activities, including work (Vo et al., 2018), as well as nausea, vomiting, visual disturbances, and light and sound sensitivity(Munjal et al., 2020; Silberstein, 1995). Despite this, it is often misdiagnosed or underdiagnosed and untreated (Lipton et al., 2007; Viana et al., 2020). In the literature, there is a difference in incidence rates between reporting of migraine for questionnaire-based studies versus those using medical records, which suggests that there is a proportion of headache and migraine sufferers who do not attend for medical care (Becker et al., 2008). This, alongside the suggestion of underdiagnosis, suggests that there could be a large proportion of migraineurs who choose to manage their symptoms at home without prescribed medication.

The internet continues to be an important source of health information, and the amount of content available to consumers is growing every day. Many people seek this information online to self-treat symptoms before seeking diagnosis from a health professional (Bojazar et al., 2020; McMullan, 2006) and its access increases opportunity to improve knowledge and understanding of a person's medical condition and self-efficacy (McMullan, 2006), enabling them to be more active in managing their condition at home. Holding this knowledge can also decrease uncertainty and worry and improve health decision making (Bujnowska-Fedak & Węgierek, 2020) and confidence to ask more informed questions of health professionals (Lee & Hawkins, 2016), thus empowering

people to actively engage in their own treatment. In *The NHS Long Term Plan*(NHS, 2019), authors draw attention to “shared responsibility”, emphasising the importance in supporting individuals to self-manage their conditions and make informed decisions through the provision of knowledge and information(Ham, 2018). It is therefore all the more important that the health information visible to internet users in the UK enables them to do this.

There are a number of factors pertaining to how an individual may interact with online health information. For individuals seeking information about specific health-related issues, although information that suits their needs and motivation may be their primary concerns (Lee & Hawkins, 2016), literature suggests that instrumental factors, including quality, trustworthiness and usefulness of information are more important in determining online health seeking behaviour than are psychological factors (Wang et al., 2021).

Although the availability of online health information is rising with the continued growth of the internet, some suggest that it could increase inequalities in its access; those who are older, have received less education, have lower socioeconomic status, and lower internet skill are less likely to use the internet to seek online information (Jacobs et al., 2017; Zimmerman & Shaw Jr, 2020). One explanation for the lack of access for some populations could be that the information presented to them is difficult to appraise; of those accessing health information, online lower e-health literacy has been linked to concerns about incorrect interpretation of information and a feeling of information overload, leading to a reduced self-confidence to accurately judge the information, and a lack of trust in the source and their own ability to interpret the content (Marcu et al., 2018).

Around 40% of adults in the UK struggle to comprehend and make use of health information targeted at the general population (NHS Digital, 2019b). This lack of accessibility creates a ‘digital divide”(N. McInnes & B. Haglund, 2011); low health literacy has been linked to lower engagement with preventative health behaviours, a decreased likelihood to access healthcare services appropriately and poorer health outcomes, (Easton et al., 2010; Von Wagner et al., 2007). It is therefore important that publishers of

online health information ensure that it accounts for differences in health literacy to increase its accessibility. One way to address this is to improve readability. However, readability analyses of online health information consistently find that that it is in fact unsuitable for a large proportion of the population (Arts et al., 2020; Ma et al., 2017; N. Mcinnes & B. J. Haglund, 2011; Skierkowski et al., 2019).

There is little literature investigating accessibility, including readability, of online health information pertaining to headache and migraine, and though a recent paper found that headache and migraine focused websites failed readability analyses (Russo et al., 2020), it utilised Google International to identify sources, meaning that search results were not reflective of a UK user's specific experience. This study therefore used UK-based search engines to understand the readability of headache and migraine information available for the UK population.

Methods

Search Strategy

Data on the market share held by leading UK search engines suggest that Google (86.31%), Bing (9.61%) Yahoo (2.36%) and DuckDuckGo (1.01%) are most accessed (Statista, 2021), thus this analysis used results from these four. To avoid the interaction of algorithms, and bias caused by location, browsers were accessed in incognito mode and cookies and the cache was cleared prior to each search.

The search, which included the pre-planned key terms "migraine" and "headache", was performed by the first author on 28th November 2021 in Liverpool, UK. The search was limited to the first page of results for each search engine as research suggests that sites on the first page receive 92% of all traffic resulting from an average search (Chitika Insights, 2013).

Duplicates, websites not in English, websites not including information on headache or migraine aimed at adults, websites aimed at clinicians, information behind a paywall, discussion boards, advertisements and newspaper articles were excluded from

the analysis. If the search result was a website home page, relevant information pages were analysed and an average score was calculated for the entry. If a page contained an article that was split into different pages (e.g. symptoms, causes, diagnosis), all pages were analysed and an average score was calculated. This did not include linked pages which led to separate information sources from which the original menu items or the landing page could not be easily navigated to. Following primary analysis, pages were grouped into “parent” websites to understand readability of content produced by individual organisations, and a secondary analysis was run.

Readability Analysis

Text was copied into Microsoft Word and all figures, captions, links, advertisements, references and disclaimers were removed. Text was then pasted into an online readability tool, *Readable,* for analysis. Five validated tests were identified for the analysis; Flesch-Kincaid Grade Level (FKGL), Flesch Reading Ease (FRE), Gunning Fog Index (GFI), Coleman-Liau Index (CLI) and Simple Measure of Gobbledygook index (SMOG). Tests use different formulae to calculate readability of a piece of text, thus the combination of scores was identified as a way in which to ensure that more facets of readability were analysed. Where FRE, FKGL and GFI incorporate word and sentence length and syllable count into their formulae, GFI calculates readability using word and sentence length alone. SMOG uses the number of words with three or more syllables in three ten-sentence samples to calculate readability. All tests but FRE result in a score that corroborate with the approximate US grade level required to comprehend the text (i.e. a score of 6 aligns with a 6^{th} grade reading level). FRE score uses a scale from 0-100, where a lower score indicates a more difficult readability level (0-30 is very difficult, 30-50 is difficult, 50-60 is fairly difficult, 60-70 is standard, 70-80 is fairly easy, 80-90 is easy, 90-100 is very easy (Flesch, 1948)).

Adult literacy levels vary across the four UK nations, where between 1 in 4 and 1 in 8 adults have very poor literacy skills (The Literacy Trust, 2022). Guidance from NHS Health Education England and the Office for National Statistics suggest that health

information should be aimed at an average 11 year old, which translates to sixth-grade (NHS Health Education England, 2018; Office for National Statistics, 2022). This analysis therefore used this recommendation as a basis for whether health information was suitable for the population. An indication of a suitable score for FRE was set at 80-90.

Results

Statistical analyses were performed using SPSS v26. A total of 106 pages were included in the final analysis. Following calculation of means for those linked to home pages and split articles, this resulted in 28 final entries from 17 parent pages (see figure 1.) This included 12 for search term “migraine” and 16 for search term “headache”.

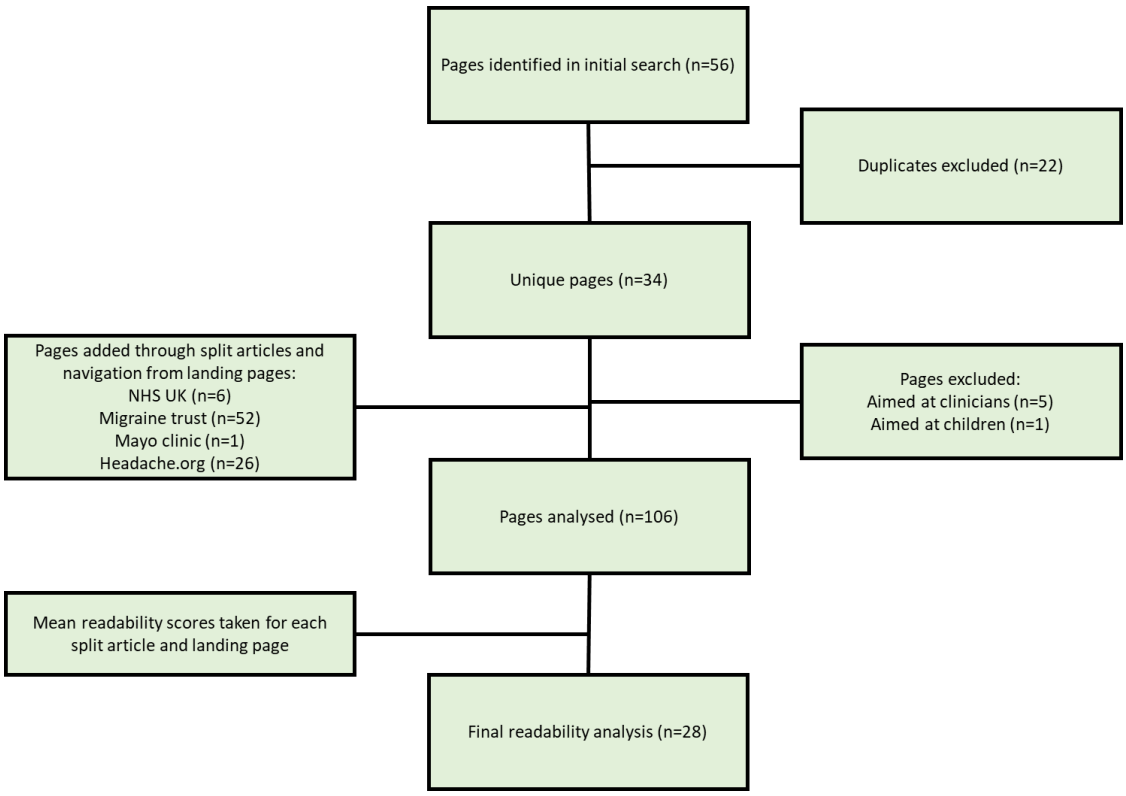

Figure 1. Process for page inclusion and exclusion

All five tests indicated that health information on most websites was difficult to read for the majority of the population. Mean grade score (FKGR, GFI, CLI, SMOG) across all websites was 10.01 (SD= 1.70). Mean FRE score was 53.23 (SD=11.58). This

corresponds to an approximate reading age of 15–17 years old, with 7.14% of articles readable for 11-12 year olds. Mean scores for each readability formula are presented in Table 1.

Table 1.

Readability Scores Presented by Formula

Readability Formula	Mean score	Minimum score	Maximum score	Standard deviation
Flesch Reading Ease	55.23	30.10	78.2	11.58
Flesch-Kincaid grade level	8.19	4.40	11.60	1.82
Gunning Fogg index	9.82	6.90	13.60	1.77
Coleman-Liau index	11.49	6.30	16.90	2.18
Simple Measure of Gobbledygook index	10.55	8.10	13.30	1.38
FKGR, GFI, CLI, SMOG combined score	10.01	6.38	13.20	1.71

Of the pages analysed, the easiest page to read was “Headaches” from NHS UK (M = 6.38, SD=1.63. According to FRE scores, “Headache”, provided by NHS 111 Wales, (78.2) was slightly easier to read than the NHS UK article (77.5). The page most difficult to read was “Migraine” provided by *Wikipedia*, with a mean average grade score of 13.2 (SD=1.15) and a FRE score of 35.7. According to FRE score alone, “The complete headache chart” from *The National Headache Foundation* was most difficult to read (30.10) This scored a mean average grade level of 11.00 (SD=2.78). See Table 2 for all pages.

Secondary analysis revealed that NHS 111 Wales provided the easiest content to read with a mean grade score of 6.58 (SD= 1.63) and a FRE score of 77.50, indicating an approximate required reading age of 11-13 years old. The highest mean grade score was

Wikipedia (M= 13.00, SD = 1.26). According to FRE the most difficult content was provided by *The National Headache Foundation* (30.10). *Wikipedia* was second most difficult to read, with a score of 36.75. This indicates an approximate reading age of 17-21 years. See Table 3 for all parent websites.

Table 2.

Primary analysis (Note. "Number of pages analysed" includes instances of articles split over multiple pages and if the search result led to a website landing page)

Web page title	Organisation	Number of pages analysed	Mean readability score	FRE score
Headaches	NHS UK	1	6.37	77.5
Headache	NHS 111 Wales	1	6.58	78.2
Headache Basics	Webmd	1	7.83	71.9
Headaches	NHS Inform	1	8.08	64.6
What is migraine?	Webmd	1	8.40	64.3
Headaches	Cleveland Clinic	1	9.10	58.9
Migraine Headaches	Cleveland Clinic	1	9.13	60.1
Headache	Johns Hopkins Medicine	1	9.13	59.1
Migraine	Patient	1	9.15	61.7
What is causing this headache?	Medical News Today	1	9.33	56.8
Everything you want to know about migraine	Healthline	1	9.60	55.9
Headache: when to worry, what to do	Harvard Health Publishing	1	9.78	60
What is migraine?	Migraine Trust	1	9.80	60

Web page title	Organisation	Number of pages analysed	Mean readability score	FRE score
What is migraine?	National Migraine Centre	1	9.98	60.7
14 types of headaches and how to treat them	Healthline	1	10.03	52.1
Headache	Patient	1	10.13	57.8
Everything you need to know about headaches	Healthline	1	10.35	53.2
Migraine	Mayo Clinic	2	10.38	52.1
Migraine	NHS UK	7	10.52	53.96
Everything you need to know about migraine	Medical News Today	1	10.63	48.5
Website home page	Migraine Trust	30	10.63	56.74
Types of migraine	Migraine Trust	17	10.98	52.36
Headache - Causes	Mayo Clinic	1	11.50	36.1
Headache: Types and location	Medicine Net	1	11.90	46
Website home page	Headache Management System	27	12.19	44.33
Headache	Wikipedia	1	12.80	37.8
The complete headache chart	National Headache Foundation	1	12.90	30.1
Migraine	Wikipedia	1	13.2	35.7

Table 3.

Secondary analysis (Note. "Number of pages analysed" includes instances of articles split over multiple pages and if the search result led to a website landing page)

Parent organisation	Website URL	Number of search results	Number of pages analysed	Mean readability score	FRE score
NHS 111 Wales	111.wales.nhs.uk/	1	1	6.58	78.2
NHS Inform	Nhsinform.scot	1	1	8.08	64.6
Webmd	Webmd.com	2	2	8.11	68.1
NHS UK	Nhs.uk	2	8	8.45	65.73
Cleveland Clinic	my.clevelandclinic.org	2	2	9.11	59.75
Johns Hopkins Medicine	Hopkinsmedicine.org	1	1	9.13	59.1
Patient	Patient.info	2	2	9.64	59.75
Harvard Health Publishing	health.harvard.edu	1	1	9.78	60
Medical News Today	Medicalnewstoday.com	2	2	9.98	52.65
National Migraine Centre	Nationalmigrainecentre.org	1	1	9.98	60.7
Healthline	Healthline.com	3	3	9.99	53.73
Migraine Trust	Migrainetrust.org	3	48	10.47	56.36
Mayo clinic	Mayoclinic.org	2	4	10.94	44.1
Medicine Net	Medicinenet.com	1	1	11.9	46

Headache Management System	Headache.org.uk	1	27	12.19	44.33
National Headache Foundation	Headaches.org	1	1	12.9	30.1
Wikipedia	En.wikipedia.org	2	2	13	36.75

Discussion

We found that the majority of online information about migraine and headache is too difficult for the UK adult population to read; only two pages from the 28 identified were readable at 6th grade level (11-12 year olds). Results from this study are consistent with previous readability analyses of headache and migraine information aimed at an international audience (Russo et al., 2020), and of online health information generally (Daraz et al., 2018; Worrall et al., 2020; Wrigley Kelly et al., 2021).

Our results indicate that articles written and provided by NHS services were amongst the easiest to understand, making up three of the top four scoring organisations in our secondary analysis. Previous research on UK participants found that NHS UK (then NHS Direct) was the most visited website for accessing health information (Marton, 2015), thus it is important that its content it provides is easily understood by the population; further, this could improve appropriate access to its own services. In recent years, NHS services have worked to improve readability of online information, providing guidelines and toolkits to content creators, aiming for a reading age of 9 to 11 years old (NHS Digital, 2019a). Though some pages analysed did achieve this target, information on migraine was considerably more difficult to understand, being delivered at a grade 10 level (15-16 years old).

Despite the increased access of NHS-owned websites, with presentation of NHS content at the top of all search engine results accessed in this study, it is important to note

some other findings; people like to visit multiple websites to get a richer understanding of their condition and to assure the validity of the information found (Pang et al., 2014). Further, the general public may be more likely to access dot com websites over governmental websites when health information seeking (Chi et al., 2020) and those with lower health literacy show lower levels of trust in government-owned websites (Mackert et al., 2009). It is therefore important to that readable information is available from a wide variety of online sources to ensure that more of the population are able to make informed decisions.

Health information presented by charities can be preferred over government sites (Sillence et al., 2007), and of websites analysed as part of this study, there were three charitable providers; *National Migraine Centre*, *Migraine Trust* and *National Headache Foundation*. However, information on these sites was too difficult to understand for much of the UK population, with *National Headache Foundation* content delivered at a level only understandable for those who have accessed higher education. Current UK data suggest that only 42% of the population aged 21-65 are graduates (Office for National Statistics, 2017), meaning potentially important access points to quality information are not able to reach most of the population.

The least readable source of information identified in this study was *Wikipedia*, which stands in line with existing literature (N. McInnes & B. Haglund, 2011). *Wikipedia* has been identified as a prominent source of health information (Laurent & Vickers, 2009), and it often appears on the first page of search results. This indicates that health information seekers may access difficult-to-understand information very early on in their searching process.

Limitations

There are some mostly unavoidable limitations to be considered in interpretation of these findings. Firstly, results were drawn from a cross-sectional analysis at one point in time. It is acknowledged that web pages are updated, and that search engines adapt in

response to website traffic and also the previous search behaviours of the individual user (Yang & Jeh, 2006). Further, though the searches conducted did not encompass a time-sensitive topic, a suggestion for future readability analyses would be to undertake the search at different time points to understand whether results change generally. Results nevertheless demonstrate the availability of health information provided by large organisations with high website traffic. Another limitation lies with the search terms used. Authors used “headache” and “migraine” as search terms, but it is acknowledged that some internet users may use phrases or specific symptoms when conducting internet searches (McCarthy et al., 2017). Although “headache” is a symptom in itself, in the case of migraine, individuals may not understand at the point of searching that this is what they are experiencing, and may try to encapsulate symptoms in a different way, and may be unsure of what keywords to use (Pang et al., 2014). It is also acknowledged that by the nature of headache and migraine being medical conditions, there are instances in which the use of medical terminology is unavoidable, such as on pages denoting treatment options, including sharing the names of available medications. This may mean that there are pages which could have increased readability scores due to the number of syllables in such words. However, authors used a number of different readability analysis tools which used a mix of sentence length, word length and syllables to reach a final score, of which an average was taken.

Implications and suggestions for future research

This study adds to the existing evidence base by providing an insight into the accessibility of online health information for individuals seeking an understanding of headache and migraine symptoms in the UK, and results increase awareness of the accessibility of information central to self-management and potential patient activation, imperative to the achievement of goals set out in *The NHS Long Term Plan* (NHS, 2019). Our findings suggest that work is still required to ensure that information from a wider variety of sources is easier to comprehend for much of the population in order for individuals to make informed decisions about health seeking and self-management of

what can be a disabling condition for many. Health information providers should incorporate readability into their content design process to address the digital divide, incorporating shorter sentences and simpler words in their description of conditions and treatment.

It is important to note that readability is just one aspect in accessibility of information. Accessibility incorporates all disabilities that affect access to the web, including auditory, cognitive, neurological, physical, speech and visual (World Wide Web Consortium, 2021) and existing literature suggests that more attention is required in this hemisphere to improve access of online health information for people with disabilities (Mason et al., 2021). This is particularly important in the case of headache and migraine information as symptoms can be disabling; namely increased sensitivity to light, poor concentration and visual problems (Charles, 2013). However, evidence on this subject is lacking and future research should also focus on different aspects of accessibility in order to improve universal access to health information.

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5.3 Systematic Review

2. Review systematically a substantial body of knowledge in an area of Health Psychology

This paper was prepared for Psychology and Health Journal as per its Author Guidelines (https://www.tandfonline.com/action/authorSubmission?show=instructions&journalCode=gpsh20). At time of portfolio submission, this article has not yet been submitted for review.

What is the evidence for walking to improve symptoms of anxiety in adults? A systematic review of walking interventions.

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Abstract

Objective: Up to 33.7% of the population are affected by an anxiety disorder in their lifetime, and those living with an anxiety disorder can experience disabling symptoms. With its increasing prevalence, it is important that work is done to address heightened anxiety as both a preventative and reactive measure. Physical activity has been identified as an effective way to reduce symptoms of anxiety, and walking is an accessible low-to-moderate intensity physical activity. The aim of this paper was to identify the evidence base for walking interventions as a viable treatment option for anxiety or for its prevention.

Design: A systematic search across six bibliographic databases (PsychInfo, PubMed, MEDLINE, Web of Science, Scopus, CINAHL) identified ten studies for this narrative synthesis.

Results: Four studies identified a significant reduction in anxiety. Questions were raised surrounding methodological quality of the data, particularly surrounding sample size, absence of follow-up and the use of suitable controls.

Conclusion: There is some evidence to support the notion that walking interventions, particularly those promoting autonomy and progression over time, are valid methods by which to increase physical activity levels to improve anxiety. However, this assertion cannot be made definitively and improved methodological quality is needed for future studies.

Keywords: walking, physical activity, behaviour change intervention, anxiety

5.3 SYSTEMATIC REVIEW

Rationale

Anxiety disorders (ADs) are understood to be the most common mental disorders in the world, and sit in the top 25 causes of global health burden across all ages (Vos et al., 2020). It is in fact suggested that up to 33.7% of the population are affected by an AD in their lifetime (Bandelow & Michaelis, 2015). Those living with an AD can experience disabling symptoms, including difficulty in controlling worry, increased irritability, loss of concentration, fatigue, sleep problems, panic attacks and other physical symptoms (National Institute of Mental Health, 2022). Furthermore, prevalence is increasing. Research suggests that stressors associated with the Covid-19 pandemic in 2020 resulted in a rise of 76.2 million cases of AD globally (Santomauro et al., 2021), and anxiety in the general population has increased (Salari et al., 2020). Anxiety is a necessary human emotion that can be protective in the short term; however, experiencing it to excess can be maladaptive and thus it is important that work is done to address the growth in both disordered and non-disordered anxiety.

Common treatments for ADs include antidepressants and psychotherapy (Ströhle et al., 2018; Thibaut, 2017); however, some pharmacological treatments can have unwanted side effects (Wang et al., 2018). When it comes to psychotherapy, waiting times can be extensive (Larsson et al., 2022; Poß-Doering et al., 2021) and for those wanting to access therapy quickly, obtaining private treatment can be costly. This cost can be unavoidable for those living in countries in which psychotherapy is not universally provided. Further, there are some populations who do not benefit from psychotherapy to the same extent as others (Carl et al., 2020). This suggests there is a growing need for alternative and timely interventions which are accessible to the general population. There are a number of effective alternative interventions available in the treatment of ADs, including mindfulness meditation (Montero-Marin et al., 2019), psychoeducation (Rodrigues et al., 2018), serious games (Abd-alrazaq et al., 2022) and the delivery of digital interventions (Domhardt et al., 2019). Further, a highly accessible and little-to-no-cost self-help intervention identified as effective in

improvement of mental health, including anxiety, is physical activity (PA) (Aylett et al., 2018; Ji et al., 2022; Lattari et al., 2018).

A simple way to incorporate PA into one's life is walking. Walking as a form of moderate intensity PA is easily accessible to much of the population: it is low impact and requires minimal fitness levels and no equipment. It has also been postulated that moderate intensity PA can be more beneficial for mental health than vigorous intensity PA (Althumiri et al., 2021), thus it is important to understand whether walking holds this benefit. Existing evidence on walking and mental health is positive (Robertson et al., 2012). A number of systematic reviews investigating walking in nature on mental health, including anxiety, have concluded it to have a positive effect, positing the combination of walking and the time in nature as an easily accessible form of therapy (Grassini, 2022; Kotera et al., 2021; Mau et al., 2021). However, such systematic reviews included mostly interventions that measured acute bouts of walking (one session), and it would be important to understand if this benefit is obtained through walking over time. Further, there is a need to understand the evidence for walking interventions alone, irrespective of the interaction of nature, as those living in urban and economically deprived areas may need to travel further to spend time in safe green spaces (Wolch et al., 2014).

A systematic review undertaken by Kelly et al. (2018) identified a number of studies investigating the impact of walking on anxiety and suggested that walking did appear to be beneficial for outcomes. However, the review was broad and, though it did include experimental studies investigating walking interventions over time, it did not focus on interventions specifically. Further, the literature search was undertaken in 2017, since when the evidence base has grown. As such, this review aimed to identify the evidence for walking interventions as a viable treatment option for anxiety or the prevention of it.

Methods

5.3 SYSTEMATIC REVIEW

This review was conducted in line with the recommendations of the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) statement (Page et al., 2021). The review was registered on PROSPERO on 10th August 2022 (registration number: CRD42022346816).

Eligibility Criteria

The choice of research question and search terms were informed by the PICOS search tool as recommended by the Centre for Reviews and Dissemination (2009). Studies that met the following criteria were included: (1) had a sample of adults aged over 18 years without a specific physical condition, (2) included a walking intervention, with more than one walking session over time, (3) included a measure of anxiety, and (4) were experimental or quasi-experimental studies. Studies were excluded if they (1) used a single-participant case study design, (2) did not include a group measuring walking only (i.e. measuring walking *with* meditation etc.), (3) introduced non-conventional walking (i.e. nordic walking, race walking), or (4) were not available in English language (see Table 1.)

Information Sources and Search strategy

After completion of scoping searches, six bibliographic databases (Psychinfo, PubMed, MEDLINE, Web of Science, Scopus, CINAHL) were searched for relevant literature from inception until 14th May 2022. Searches were conducted with assistance from an academic librarian. The following keywords were used to search within titles and abstracts: (anxiety OR panic disorder OR obsessive compulsive OR obsessive thoughts OR intrusive thoughts) AND (walk*). For full search syntax see Table 2. Reference lists of related systematic reviews were also checked to identify additional papers.

Selection process

All retrieved articles were imported into a reference manager and duplicates were removed. One reviewer then screened all titles and abstracts to identify potentially relevant

papers and a cross-section of papers were checked by a second reviewer. Full-text papers of all relevant papers were obtained where possible, and each study was assessed by one reviewer according to inclusion criteria. Effort was made to contact authors of papers mentioned in conference proceedings. Results were shared with a second reviewer and any discrepancies were discussed prior to inclusion or exclusion.

Data extraction

A data extraction form was prepared on *Microsoft Excel* and tested on a small portion of identified studies, following which it was applied to all successfully screened papers. The form captured details including authors, year of publication, country, funding sources, nature and length of intervention, participant details, anxiety measures, statistical tests used, statistical analysis and self-described limitations. One reviewer applied the data extraction form to each paper following which a second reviewer applied it to a selection of papers. Reviewers then discussed and resolved any discrepancies to ensure accuracy.

Risk of bias

Study quality was assessed using the Joanna Briggs Institute (JBI) critical appraisal checklists for RCTs and non-randomised experimental studies. Items on the checklists are graded “Yes”, “No”, “Unclear” or “N/A”. Within the RCT checklist, items 5 and 6 explore blinding of those delivering the intervention and assessing outcomes, both of which are inapplicable to psychosocial interventions. As such, these were removed from the checklist for the purpose of this review. One reviewer applied the checklist to all studies and the second and third reviewers assessed one paper each. Outcome of quality assessment was discussed, and any discrepancies were resolved through discussion between reviewers.

Data Analysis

Due to non-homogeneity of study participants, outcome measures used and statistical analyses, a meta-analysis was not possible. Therefore, a narrative synthesis was completed.

Results

Selection Process

Searches identified 745 results. Once duplicates were removed, 224 papers were identified for the first stage of screening in which titles and abstracts were assessed for relevance. Following review, 20 citations were retained. Nineteen papers were obtained for full-text review (stage two selection) and a further paper was identified through reference lists of selected papers and systematic reviews. From this, eight papers were excluded; two examined an inappropriate population, three did not include an intervention, one examined an acute intervention, one did not measure anxiety and one was not available in English. Following discussion at quality appraisal, a further paper was removed as it was identified that the content and quality of information presented did not allow for a full assessment of risk of bias (Sinatra et al., 1990). As such, 10 papers were included in the systematic review (see Figure 1.).

Study Characteristics

Main characteristics for each study are summarised in Table 3. The ten studies were published between 2002 and 2021 and were conducted in seven different countries. Interventions ranged from four weeks to 12 weeks (M = 8.8, SD = 3.15), and all included walking as an intervention condition. Interventions of included studies varied in nature; some studies advised participants to complete step-based (Vanroy et al., 2017; Vetrovsky et al., 2017), time-based (David, 2014; Hills, 2019; Murphy et al., 2002; Saavedra et al., 2021; Streeter et al., 2010; Sturm et al., 2020) and distance-based goals (Pelssers et al., 2013).

For one study the nature of walking was not clear, though authors specified that participants were offered walking “classes” (Isaacs et al., 2007). Seven studies incorporated walking in groups or with a researcher for at least some part of the intervention. Of the 10 studies, four were randomised control trials and six were non-randomised experimental designs.

Four studies compared walking to another form of PA (David, 2014; Isaacs et al., 2007; Saavedra et al., 2021; Streeter et al., 2010). For the purpose of this review, details of these interventions have been provided in Table 3, but outcomes for these other activities have not been included in analysis.

Studies employed a number of different measures of anxiety, including GAD-7 (Spitzer et al., 2006), the Hospital Anxiety and Depression Scale (HADS) (Zigmond & Snaith, 1983) , Profile of Mood States (Terry et al., 1999), and full and adapted versions of the State-Trait Anxiety Inventory (Spielberger, 1983). See Table 4 for average scores.

Two studies recruited from populations displaying clinical levels of anxiety and/ or other mental health illnesses and eight were aimed at sedentary or healthy adults or older adults, although one study required that participants possess a cardiovascular risk factor. Three studies excluded those diagnosed or with recent history of a mental health disorder. Nine studies reported on both genders and one on women only, although women made up the majority of participants in all but one study. Half of the studies included either a waitlist control or a control in which no changes were recommended.

One study incorporated email counselling for a subset of participants (Vetrovsky et al., 2017), though these groups were not reported on independently, with authors stating that no significant difference was noted between groups. However, a separate paper later published by the authors detailed the demographic split between groups (Vetrovsky et al., 2018), and this information has been included in the study characteristics table.

Outcomes

Table 4 displays study results. Four studies identified a significant reduction in anxiety at follow-up. Of the two which included a control, one identified a significant difference between the walking and a waitlist control (Pelssers et al., 2013). The second did not (Isaacs et al., 2007); however, participants in this control were provided weekly group psychoeducation. Two studies did not include a control group but identified a significant reduction in anxiety post-intervention (Murphy et al., 2002; Streeter et al., 2010).

Of the six studies which did not identify a significant change in anxiety scores, all identified some reduction in scores for both walking and control groups (where used), with the exception of one study, which saw an increase in scores for the control group (David, 2014). Two studies saw a larger change in the intervention group/s (Hills, 2019; Vanroy et al., 2017), one observed the same change in both groups (Saavedra et al., 2021) and one found a larger reduction in scores in the control group (Vanroy et al., 2017). One paper did not report the data, though advised that, whilst there was a reduction in scores, this was not significant for the walking group (Streeter et al., 2010). One study in this group did not have a control group, though observed a reduction (Sturm et al., 2020).

Three studies examined different types of walking. Hills (2019) examined the difference between walking a labyrinth and walking a square path and, though both intervention groups saw a larger reduction in anxiety than the control, a larger reduction was observed in the square path walking group. Sturm et al. (2020) examined walking with a sense of awe alongside regular walking and saw a larger change in the awe group, though a reduction was observed in both. Murphy et al. (2002) examined differences between walking in short bouts (3 x 10 minutes) and one continuous session. Authors observed a significant reduction in anxiety for both groups, but no difference between them.

Quality Appraisal.

Overall, the quality of papers included in this review was questionable; there were issues identified in relation to long-term follow-up in all studies, blinded treatment group assignment, and in participant demographics between groups for non-randomised experimental studies.

See Table 5 for quality appraisal for RCTs. Within this block there are three RCTs and one crossover trial (Murphy et al., 2002). Three papers utilised permuted block randomisation and one stated randomised allocation but did not specify the process used. Treatment groups were similar at baseline for all RCTs. For all studies, it was either unclear as to whether allocation to groups was concealed, or it was confirmed that participants were not blind to their treatment assignment. To account for attrition, most RCTs used a per protocol analysis, removing data of those who dropped out, or who did not complete a sufficient number of measures, from the final analysis. Only one study used intention-to-treat analysis (Isaacs et al., 2007). One paper provided a CONSORT flow diagram to describe reasons for dropout (Streeter et al., 2010).

Table 6 displays quality appraisal for non-randomised experimental studies (n=6), of which four had at least one intervention group and a control group, one used the walking intervention as a control group (Sturm et al., 2020), and one was a pre-post study (Vetrovsky et al., 2017). Participants were similar at baseline in two of the five studies using two or more groups (Pelssers et al., 2013; Sturm et al., 2020). There were significant differences in baseline for three papers; one had differences in AD, institutionalisation level, substance dependence, medication stability and BMI (Vanroy et al., 2017), and one had differences in weight, ethnicity and previous exercise level between groups (Hills, 2019). Further, Saavedra et al. (2021) had significantly more males in the control group, and it should be noted here that the control group consisted of those who did not want to partake in the intervention. In terms of follow up, one study completed intention-to-treat analysis (Saavedra

et al., 2021), one had no dropout (Vetrovsky et al., 2017) one described no difference in demographics of participants dropping out and completing (Pelssers et al., 2013). Reasons for attrition were described in two of the studies (Hills, 2019; Vanroy et al., 2017).

Discussion

This systematic review examined available evidence for the effectiveness of walking interventions as treatment of symptoms of anxiety. There was some evidence that walking interventions can result in improved anxiety, with successful interventions identifying a significant reduction in scores. However, this was an inconsistent finding; though all studies observed *some* reduction in anxiety, statistically significant improvement was observed in fewer than half of studies. Further, there were some substantial methodological limitations present across the data. Collectively, this means that the question of whether walking would be a suitable PA intervention to support improvements in anxiety cannot be answered with certainty.

Given the significant questions surrounding methodological quality, the diverse nature of interventions in question, and the absence of homogeneity in both anxiety measures and statistical analyses used, the authors opted to perform a narrative synthesis on the data.

Interventions of included studies varied in nature, incorporating step-based, time-based, and distance-based goals, although time-based was most popular with seven studies opting for this method. This aligns with public health advice from the World Health Organization (2022), which suggests individuals complete a number of minutes of activity per week. Interventions also asking participants to set aside specific times for walking could be more beneficial to mental health; a recent review carried suggested the development of PA guidelines specifically for mental health, to include doing activity during leisure time or in active travel (Teychenne et al., 2020). It is also important to note that this review suggested that individuals prioritise enjoyable or personally chosen activities and, although walking may

be enjoyable for some, it was not an activity personally selected by participants involved in the studies in our review as interventions were already set. Despite this, participants did opt into the interventions themselves and could withdraw at any time.

An interesting observation was that seven of ten studies incorporated a social aspect for some part or all of the intervention; for example, most interventions were delivered in groups, or were researcher led. Though the intention of this for a number of studies may have been to take objective measures of walking, the inclusion of social interactivity may have played a part in any changes to anxiety scores. This aligns with the existing evidence base; group exercise has been linked to improved mental health and wellbeing (Gatab & Pirhayti, 2012; Henriksson et al., 2022). A study undertaken by Patterson et al. (2021) investigating the impact of social networks and group exercise on anxiety in college students found that taking part in a group exercise programme resulted in lower anxiety scores. Authors suggested that group exercise positively influenced anxiety levels above and beyond individual exercise. Further, group-based exercise has also been identified as an important factor in adherence (Farrance et al., 2016), which suggests that any beneficial effects from a specific intervention could be extended.

Notwithstanding the evidence-based nature of included interventions, it should be stated that, of the four studies identifying significant improvements in anxiety, two did not incorporate a social element (Murphy et al., 2002; Vetrovsky et al., 2017). Of the other two, one was wholly group-based, including an instructor-led, community-based walking programme (Isaacs et al., 2007) and the other included an individually-focused walking programme and one weekly group meeting and walk (Pelssers et al., 2013). It is important to note, however, that Isaacs et al. (2007) did not find a significant between-groups effect, though this review provided group psychoeducation settings to its control group. An explanation for why these interventions could have been more impactful on anxiety could be as these participants were able to choose when and where to perform their walking activities, sitting in line with the previous review mentioned regarding the inclusion of PA in

leisure-time and active travel (Teychenne et al., 2020). Further, these interventions promote a sense of autonomy (i.e. having psychological freedom to engage in an activity), which has been shown to be important in maintenance of PA in those with affective disorders (Vancampfort et al., 2015). Findings therefore highlight the need to investigate the use of person-centred, autonomy-promotive exercise interventions to improve anxiety.

Interventions producing significant effects all included a progressive aspect in accordance with participants' fitness levels; something which all but one of the other interventions (Vanroy et al., 2017) did not. The achievable challenge provided to participants as they moved through the intervention could have contributed to an increase in self-efficacy, associated with improvements in anxiety in PA interventions (Anderson & Shivakumar, 2013; DeBoer et al., 2012). It should, however, be noted that, particularly in those interventions incorporating an individual aspect (David, 2014; Sturm et al., 2020; Vanroy et al., 2017), it is difficult to ascertain whether participants could have also inadvertently progressed in how they performed the walking task, and so any conclusions here are speculative; although Vanroy et al. (2017) utilised pedometers, this data were not presented. Nevertheless, this finding suggests that walking in itself may not be a complex-enough intervention to improve anxiety.

Limitations

There are a number of limitations associated with the dataset which impede our ability to draw any reliable conclusions on the impact of walking on anxiety. Overall, methodological quality was questionable. Only five studies incorporated either a waitlist control or no-changes-recommended control group. Further, for all studies, it was either unclear as to whether allocation to groups was concealed, or it was confirmed that participants were not blind to their treatment assignment. Only two studies included a long-term follow-up measure (Isaacs et al., 2007; Vanroy et al., 2017), and thus conclusions

cannot be drawn on whether any changes in anxiety and PA levels were maintained in the medium or longer term.

Sample sizes for most studies were also small, with eight studies including fewer than 75 participants, and five of these including fewer than 25. This draws into question the generalisability of results and the suitability of statistical analysis methods used, impacting on reliability. It is interesting to note that the two studies including 472 and 626 participants (Isaacs et al., 2007; Pelssers et al., 2013) presented significant findings, and researchers would be curious to understand if other interventions would have presented different findings had a larger number of participants been recruited.

All studies used validated measures to measure anxiety, however it should be noted that there were a number of different anxiety measures used by the included studies, thus direct comparisons between findings are somewhat difficult. Authors in this area should consider this in the design of future studies, and future reviews could consider grouping studies using the same measures for meta-analysis where this is suitable.

This review did not exclude studies recruiting participants with anxiety or other mental disorders, and it is acknowledged that there could have been motivational and other cognitive factors in this population that could have impacted on generalisability of results. However, as studies either did not exclude those with mental disorders or investigated participants specifically with and without mental disorders, both disordered and non-disordered populations were represented by the data.

Regarding our review process, authors used search terms similar to previous systematic reviews exploring similar subjects (Grassini, 2022; Kelly et al., 2018). This, together with piloting of the search strategy and hand searching relevant reference lists gives us confidence that relevant research has been included in this review. However, as only English-language studies were included, and as we were unable to obtain the full text of one paper, we accept that a small number of relevant studies may have been excluded.

Conclusions

Studies included in this systematic analysis sought to understand the impact of walking interventions on anxiety. Some evidence was identified to support the efficacy of such interventions, however due to methodological quality, there is insufficient evidence to support the suggestion that walking-over-time interventions are an accessible and sufficient method in which to introduce PA with the aim of improving anxiety. Future studies should focus on the recruitment of higher numbers of participants and the implementation of follow-up measures to assess long-term maintenance and impact on anxiety.

Disclosure statement

The authors report that there are no competing interests to declare.

Data availability statement

The data that support the findings of this review are available from the corresponding author, KA.

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Table 1. Inclusion criteria

	Inclusion criteria	Exclusion criteria
Population	Adults aged 18 years or over, where the investigated population does not have a specific physical health condition	Inclusion of under 18-year-olds, sample with physical health condition
Intervention	Walking intervention, where no other activities are included (i.e. other physical activity, meditation, or therapy)	Interventions including different types of walking (i.e. nordic walking, race walking), multicomponent interventions, interventions including one walking session only
Comparator	Any comparator including non-comparator	
Outcomes	Any change in measure of anxiety	No measure of anxiety used
Study design	RCTs, quasi-experimental studies	Single participant designs, cross-sectional studies, non-experimental studies, qualitative studies
Others	Studies written in English language	

Table 2. Search syntax

Database	Syntax
Psychinfo	tiab(anxi* OR panic OR “panic disorder*” OR obsessive compulsive OR obsessive thought* OR intrusive thought*) AND ti(walk*)
PubMed	(walk*[Title]) AND (((anxi*[Abstract] OR panic[Abstract] OR “panic disorder*” OR obsessive compulsive[Abstract] OR obsessive thought*[Abstract] OR intrusive thought*[Abstract])) OR (anxi*[Title] OR panic[Title] OR obsessive compulsive[Title] OR obsessive thought*[Title] OR intrusive thought*[Title]))
MEDLINE	(TI walk*) AND (TI (anxi* OR panic OR “panic disorder*” OR obsessive compulsive OR obsessive thoughts OR intrusive thoughts) OR AB (anxi* OR panic OR panic disorder OR obsessive compulsive OR obsessive thoughts OR intrusive thoughts))
Web of Science	((TI=(anxi* OR panic OR “panic disorder*” OR obsessive compulsive OR obsessive thoughts OR intrusive thoughts)) OR AB=(anxi* OR panic OR panic disorder OR obsessive compulsive OR obsessive thoughts OR intrusive thoughts)) AND TI=(walk*)
Scopus	TITLE (walk*) AND ((TITLE-ABS-KEY (anxi*) OR TITLE-ABS-KEY (panic) OR TITLE-ABS-KEY (“panic disorder*”)) OR (TITLE-ABS-KEY (obsessive AND compulsive) OR TITLE-ABS-KEY (obsessive AND thoughts) OR TITLE-ABS-KEY (intrusive AND thoughts))
CINAHL	(TI walk*) AND ((TI anxi* OR panic OR "panic disorder*" OR "obsessive compulsive" OR "obsessive thoughts" OR "intrusive thoughts") OR (AB anxi* OR panic OR "panic disorder*" OR "obsessive compulsive" OR "obsessive thoughts" OR "intrusive thoughts")

Table 3. Study characteristics

Study	Year	Country	Target population	Recruitment	Design	Intervention details	Intervention length (weeks)	Sample characteristics analysed** split by group *N*; Mean age (SD where stated); Female/Male; ethnic split
Sturm et al.	2020	USA	Healthy older adults aged 60-90 No evidence of major psychiatric disorder in past two years	From community followed by Hillblom Healthy Ageing Network	Randomised trial	Weekly 15-minute walks alone in any outdoor setting, phone only permitted to take photographs Two groups: • Awe walks: participants asked to tap into sense of wonder and go somewhere new • Control group: participants just asked to walk	8	52 participants: Awe walk: 24; 75.5 (4.4); 15/9; 23 white/ 1 black Control walk: 28; 74 (4/4); 19/9; 25 white/1 hispanic/1 asian
Hills et al.	2018	USA	College students experiencing depression and/ or anxiety	Flyers on campus, social media and email	convergent independent three-arm design	Three groups: • Researcher-led group walking a labyrinth 20 minutes once per week • Researcher-led group walking a square route at moderate intensity 20 minutes once per week • Waitlist control	4	16 participants: Labyrinth: 7; 21; 7/0; 4 African American/11 Caucasian Square route: 6; 21; 6/0; 4 Caucasian/ 2 African American

								Control: 3; 22; 3/0; 1 Caucasian/ 2 African American/ 1 Asian
Vanroy et al.	2017	Belgium	Institutionalised adults with a diagnosed mental disorder	Associations recruited through email, individuals recruited through associations	Non-randomised control trial	Two groups • A pedometer based personal walking schedule based on fitness levels and a weekly group walk with a coach • No recommendations or prohibition of activities	10	74 participants: Intervention group: 53; 46.4(10/8); 42/49; ethnicity not recorded Control group; 21; 44.6(15.7); 16/28
David.	2014	USA	Students. No inclusion/ exclusion criteria presented	General psychology sigh-up portal and email, posters and flyers	randomised control trial	Four groups • 2 x week 20-minute walking in a researcher-led group and 3 x week alone • Yoga postures* • Yoga breathing* • Waitlist control	4	25 participants in groups of interest: Walking group: 7; 20.29(1.25); 6/1; 5 Caucasian/ 2 other Control group: 15; 20.27(2.15); 6/1; 10 Caucasian/ 5 other
Streeter et al.	2010	USA	Healthy adults aged 18-45 No diagnosis of mental health disorder	Newspaper advertisement and flyers	randomised control trial	Two groups • 60-minutes group walking around gym perimeter at 2.5 mph on a flat surface rated at 3.0 METs per week • Yoga*	12	In group of interest: 15; 25.6(4.9); 11/4; ethnicity not recorded

Saavedra et al.	2021	Iceland	Office workers No inclusion/ exclusion criteria presented	Flyers and emails at office headquarters.	quasi-experimental (semi-randomized) control trial	Three groups: • Group walk 3 x week with a stride cadence objective of >100 strides per minute • Circuit training 3 x week* • Control – no exercise recommended (recruited from those not interested in exercise intervention)	12	23 participants in groups of interest. Demographic data only provided for baseline sample (47 participants): Walking group: 19; 45.6(9.4); 16/3; ethnicity not recorded Control group: 11; 43.2(12.1); 6/5
Murphy et al.	2002	Northern Ireland	Sedentary adults Diagnosis of mental health disorder not excluded	Poster in university and community	cross-over design	Advised to walk briskly at 70–80% of predicted maximal heart rate for a total of 30 min 5 days per week. Two groups (participants assigned to both groups with a 2-week washout period): • Undertaken in a single, continuous session (long bout) • Undertaken in three, 10-minute sessions separated by intervals of 3 hours (short bouts)	6	21 participants: Short/long bouts: 13; 43.8(6.6); 8/5; ethnicity not measured Long/ short bouts; 8; 45.5(5.5); 6/2
Isaacs et al.	2007	England	Sedentary adults with	GP referral	randomised control trial	Three groups:	10	626 participants in groups of interest.

			cardiovascular risk factors Diagnosis of mental health disorder not excluded			• Leisure centre-based programme based on GP exercise referral programmes* • Instructor-led community-based, progressive walking programme with provision for continuing exercise on completion (advice on how to continue being active and book of 20 half-price tickets for leisure centre) • Control group given tailored advice and information on physical activity and local exercise facilities. Subjects put on waiting list for re-randomisation to one of active interventions after around 6-9 months		Walking group: 311; 56.9(8.5); 214/97; 236 White/ 38 Asian; 37 other Advice only group: 315; 57.0(9.0); 215/100; 241 White/44 Asian/ 30 other
Vetrovsky et al.	2017	Czech Republic	Sedentary adults (less than 8,000 steps per day) Diagnosis of anxiety/	Recruited during routine GP visits	quasi-experimental, pre-post study	To gradually increase daily number of steps to 10,000, measured using a pedometer. Sub-group of subjects also received email-based counselling.	12	23; 41(10); 11/12; ethnicity not recorded Walking only group: 13; 39(9); 8/5***

			depression disorder excluded					Walking with counselling group: 10; 44(10); 3/10***
Pelssers et al.	2013	Belgium	Adults aged 55 and over Diagnosis of mental health disorder not excluded	Newspapers, local radio and television, magazine, newsletters and direct from community	cluster randomised trial	Two groups: • Given a pedometer and offered 10 walking programmes in accordance with fitness levels schedules, which increased in walking intensity and/ or volume. Added participation in weekly group meetings and walks. • Waitlist control	10	472 participants. Demographic data only provided for baseline sample (580 participants): Intervention group: 359; 69.4(7.26); 300/132; ethnicity not recorded Control group: 113; 70/34(6.38); 92/56

* Details given for information only. These groups are not included in sample characteristics and any further analysis.

** Data analysed only, this information does not account for attrition/ unusable data

*** Data retrieved from separate paper and included for information only

Table 4. Study Results

Study	**Anxiety measurement (scoring)**	**Anxiety before Mean (SD) unless otherwise stated**	**Anxiety after Mean(SD)**	**Anxiety Follow up**	**Summary of findings**
Sturm et al.	GAD-7 (0-21)	Awe group: 1.4 (2.3) Walking only group: 1.4 (1.8)	Awe group: 0.6 (0.8) Walking only group: 1.3 (1.7)	-	Some reduction in scores, heightened in awe group, but no statistical significance for both groups (p=0.17)
Hills et al.	GAD-7 (0-21)	Labyrinth walking group (M(Range)): 11.71 (4-20) Square walking group: 12.17 (5-18) Control: 12.33 (8-19)	Labyrinth walking group: 9 (5-15) Square walking group: 7.33 (2.17) Control: 10.33 (4-16)	-	Some reduction in scores, biggest reduction in square walking group, although labyrinth walking group saw bigger change than control group.
Vanroy et al.	5 item scale based on trait version of state-trait anxiety inventory (1-5)	Intervention group: 2.88(1.14) Control group: 3.11 (1.10)	Intervention group: 2.84 (1.09) Control group: 3.02 (1.02)	Intervention group: 2.84 (1.09) Control group: 3.02 (1.02)	Some reduction in scores, heightened in control group, but no statistical significance found (specific p values not reported)

David.	State-Trait anxiety inventory (shortened state scale) (20-80)	Walking group: 36 (9.75) Control group: 42.4 (10.32)	Walking group: 31.43 (6.05) Control group: 46.26 (14.13)	-	Some reduction in scores in walking group, but no statistical significance found (walking *p*=0.13, control *p*=0.29)
Streeter et al.	State-Trait anxiety inventory (shortened state scale)	Not reported	Not reported	-	Some reduction in scores but no significance found for walking group *(p*=0.30)
Saavedra et al.	Depression Anxiety Stress Scales (DASS) (Mean score of 1-4 calculated)	Walking group: 2.5 (3.2) Control group: 2.2(2.6)	Walking group: 0.9 (1.3) Control group: 1.6 (1.4)	-	Some reduction in scores across both walking and control groups, but no statistical significance (*p*=0.121, *p*=0.434)
Murphy et al.	Profile of Mood States (28), tension/ anxiety subscale used	Short bouts: 0.55(0.19) Long bouts: 0.48(0.13)	Short bouts: 0.26(0.09) Long bouts: 0.20(0.07)	-	Feelings of tension/anxiety decreased significantly after short-bout ($p < 0.05$) and long-bout programs ($p < 0.05$), no significant differences between groups
Isaacs et al.	HADS (0-21)	Percentage of subjects in each range Walking	Percentage of subjects in each range Walking	6 months Walking 62.6% normal, 16.5% mild, 18%	Significant reduction in anxiety scores between baseline and 6 months for all groups ($F_{1,512} = 7.40$, $p < 0.05$), but not significant effect of treatment group on anxiety

		50.5% normal, 22.6% mild, 22.6% moderate, 4.4% severe Advice only 50.8% normal, 30.5% mild, 15.9% moderate, 2.7% severe	63.7% normal, 19.8% mild, 15.4% moderate, 1.1% severe Advice only 70.1% normal, 21.8% mild, 5.7% moderate, 2.3% severe	moderate, 2.9% severe Advice only 60.6% normal, 25.3% mild, 12.1% moderate, 2% severe	
Vetrovsky et al.	HADS (0-21)	6.6 (3.3)	5.2 (2.3)	-	Significant reduction in scores 95% CI: –2.4, –0.4 (p = 0.011)
Pelssers et al.	State-Trait anxiety inventory (shortened trait scale)	Intervention group (M (SE)): 1.60(0.02) Control group: 1.60 (0.04)	Intervention group (M (SE)): 1.48(0.02) Control group: 1.55 (0.04)	-	Significant reduction in scores in intervention group in contrast to control group (p<0.05)

*Follow-up data obtained but the paper does not present the same sample for pre, post and follow-up together. Results are therefore not comparable across the three time points and are not discussed in “findings” column

Table 5. Quality appraisal of RCTs

	David et al. 2014	Streeter et al. 2010	Isaacs et al. 2007	Murphy et al., 2002
Was true randomization used for assignment of participants to treatment groups?	Y	Y	Y	?
Was allocation to groups concealed?	N	?	Y	?
Were treatment groups similar at the baseline?	Y	Y	Y	Y
Were participants blind to treatment assignment?	N	?	N	N
Were treatment groups treated identically other than the intervention of interest?	Y	Y	Y	Y
Was follow up complete?	N	N	Y	N
Were participants analysed in the groups to which they were randomized?	Y	Y	Y	Y
Were outcomes measured in the same way for treatment groups?	Y	Y	Y	Y
Were outcomes measured in a reliable way?	Y	Y	Y	Y
Was appropriate statistical analysis used?	Y	Y	Y	Y
Was the trial design appropriate for the topic?	Y	Y	Y	N

Table 6. Quality appraisal of non-randomised and quasi-experimental studies

	Sturm et al. 2020	Hills et al. 2018	Vanroy et al. 2017	Saavedra et al. 2021	Vetrovsky et al. 2017	Pelssers et al. 2013
Is it clear in the study what is the 'cause' and what is the 'effect' (i.e. there is no confusion about which variable comes first)?	Y	Y	Y	Y	Y	Y
Were the participants included in any comparisons similar?	Y	N	N	N	N/A	Y
Were the participants included in any comparisons receiving similar treatment/care, other than the exposure or intervention of interest?	Y	Y	?	Y	N	Y
Was there a control group?	N	Y	Y	Y	N	Y
Were there multiple measurements of the outcome both pre and post the intervention/exposure?	N	N	N	N	?	N
Was follow up complete and if not, were differences between groups in terms of their follow up adequately described and analysed?	N	N	N	Y	Y	Y
Were the outcomes of participants included in any comparisons measured in the same way?	Y	Y	Y	Y	Y	Y
Were outcomes measured in a reliable way?	Y	Y	Y	Y	Y	Y
Was appropriate statistical analysis used?	Y	Y	Y	Y	Y	Y

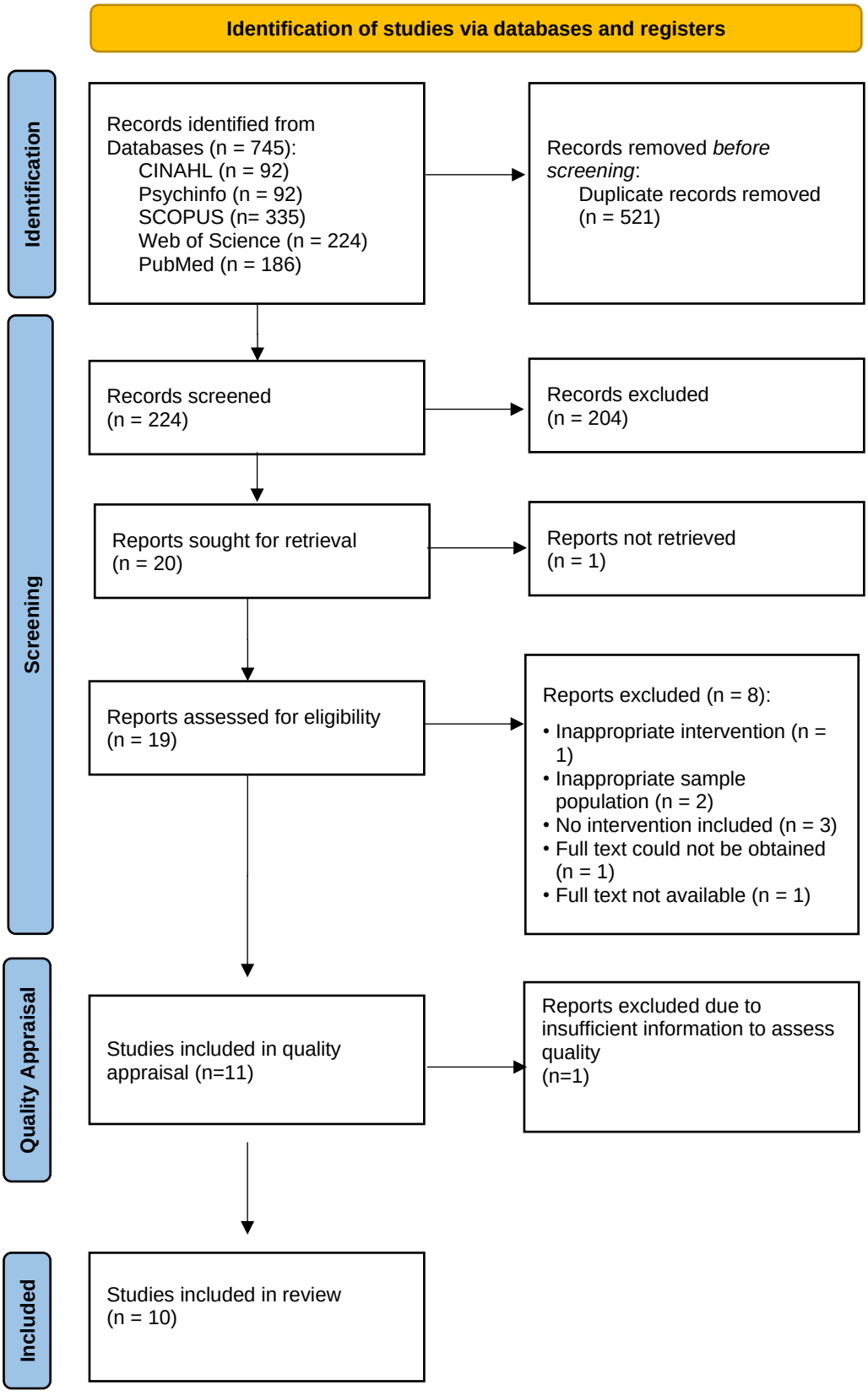

Figure 1. PRISMA flowchart of included studies in systematic review.

5.4 Research Commentary

5.4 RESEARCH COMMENTARY

Overview

In the last three years, I have had opportunity to partake in literature reviews, co-creation with groups, and drafting research and business proposals, as well as attending CPD events on research processes in my first placement and engaging in service evaluation in my second placement. For the purpose of this commentary, I have focused on four projects specifically, identifying one area of growth in each project and reflecting on any learning processes.

Introduction

Prior to commencing on any projects, I felt stuck. I would regularly think of research ideas, only for them to be dismissed or forgotten quickly. It wasn't until a conversation with a friend and fellow student in June 2020 that I felt inspired to move things forward. She advised me to get any ideas down as a rough proposal to see how they could be done. I followed her advice and this helped me to identify two project ideas topical to the pandemic.

Project One: Exploring a recalibration in the perception of severity of symptoms following introduction of UK lockdown measures and impact on utilisation of healthcare services

I understood from working on CATCH (Common Approach to Children's Health – see "Details of Placements and Outsourcing") that utilisation of appropriate NHS services was low, and I was curious if this applied to adults in seeking appropriate medical care for their own health, particularly as other projects at Damibu were focused on health information provision aimed at adults. I was particularly interested in how the Covid-19 pandemic and associated lockdowns could impact on this, and findings from the paper could have influenced how we as a company could have supported an intervention to address any barriers to appropriate healthcare use. I put together a brief proposal which was approved by management, and I also sought approval from my academic supervisor, who identified that this would be an appropriate project to move forward with.

Although I was not new to research, this was the first project that I had produced fully by myself; previous projects were suggested by supervisors or supported an existing research project. This was also the first larger quantitative project I had embarked on, and I felt that I was "starting from scratch". However, understanding that I was inexperienced in quantitative research, I wanted my experience coming away from the doctorate to be well-rounded so I felt it was important to push myself outside of my comfort zone and use different methods.

5.4 RESEARCH COMMENTARY

One thing I had learned from the Masters programme was the importance of reaching out for help when required. When it came to data analysis, due to my inexperience, I asked my academic supervisor for support and we arranged a number of sessions in which helped me immeasurably. I also used *Laerd Statistics* and the book *SPSS for psychologists* (Brace et al., 2016) and managed to clean the data and complete an initial analysis, for which I felt accomplished. However, on sharing with my second supervisor, many errors were identified in the dataset due to mistakes in development of the questionnaire, the nature of the sample and ongoing developments in covid symptoms. After several more hours of trying to make it work and a number of meetings with both supervisors, I made the difficult decision to abandon the project.

Leaving the project was upsetting; I had spent a significant amount of time working on the data, as had both of my academic supervisors. I felt guilty that I was unable to continue the project despite validation from my first supervisor that it was the right thing to do. As there were mistakes made in questionnaire development, I saw myself as incompetent and unworthy of being on the doctoral program, and wondered why I hadn't chosen something more basic. I reflected on my disappointment with my first supervisor, who reassured me that this was not an uncommon experience in research and introduced sunk-cost fallacy.

I searched through the relevant literature and found that, according to sunk-cost fallacy, people are more likely to pursue an outcome based on previously invested resources (Arkes & Blumer, 1985), and factors such as time and effort are key drivers (Ronayne et al., 2021). There is some further evidence to support that sunk-cost fallacy can be applied interpersonally, where the decision-maker's choice impacts on others (Olivola, 2018) and, although results from this study focus on monetary costs, this explained the guilt I felt in moving on despite temporal contribution from both supervisors.

Ronayne et al. (2021) also reported that feeling able to override sunk-cost fallacy is made easier once it is recognised. Understanding that I was putting in time and effort into a project that I knew would not lead to a publishable quality piece of research and knowing the psychological mechanism behind this thinking did make it easier to let it go. Further reflection aided the realisation that I did walk away with a renewed understanding of quantitative data analysis. I learned a lot about SPSS, data input and organisation, and tests, and I took that with me through the rest of the programme. Although I do still find quantitative research daunting, now it is less so, and I wouldn't back away from a project if this was necessitated, with the understanding that I should be looking forward to the analysis stage from the very beginning. I also feel more confident that I could identify when I am working with sunk costs and be able to walk away if necessary.

5.4 RESEARCH COMMENTARY

Project Two: Empirical Project One

I understood from my own experience as a netballer that many women engaged with the sport were affected by lockdown, and, alongside the impact of lockdown on physical activity, I wanted to understand motivational processes underlying team sport that may be associated with long-term maintenance of physical activity. I opted to move forward with a multi-method project – another novel area of research for me. This project felt much more comfortable to me, and I felt more motivated to move through the process. I used skills learned in project one in data analysis and, although I did utilise supervision, I felt that I needed less guidance, particularly with the qualitative aspect.

Growth from this project came with the publication process. I wrote up the manuscript in the same way I wrote my masters thesis prior to identification of a suitable journal. Although this did make things easier at first, it meant that I didn't consider word count or formatting, and when I identified suitable journals and went through the submission guidance, I realised that this may have been a mistake. I found a journal that was relevant to the research I had produced and which also allowed for a larger page count; however, I found that I still needed to substantially cut down words. I discussed this with my supervisors and came to the tough decision to remove a whole section of analysis from the manuscript. This was difficult as, although it was a smaller part of the paper, I had put a lot of effort into it. I understood that this was an unfortunate part of the research process. I unfortunately received a rejection from the journal and was required to compress the manuscript further for a second journal, removing six pages.

I received reviewer feedback a few months later and this was the part of the process that I found most difficult. I knew that I would struggle to receive the feedback, but I felt that my intelligence and integrity were being questioned. I felt some of the comments to be irrelevant to the quality of the work and more reflective of the writing styles of the reviewers. Nevertheless, I amended the paper, including rewriting the introduction (which looking back I do think was reasonable as it didn't focus on the research question) and removing a large number of references. However, when I went to submit, I noticed that I had missed a large chunk of feedback. I felt disappointed in myself that I had missed this, and was uncomfortable returning to my supervisors to highlight that I had "failed" in this area. It took some more time to address these comments, and I considered pulling the submission had it not been for an offer of extension on behalf of the editor, but I found time to update and resubmit the manuscript.

As I have discussed in my teaching and training diary, I know that I have low resilience to negative feedback, and I think this contributed to my unfavourable reaction to the reviewer comments, despite me being aware of this tendency. I think this offers me a different

space to reflect in as these comments came from people who I knew had much more expertise than I, and I didn't want them to see me as an incompetent researcher. However, there was no way that this feedback could be personal as it was a double-blinded review process.

Looking back at the changes made now, I do think that the manuscript was improved significantly as a result of the feedback, though I maintain that some of the changes suggested were a reflection of the reviewers' personal preferences. I researched others' experiences of the peer review process and found that, according to the Bayesian framework, in the case of rejection authors can attribute blame to negative bias (García et al., 2016). Although my paper wasn't rejected (and remains in the review process), I saw the negative feedback as rejection, and this may go some way in explaining my initial reaction. However, it is not unusual to feel that referee reports can include superficial comments and requests for unreasonable modifications (Huisman & Smits, 2017) and I do think that, whilst reviewer comments are important and offer space for growth as a researcher, reviewers are still human and there will be times when some comments may not add to the project.

It's been valuable to undergo this process whilst under the supervision of the doctorate. It has made me think critically, and has helped me to take feedback pragmatically. I learned to write more concisely, and to understand how different viewpoints can be helpful in strengthening research. Whilst it has been frustrating at times, I ultimately believe that it has helped me to produce a better piece of research as a result and has caused me to think more about what makes stronger methodological processes and write ups.

Project Three: Empirical Project Two

Conducting a readability analysis was another novel experience for me, and it was an area of research that I wish I was aware of sooner; understanding readability and accessibility of online health information was an important part of my first placement. For this reason, I found the literature on readability interesting.

Learning from previous experience, I opted to identify a journal before I started the write up, and this made the process much easier. Understanding page counts, formatting guidelines and reviewing papers accepted by the journal meant that I wasn't spending time producing work that would need to be vastly modified or removed. Additionally, the quantitative skills gained from project one helped me to identify statistical tests and analyse output with less support. I felt more confident as a researcher and, whilst I did have days working on this project where I struggled with focus, overall, I was able to sit

down for long periods of time to work on the project. This helped me to feel driven and, at times, more confident in my abilities.

This project, however, did not pass without any challenges. I was part-way through obtaining readability scores from *Readable* when I noticed that the "*read time"* for one article was hours long. Though the page was long, I knew that it wouldn't take longer than around 20 minutes to read and so I knew something was wrong. I looked at the analysis outcome in more detail and identified that the software had included unnecessary text that was not part of the article. To test this, I copied the text from the page into the software and, not only did the read time change, but the scores did too. I knew that this meant that all previous sites analysed could be incorrect, and so I had to start this stage from the beginning, copying the text instead of inputting the URL.

When I noticed the error, I was frustrated. I was enjoying the process, and making quick progress, and I was annoyed at myself for not making this realisation earlier. However, I quickly recognised that although I had made an error, I had also noticed it, and was able to rectify it at an early stage. *Readable* was a completely new platform to me, and I now know for any future readability analyses what is best practice. It was important to practice self-compassion and understand that it was not just the technology that was new to me, but the whole area of research.

I'm proud of myself for being able to look at this error objectively, and to quickly reflect on the initial annoyance at myself to understand that it wasn't a reflection of my general character. I looked into the literature surrounding self-compassion, and found a piece of reflection that highlighted that an aspect of common humanity is the acknowledgement that making mistakes is part of the human experience (Robinson, 2021). In recognising this, I was able to move on with my work and rectify the solution without much impact on my mental state or my motivation to continue, something that is often impacted when I feel that I have done something wrong. I think that practicing self-compassion in this instance helped with that motivation, as it has also been associated with a tendency to try again after failure, and an increase in self-confidence in one's ability to learn (Neff & Knox, 2016).

Overall, this project was a positive experience, and I would love to conduct further research in the readability sphere. Looking forward, I now know how to use *Readable* to its potential, and I understand that when working with a novel technology I need to place care in checking for any errors. I also know that I am capable of practicing self-compassion, and the impact that this has in my motivation to problem-solve and continue with a project. Finally, I now feel more confident in utilitising learning from previous

experience, understanding that I can apply new knowledge in quantitative research and writing for publication.

Project Four: Systematic review

This was a completely new area of working for me, and it was the project that felt most daunting. I found that when I went to identify a subject, my mind emptied, similar to my experience with other projects. I realised that the deadline for the end of the course was approaching, and I knew I had to identify a project quickly. I thought back to the start of the research process and realised I needed to put pen to paper and get a proposal down. I understood that my service was considering starting a walking group and I thought it would be helpful to understand the evidence base on walking for mental health. Scoping searches identified that the evidence on walking and anxiety had not been synthesised for a number of years, thus I chose to move forwards with this.

I arranged a supervision with my supervisor to discuss this and I shared my concerns on my lack of experience in this area. It really helped to vocalise them, particularly on the potential length of the project, and Mark helped to reassure me that a systematic review potentially played to my strengths. Whilst at times I enjoy expressing my creativity, when I am overwhelmed I find it hard to progress when there are no clear boundaries and find it easier to work with rules, something that process of a review itself and the PRISMA guidelines (Page et al., 2021) offered me. I loaned a book, *Doing a Systematic Review* (Boland et al., 2017) and took things step by step. This helped immeasurably, though I still found the process challenging, particularly identifying and applying an appropriate quality appraisal checklist. I used the book alongside numerous published reviews using my identified checklist and *YouTube* videos explaining some of the concepts I needed to understand (Intention-to-treat analysis and lost to follow up), and I managed to move forwards with the project.

I sought to understand why I prefer this approach and came across the Honey and Mumford learning styles (Honey & Mumford, 1992). On first look, I assumed I was a pragmatic learner, preferring to learn how to apply theory practically, and through seeing others' application of learning through case studies and examples. However, I completed the questionnaire and found that I scored most highly as a reflective learner. Digging deeper into reasons for this, it made sense in relation as to why I often prefer more logical approaches to work. I learned that reflectors can be more cautious and prefer to observe others and investigate before taking action. This can mean that it is hard for a reflector to get started.

Despite my struggles with undertaking work when I am not fully proficient, and being slow to decide on approaches and thus start new projects, I know that there are strengths in being comfortable with a reflective approach; it is in fact the most common type of learner amongst postgraduate students (Shukr et al., 2013). I know that by asking more questions, and following all processes, I can foster long-term learning which will be beneficial to me as I grow as a Health Psychologist. In the case of this systematic review, I am confident that in following set guidelines, I understand the process and will feel more comfortable next time. Further, understanding my own learning style can help me to identify more ways in which to approach new challenges, and to hold self-compassion when I find it harder to start.

Final note

The above experiences have vastly improved my research skills, and whilst I found it difficult to move through the process with lower levels of guidance than I had done previously, I think this forced me to *learn* rather than just *do*. Skills developed through this process have strengthened my abilities in other areas, both in other competencies, such as evaluating interventions, and away from the doctorate, such as assisting in service evaluation and developing questionnaires for user research.

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6. REFLECTION IN HEALTH PSYCHOLOGY

This section contains two pieces of work: a Reflective Practice Commentary, in which I have provided a detailed reflection on training over the course of the Professional Doctorate; and a Log of Training, which provides an overview of work undertaken over the previous three years, including semi-detailed reflections of learning.

6.1 Reflective Commentary

6.1 REFLECTIVE COMMENTARY

Introduction

This commentary covers January 2019 – July 2022. During this time, I have had significant opportunity for development, and keeping a practice log and diary throughout has helped to identify areas in which this has taken place. Although there have been many lessons learned, in this commentary I have provided deeper reflection on six instances which I believe have been most influential in my development. I have focused on areas in which I have not already reflected on in my Research Commentary, Teaching and Training Diary and other case studies. I have used Gibbs' Reflective Cycle (1988) to structure my reflections, and have made effort to reflect on my previous reflections, in line with Schön's Model of Reflection (1987). Throughout this piece, I have made references to entries in my practice diary (PD) and practice log (PL) and have provided quotes to support those reflections.

Starting on the Doctorate

I started from a position of relative inexperience. I was working in Damibu and had identified a space in which to pursue health psychology within the role. I was excited to pave the way of health psychology in the digital field, and I saw opportunity to improve skills in research and interventions as well as teaching. They were supportive of me, though were not knowledgeable in this area so the role felt self-directed. I initially felt that I had the drive to manage this, but quickly learned that this autonomy was not something that I was comfortable with. Whilst I managed my own work diary successfully regarding set tasks, and regularly produced ideas in which I could use health psychology for the company, I found that something blocked me from producing anything concrete once I started the programme.

From day one, I found myself comparing my own expertise to that of my cohort who, in my view, were all experienced and set up in a role in which they could easily achieve competencies. I felt that I had somehow managed to gain a space because everyone had misunderstood my skill level and ability to fulfil competencies, although I did acknowledge that these could have been automatic thoughts:

> *"After introductions I was a little overwhelmed as everyone's job title/previous experience seemed a lot more impressive than mine. I think that, while everyone is well set up, I do tend to put myself down and its already something I know I need to work on. As I was attending the introduction already thinking I was below par, my preconceptions probably contributed to why I felt like this." PD, 17/01/2019*

When it came to preparing the Plan of Training, I struggled, despite my previous understanding that the opportunities existed, and this led to a constant feeling of anxiety. I arranged a discussion with my supervisor during which I realised I had noted the deadline as a week late. Although this was a shock to me, after the discussion I was able to produce a piece of work in a short timeframe that I was proud of, and for which I received positive feedback.

On reflection, I identified that the “something” that was blocking me was likely my own self-confidence, and the feeling of me being an impostor both on the course and in my new modified role. Impostor phenomenon (IP) was introduced early on in the course, and it was something that resonated with me. I researched into this area and found that for those who experience this phenomenon, perfectionism and procrastination can be used as coping mechanisms (Leonhardt, Bechtoldt, & Rohrmann, 2017). Whilst I didn’t feel in the moment that I was putting things off, looking back, the inability to focus probably was an indicator that this was happening. Looking more into the phenomenon and how it could be managed, I identified that social support may be helpful in reducing associated psychological distress (Pervez et al., 2021). I think that approaching my supervisor when I did helped me to ease the distress, and reaching out for help was something that I continued to do.

It feels ironic that in writing *this* piece of reflection, I found myself regularly anxious, distracted and unfocused, and I wonder if being faced with an explanation of my thoughts and behaviours in this area is hard for me to come to terms with. An alternative contributory factor to these feelings however, could also be the upcoming deadline for final submission. Nevertheless, there is literature to suggest that those experiencing IP can be more susceptible to psychological distress and can easily lose balance under stress (Leonhardt et al., 2017; Maftei, Dumitriu, & Holman, 2021), and so this relationship is complicated.

Developing confidence in my own offering has been a long and slow process. Whilst an understanding of IP has helped me to question my thought processes and rationalise any illogical conclusions, and reaching out for support has been helpful for me, feeling out of place and undeserved of a space in this arena is something that I continue to experience, and something I come back to each time I am faced with a challenging situation:

> *“As a trainee as I've always mentioned before I'm still learning a lot and impostor syndrome is always just round the corner. I don't know if because of this I'm spending a lot more time on the sessions than I probably should. Although I'm only being paid £200 for the five-session series, I just feel the need to prove my worth”* (PD, 4th October 2020, consultancy project)

> *“I feel like I'm learning about bipolar disorder the more that I work with this patient and I feel like an imposter trying to help him to manage his condition when I have no lived experience in it myself.”* (PD, 14th December 2021, therapy session)

> *“There's pressure on the sessions as the previous ones delivered by psychologists have been so well received in the service. I think I almost feel that by delivering this session I have something to prove and that*

> *I'm not just an Assistant Psychologist."* (PD, 11th January 2022, provision of training)

I understand that I still have work to do to come to terms with this, although I hope that the headspace which will be afforded upon conclusion of the doctorate may help me to continue to address this. I understand that skills development and the creation of healthy expectations are important in managing IP (Bravata et al., 2020) and this is something I will continue to seek to manage my feelings.

Understanding Behaviour Change in Health Professionals

Following submission of the Plan of Training, It felt that months moved on without progression and I felt stuck. Looking back, although I hadn't progressed in the case studies and research projects, I was learning lots about the healthcare system and its challenges locally. I attended multiple events in research, co-creation and problem solving, and gained valuable skills in working with people to develop and disseminate interventions.

My first big moment of reflection came in February 2019. I had an engagement session with a team of Health Visitors to discuss how CATCH could be used to support them in their role. Prior to commencing the doctorate, I had been a part of many similar sessions, with different groups of professionals and, whilst I did achieve engagement at the time, it was not reflected in subsequent app use. In this case, I had spoken to this team previously, and I started the meeting asking if anybody had used CATCH. Responses indicated that, for most, it wasn't something that they had even heard of, and a large part of the session was used instead to reintroduce it. I felt frustrated and a little disrespected:

> *"It was really frustrating as although I've spoken to them all before, none of them had even taken a look at CATCH and only one (of about 20) recommended it to parents."* PL, 12th February 2019

From my point of view, I had put in the time and effort to explain the intervention and it had been disregarded. However, I didn't have the time to ruminate on this and I decided to show the group what CATCH could do in a more practical way. I do think that this method of delivery helped the group to understand how the app could support them in their roles by acting as a bank of information to refer their patients, and I left the session feeling satisfied that this approach had worked, but also disappointed in myself that my previous approach had been the cause for low uptake. However, this approach did translate into uptake and involvement in the app; there was a rise in users in St Helens, and an increase in input from the group.

In retrospect, I placed unwarranted responsibility on the Health Visitors for not delivering the intervention to parents after having introduced it to them previously. However, a realisation I had was that engaging health professionals could be approached as a behaviour change intervention in itself, and quick thinking and taking a different approach, in my opinion, really helped to "excite" the group and influence them to share their own experiences and challenges that could be supported.

What had not worked previously was just talking about CATCH and not showing them. I now realise that, again, I blamed myself for not being "perfect" first time rather than treating it for what it was- an opportunity to learn and develop.

I think that the reason the initial approach didn't work was that I was expecting the group to engage as part of their role which, in hindsight, was not correct. Promoting CATCH was my responsibility, and in this case, I needed to work to help these professionals to feel involved in the project enough for them to both remember it and influence parents to engage in it. I looked into the literature in this area and found that perception of value of a new technology is an influential factor in its adoption by professionals (Feijt et al., 2021). I believe that physically showing the group how CATCH worked, and taking the time to listen to their challenges as they "walked through" it was an important factor here as it added that value. Further, learning to communicate effectively with the group and sharing CATCH in a way that worked for them aligned with standards expressed in HCPC Standards of Conduct, Performance and Ethics (2022).

Away from developing skills in adoption of psychological interventions, I think this experience also gave me space to reflect on myself. I noticed that I moved through a phase of blaming others for not adopting the technology to a "realisation" that it was my fault that adoption hadn't been influenced the first time around and looking back now, it's curious that I felt this to be an appropriate reflection. I understand now from working with different individuals and groups of people that behaviour change is complex, and it's not as simple as being one party's responsibility.

Seeing Things from a Different Perspective

Another experience that shaped my development happened during a series of collaborative working events, in which professionals across different disciplines attended full-day sessions to understand a public health challenge and to produce suggestions for system improvement. There was a particular exercise which I found enlightening, and which changed the way in which I approached my work.

We were asked to consider a public health challenge from a different viewpoint. My group focused on smoking cessation, and we were to try and see challenges from the viewpoint of a pregnant woman living in high socio-economic deprivation. Listening to other viewpoints, I couldn't help feeling that I was viewing the problem through a simplified lens. Although I did try to approach the problem holistically, I think before this challenge I was thinking "what would *I* do if I had these barriers?", without thinking of the psychological complexities associated with different life and developmental experiences. I was taking things with an assumption that they just didn't have the right education in behavioural processes:

> "As a Health Psychologist in Training I know I should always look at things holistically. I thought I did this already but maybe I didn't think about it properly because I have no experience of smoking and cannot relate to symptoms of addiction." PD, 5th June 2020

I now realise that I was naïve in this way of thinking and in retrospect I am a little ashamed that I held such a simplified view at doctoral level. However, being wrong can be viewed as an experience to reflect on in itself, using it as an opportunity to change opinion on what was previously considered correct (Schulz, 2011), thus maximising learning. In this case, although I was taking into account aspects of health psychology models when considering interventions, I was failing to think about interacting factors, including individual differences and social barriers and facilitators. This is important in addressing inequality in public health, as socioeconomically disadvantaged populations often experience significant barriers to change (Hammett et al., 2018; Inglis, Ball, & Crawford, 2005; Osborn, Mayberry, Wagner, & Welch, 2014).

I am aware that I come from a place of privilege, and although I experience my own challenges, I recognise that the circumstances in which I currently live and was raised in give me more choice than many. Depending on these choices, alongside aforementioned variations in developmental experiences and other individual differences, I do know that it's helpful to remember that people may react another way to the same experience (Pluess & Belsky, 2013). It was uncomfortable for me to realise that I was not thinking as holistically and empathetically as I thought I was capable of, though I think that another reason that I may not have developed this as much as I had hoped was because I had not yet worked directly with a patient population.

This experience fundamentally changed how I approach behaviour change. At the time, I made effort to not only think of this more in my job, which influenced my suggestions for content to a more holistic approach, but I also brought it forward to teaching experiences and in my subsequent roles. Looking back, I think this was a sign to work more directly with patient populations during co-creation as part of my role.

Taking Time Away from the Doctorate

Although with hindsight I gained important skills in my time at Damibu, I continued to feel overwhelmed by the responsibilities of the doctorate and the opportunities afforded to me in the role and my mental health suffered. I knew that I wanted to apply health psychology in other ways, and I wanted to be able to make a direct difference; something I wasn't seeing in my role. I made the decision in December 2020 to take a six-month break. It was important for me to have the space to be able to address my thoughts and figure out if this was right for me, particularly in light of the financial stressors that came with the doctorate. Having that space helped immeasurably. For the first time in a year, I started to enjoy things again, even in the face of uncertainty in relation to a global pandemic.

During this time, I continued to seek new opportunities and was faced repeatedly with rejections based on lack of experience. This was something that I found frustrating. I didn't have the option to seek an honorary position, and I struggled with having the time to find a voluntary position outside of working hours. To me, whilst I was privileged in being able to do the doctorate in the first place, it felt gatekept. I had to work full time to fund the doctorate and pay my bills, and I was jealous of those who were able to seek out voluntary opportunities. Had I commenced on the doctorate at an

earlier stage in my life, I know that I would have been able to do this, so it was frustrating knowing that changing my career at twenty-five contributed to this challenge.

Volunteering at Childline

I knew that I didn't have the power to change things retrospectively and I wanted to finish the doctorate well-rounded having had clinical practice. With the understanding that it would take more time away, I decided to volunteer outside of working hours, and secured a role at Childline. This gave me different skills and opened up new opportunities. At Childline, I had the opportunity to complete training rooted in person-centred counselling, motivational interviewing and understanding motivation to change using the Theory of Planned Behaviour.

Commencing the online training was daunting. I found role play particularly difficult initially, but by the end of the 20 weeks I felt competent. After finishing training I volunteered on Friday nights. I found it challenging managing the extra workload and often felt bad for not finding it as rewarding as everybody said it did. There were moments I felt able to support someone, and they more often than not said that they felt better for talking, but there were equally lots of moments when I felt helpless, and that I wasn't able to offer them what they needed. On reflection, I went into the role thinking it was my responsibility to save callers and to do this perfectly. I now know that I was just there to listen and help them through a moment of crisis, and that these thoughts reflect ongoing themes of perfectionism and proving my worth.

Despite this, I did feel able to positively reflect on one experience in particular; I felt for the first time that I was able to work towards a positive outcome with an individual. The caller shared that they had been struggling with poor mental health, and wanted help but they weren't sure what to do. I explored her situation, using motivational interviewing techniques and asking the miracle question to support change. I then worked with her to plan to talk to her mother about her mental health and to ask for help in booking a GP appointment. I then suggested she contact Childline the following day to which she agreed would be helpful. The caller thanked me for listening to her without judgement and allowing her to express her emotions and, although due to the nature of the role I was unable to find out what happened, I got the sense that they would follow through with their plans.

I think that in this instance- and many others in Childline- what was most important was being there to actively listen, something that I think not many callers had the privilege of. It took training with Childline to help me realise that this level of listening was not something I often did previously, but I definitely noticed how it helped both callers to Childline, and people I helped in my personal life to open up.

This was the first real experience of a positive interaction, and it helped me to recognise that I was able to competently apply the skills that I had built through training:

> *"I've had a lot of contacts that weren't very engaging or were not clear cut recently and this one just make me feel competent as a counsellor as I always knew what to say to her".* PL, 25th May 2021

I also had a similar experience the following week:

> *"Had a shift at Childline supporting a young person with compulsions who hadn't sought support before. I asked open questions and provided reassurance and from this encouraged her to seek support from her GP. She thanked me for listening to her when other people didn't. I felt able to really use my motivational interviewing skills and felt really competent as a Counsellor".* PL, 11th June 2021

Writing about this as a positive experience helped to address some of the symptoms of IP I continued to experience and aided in the recognition of growth as a practitioner. I often find myself pointing out my mistakes and flaws and, whilst I do find reflection helpful, it can sometimes lead to negative affect when I'm not able to successfully bring myself away from rumination, something that has also been identified in literature (Selby, Kranzler, Panza, & Fehling, 2016). At the time, I highlighted how important reflecting on a positive experience was to me:

> *"I think it's important to remember positive experiences to build confidence. I reflect mostly on negative experiences and even though reflection does help, it doesn't always and can sometimes lead to rumination"* PD, 25th May 2021

I think it is important to reflect on what went well, not only to notice those areas of growth but to also identify what worked and what to continue to offer as a practitioner. In positive psychology, reflecting on events that elicit positive emotion has been shown to improve mood and physical health (Adair, Kennedy, & Sexton, 2020; Burton & King, 2004) and important for health professionals emotional exhaustion (Sexton & Adair, 2019). Though it is of course imperative to reflect and learn from less positive experiences to evolve, this research highlights the important of being kind to oneself, something I often forget to do.

Although I identified this a year before finishing the doctorate, looking through my practice log and diary I could not find many more examples of purely *positive* reflection. However, I did find plenty of entries that did practice that self-compassion, highlighting positives within the negatives and allowing space for learning:

> *"Struggled a bit on chats today with coming up with the right thing to say so felt I took a bit longer to reply than normal. However I think that this was also partly due to contacts not engaging fully with questions. I used supervisor support appropriately but didn't feel like I over-relied and I think outcomes from tonights chats and calls improved my skills as a*

> *counsellor"* PL, 10th September 2021 – responding to online contacts at Childline
>
> *This is the first group therapy session I have led and I was very nervous coming into it but it's definitely improved my teaching delivery skills and how to manage group dynamics and move the group forward.* PL, 21st January 2022 – delivering a psychoeducational group
>
> *"The more of these letters I write, the easier they become. They give a real chance to show that I have listened, and what positives have happened on their journey (something I find that a lot of patients struggle to bring attention to). I can sometimes still find it hard to be succinct, but I am learning how to denote that feeling of hope in my words."* PL, 17th June 2022 – writing therapy summary letters

Understanding what I do now, I will endeavour to make more effort in the future to note positive experiences to use as a tool to understand my growth. This could in turn help to address feelings of IP by giving me proof that I am capable and deserving of a space in the field.

Securing my Second Placement

I had been volunteering at Childline for around three months when I secured my first Assistant Psychologist role. I started slowly for which I am grateful as it allowed me to give myself permission to learn. Although the role was not inherently based in health psychology, it did equip me with an abundance of transferrable skills and the option to apply my practice, as many patients struggled with motivation to self-care and had problems with sleep, pain and other physical symptoms. My role primarily involved the delivery of psychoeducational materials to foster emotional coping skills, on both a one-to-one and group basis.

Working Within a Group

One of the first bigger group pieces of work in this role was to work with five other Assistant Psychologists to refine and deliver an existing emotional coping skills group, to be delivered centrally and virtually due to challenges associated with staffing levels and the pandemic. Assistant Psychologists involved in the project worked across three different hubs and we were supervised as a group weekly.

Although much of the content for the presentation already existed, the slides were wordy and contained too much complex information. Further, the group was to move from a 12-week programme to a six-week programme followed by an optional further five weeks, and so it was also important to prioritise some of the content. To start, we arranged a number of meetings to discuss the existing content and to make a plan moving forward. We agreed to each plan two sessions, with the exception of myself who had one session to plan. I suggested that I also bring the presentation together at the end to ensure that slides followed a similar theme.

6.1 REFLECTIVE COMMENTARY

One thing I noticed early on in the planning process was that I found it hard to accept others' approaches to the challenge. I knew before I was sent the sessions that I might not agree with the content, and that I might struggle to communicate this:

> *I struggle to accept ways of working which I don't think would be useful when delivered and I think with the piece of work we are doing this is something that I could encounter (different approaches to streamlining content). I want to be able to try communicating assertively as I often fester in silence.* PL, 24th November 2021

This was later proven correct when I was sent the sessions. Though the content had changed, I did notice that it continued to be complex and word-heavy from most of the group, and it was clear that writing styles differed. I was initially frustrated. I had put in a lot of time and effort into my own session on mindfulness to ensure that the content was easy to understand and didn't look overwhelming on the page. I felt that this effort was not replicated. On reflection, however, I realised that I had experience in teaching and training that others did not, and also that it was part of my assigned role to bring this together uniformly:

> *"It's a bit frustrating knowing how much effort I put into mine, and I'm annoyed that this piece of work is turning into something bigger because of it. However I am wary that I have had experience in teaching that others have not, and it is my role to bring things together."* PD, 5th January 2022

During a group meeting, I communicated this with others, and shared my reasons for simplifying the content, which the team agreed with. I managed to update the slides and we were all pleased with the final product. Feedback received from attendees of the group was positive; patients agreed that the content was pitched at the right level.

I wanted to reflect on this here as I understand that I will have many future professional experiences working within a team, and I noticed a feeling of unease in doing so for this project. Looking back, I created expectations that other group members would think and work in the same way that I do, and I was disappointed when this turned out to be false, even though I hadn't raised these initially and thus expected others to know what I was thinking. However, taking time to reflect by myself and in supervision helped me to understand that people work differently and bring different skills and experience to the table, and with foresight I probably could have shared my reservations proactively.

A theory that may explain why I didn't raise my concerns initially is Groupthink (Janis, 1983). Groupthink posits that people strive for group consensus, often setting aside their own opinions to strive for uniformity, and this effect has been seen in healthcare teams, who often have similar backgrounds (DiPierro, Lee, Pain, Durning, & Choi, 2022). I think in this case, as I knew the group well but was not comfortable enough to challenge opinions, I failed to bring this up to maintain

group harmony without realising that this would result in further work down the line, and the potential production of a sub-standard educational group, thus impacting patient care. Looking forward, I will take notice of any feelings I have associated with future group projects and other aspects of teamwork, and make effort to raise these sensitively, understanding my own expertise. This may be particularly important in my future career as a Health Psychologist working within established teams of Clinical Psychologists.

On an additional note, though in this scenario I did worry about my ability to effectively communicate with the group, I did not question my abilities as an Assistant Psychologist and recognised that I had skills to bring to the table. I think this is a poignant moment to reflect back on. I recognise that had this experience happened even just a year prior, I possibly would have questioned my ability to be a valid member of the group and this task would have been met with much more emotional distress. I perhaps would not have raised my concerns at all.

Working With Patients One-to-one

Another aspect of my role, and one which I initially was most worried about, was working therapeutically with patients on a one-to-one basis. In my time at Mersey Care, I worked with several patients in this way, supporting them to develop emotional coping skills, including mindfulness, distress tolerance, relaxation techniques and recognition of the connection between thoughts, emotions, behaviours and the physical self. Although many patients engaged well, others were not as psychologically minded and I had to adapt the sessions to manage this. I learned a lot myself in the delivery of the content, and delivery of the sessions slowly moved from terrifying me to feeling somewhat comfortable in delivering them.

Managing Difficult Feelings

There was one experience that taught me a lot about how to act within my boundaries whilst still supporting someone. I worked with Jane[3] for six coping skills sessions in early 2022. Jane struggled to regulate her emotions and had a history of a number of overdoses, and used alcohol as a coping mechanism for both her emotional distress and pain associated with fibromyalgia. At the time of my working with Jane, she had stopped drinking alcohol but was suffering from withdrawal symptoms.

For the first few sessions, Jane was able to focus on the psychoeducational content, and did share that practicing these skills had helped her to calm herself where she would be unable to manage her emotions. I made space to explore Jane's ongoing difficulties, and during our time together, with her permission, I referred her to occupational health to support with difficulty in the home due to her pain, and to a local service which offered group activities to address her social exclusion.

However, after the halfway point, I noticed that Jane started to deteriorate and miss sessions, and I became worried for her safety. I followed relevant safeguarding procedures, but I couldn't help but think that there was something more here. I understood that Jane was isolated, and I felt

[3] Pseudonym used to protect anonymity

uncomfortable that my time with her was coming to an end whilst she continued to present such a high risk. Despite feeling worried about her safety, I also did not look forward to the sessions, and there were times when I was glad that she did not attend.

I took these thoughts and feelings with me to clinical supervision, where I was provided a space to think deeply about them. During this discussion, we talked about “hooks”, and I realised that the cognitive dissonance I felt both about my hesitance in finishing the sessions with Jane without resolution and the discomfort of attending such sessions could have been associated with Jane’s loneliness.

Loneliness is something that I experienced during my early twenties and is a feeling that continues to upset me when I think back. Although our circumstances were different in that I continued to be surrounded by friends and family during this time and Jane did not, I deeply resonated with that feeling, and it caused me distress to think about it. I reflected in my diary at the time that at one point I even had a physical reaction, finding myself shaking after the session:

> *“Since working clinically, this is the first time I have had almost a physical reaction to a session. In supervision, we talked about how the service user is aware that the sessions are coming to an end and this presentation could indicate a want to remain under the care of someone, and in someone’s mind.”* PL, 28th April 2022

Although at the time we reflected together that imminent ending could have led to the service user’s reaction, I think looking back, my own reservations to not be “holding” her any more probably contributed further to how I felt. In the book *“Intelligent Kindness” (Ballatt & Campling, 2011)*, authors posit that one’s choice of profession can be rooted in a subconscious want to deal with unresolved hopes, hurts and fears from the past, and I could see me wanting to resolve Jane’s loneliness in a way that I hoped someone would help me with my own. The book also suggests that when the work does not allow for that resolution (in this case me not having the control to solve Jane’s loneliness), it could lead to burnout or depression. I think it’s therefore important to reflect and be aware of these hooks in order for these difficult feelings to be addressed and also to know when I don’t have control, and thus don’t have that responsibility.

In this case, I worked through most of my feelings in clinical supervision, where I was guided to provide appropriate support based on my level of responsibility as an Assistant Psychologist, and to understand that I was just one member of a larger team who would continue to work with her. Although I often wonder about how Jane is doing, I know it’s important to let other’s do their job. I think this experience helped me to recognise the value of clinical supervision managing my own wellbeing ensuring that I am offering the right support to a patient.

Using Supervision

On a final note, I want to reflect on my experience of clinical supervision. I find supervision extremely beneficial and truly believe it has helped me to grow as a mental health practitioner. I

enjoy having a space to talk openly about the things I am not sure about, and for someone to listen and guide me in the right direction and assist in meta-reflection, understanding that I often do have the answers in myself. My supervisor took into account where I was and offered a space for me to grow whilst acting in the boundaries given by my role to work safely, taking that responsibility where required.

One of the things that stuck with me was when he told me "*you are an excellent clinician, for where you are now*". When I heard those words, something within me clicked, and I realised that I was actually comparing myself to other, qualified clinical psychologists, who should be "better" than me. It helped me to think holistically about how I perceive other peoples' expectations, and my own expectations, of me:

> *"*I know that I place too much pressure on myself to be the best, and I sometimes find it disheartening when people are better than me, worrying about if they are judging me. However I want to be able to think more about my own level of experience, and how I am improving every day." PD, 2nd February 2022

Hearing those words meant a lot to me, and I often repeat them to myself to encourage self-compassion when I am feeling like an impostor, or that I have made a mistake.

Final Note

Having reflected on my journey as a Trainee Health Psychologist, I can see real areas of growth. From my time working in the arena of public health at Damibu and learning about working with groups of health professionals to produce holistic interventions, through to refining clinical skills and applying theory to real-life patients at Childline and Mersey Care, I truly believe that I have been given a well-rounded experience. Completing many of the competencies outside of my placements was challenging, but allowed me to again seek different experiences to widen my skillset and helped me to identify which areas held more interest for me.

Though at times I felt that not having the opportunity of working in a health psychology-focused role negatively impacted on my training, I do believe that health psychology can fit in many places, and I did cut out a space to work bio psychosocially-minded in each role. I hope that this reflective piece shows how I have used these spaces to develop my skills and to become a competent Health Psychologist.

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6.2 Practice Log

This practice log is a record of work undertaken January 2019 – July 2022, with the exception of a six-month period from January – May 2020 during which I took a leave of absence from the programme.

To Note

During my placement at Damibu, in-placement entries were recorded on a page in a shared working space called *Atlassian Confluence* and later inputted into this document. Screenshots of supervisor signatures have been inserted in the relevant months. From June 2020, on my return to the doctorate after a 6-month break, the practice log was recorded on separate pages and signed off monthly. From this date there are some signatures that are dated later on in the year, but it is for the correct month. There are two months in placement one where work hasn't been signed off: December 2019 and July 2020. This was oversight on my behalf. For placement two, the practice log was shared every 2-3 months with my placement supervisor, at which time he inserted an electronic signature.

In-placement work, and thus work signed off by placement supervisors, is highlighted in red in the final column.

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
January 2019				
18/01/2019	Spoke to Dr Julia Mueller (Health Psychologist) and Dr Tracey Farragher (Health Epidemiologist) about research project to evaluate CATCH. We discussed potential research designs and I advised on what the possibilities were with data collection and app changes. They will draw up a plan on what we can do before the NIHR bid is written.	I should read up on evaluations to understand the process more should this move forward	Research	
21/01/2019	Engaged with the Parent and baby wellness team in Liverpool. We discussed how CATCH could be beneficial for their parent's by reducing the information overload and offering local support. They seemed really interested and the team manager will provide some contacts for me to get the word out.	I always come away from meetings like this with more ideas. CATCH and the ability to share information so readily has so many potential benefits and could reach so many demographics	Generic professional competence	
22/01/2019	Sat down with Public Health and Family Nurse in Halton to run through notifications for CATCH and to decide when would be the best time to send out messages to encourage parents to read articles and follow advice.	It was hard to get everyone fully engaged but as it's something completely different for them I can see how it may be overwhelming. Patience is needed.	Generic professional competence, behaviour change interventions	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
23/01/2019	Provided overview of CATCH to Health Visitors. Discussed ongoing local concerns, including domestic abuse support and support for asylum seekers and those without a phone. I took information on board and will look at ways in which we can address these in the app	Improved skills in multidisciplinary working and understanding how to address barriers to behaviour change.	Generic professional competence, behaviour change interventions	
24/01/2019	Attended lectures. Plan of Training and competencies were explained in detail.		Plan of Training	
28/01/2019	Continued to prepare 2018 overview. Considered proposed research in further detail and considered options. Started to prepare January area-specific reports for CATCH.	It's been good looking through analytics and feedback and identifying other areas of potential impact for CATCH. However, it's hard to establish causation for public health outcomes, especially our main outcome; A&E attendances	Research, report writing	
29/01/2019	Created monthly reports for all areas, showed engagement, downloads and new content		Report writing	
30/01/2019	Spoke to Julia Mueller and Tracey Farragher again to run through some more questions for the NIHR proposal. Discussed the possibility of applying for CATCH roll-out in a new area as a treatment cost		Research, bid writing support, multidisciplinary working	
31/01/2019	More reading on the NHS Long Term plan to understand upcoming changes to children and maternity healthcare and prevention methods	It was interesting to see how well aligned it seemed with Health Psychology and prevention. I should	Generic professional competence	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
		keep an eye out for more opportunities for us, but I do hope that things are put into place properly.		
February 2019				
04/02/2019	Attended One to One midwives event and networked to discover local services and to understand what parents have access to in Liverpool	Networking is always hard for me, but people are generally open to talk as long as you don't push a "sell" of the service straight away	Generic professional competence	
05/02/2019	Attended early years event to promote CATCH. Spoke to lots of different services including Health Visitors and Children's Centres and informed local nurseries, schools, and childminders of CATCH - most took flyers to hand out to parents. Interesting talk by guest speaker on encouraging boys to achieve		Generic professional competence	
07/02/2019	Had professional doctorate lectures, went through how to do a systematic review and how to search through databases to find papers	I had some idea of how to do a systematic review but as I had never done one before, this was helpful	Research	
12/02/2019	Sat down with Health Visitors to discuss how they found CATCH and what could be done to change it. It was really frustrating as although I've spoken to them all before, none of them had even looked at CATCH and only one (of about 20) recommended it to parents. Discussed strategies to get the word out to parents and thought	I've had to rethink how I work with professionals and work out a way to engage them rather than bringing myself down and beating myself up about it. It helped to take a more involved approach, getting them to get the app up on their screens and interact with it themselves. The fact that a lot didn't	Generic professional competence/ psychological interventions	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
	through some ideas on how we could get professionals excited/ involved enough to recommend to parents.	know what CATCH was shows that my engagement previously hasn't been effective.		
12/02/2019	Doctorate meeting in the afternoon which involved working out how I can hit competencies in and out of work. Dave linked me up with Alder Hey for potential training sessions and I approached Innovation Agency who replied to say that they could have something and shared my details. Also approached Alder Hey through my mother (who is a Trauma Coordinator and retired physio at the Hospital)			
26/02/2019	Met with stop smoking service in Halton to review information in CATCH and to discuss what more can be added to Halton mums to get those not engaging with the service to engage. Management in alcohol service will provide me with similar information. Also discussed how to get into Halton pharmacies	It helped to understand what the smoking cessation services are actually doing away from public health advertising campaigns. They seem to have a lot of people running through their service and thought that notifications could be helpful. I need to do research to see if this is the case	Psychological interventions, generic professional	
27/02/2019	Had a meeting with Knowsley Council to try to arrange attendance at the Women's and Children's Board to represent CATCH. Was presented with a few ideas on how to grow CATCH, one being that she said that 60% of workers on her floor had children under five and would probably be interested in CATCH if they knew about it. Do	Multidisciplinary working	Generic professional	

Date	What happened	What I learned	Competencies reached	Placement/ outside
	we continue to only target health areas or do we also contact large companies?			
28/02/2019	Attended a smoking cessation event run by the Innovation Agency. Was interesting to find out what people are trying to do to reduce smoking rates and was also interesting to know how high figures were. Came away with ideas on how we can add to CATCH to support mothers and their families trying to quit	The fact that smoking is an addiction should be kept in mind. Found myself thinking through the day that a lot of the interventions suggested in groups were so simple, but addiction isn't simple.	Psychological interventions, generic professional	
March 2019				
01/03/2019	Discussed how we can help smoking cessation with CATCH, was asked to lead on this so started initial research to learn about what has done before with apps	It was interesting to hear other opinions on this, especially from those who have experienced smoking addiction. It will definitely be important to consider these viewpoints if I ever move forwards with this as I have never experienced addiction myself.	Psychological interventions, generic professional	
04/03/2019	Spent the morning finding research on use of mobile apps in smoking cessation, working up to doing a systematic review. Then spent the afternoon working on presentation for driving uptake in digital health	There are a lot of apps out there on the market, but few seem to be validated or evidence based. There does also seem to be systematic reviews already out there on very similar topics, so this is something to consider more.	Research, generic professional, teaching and training	
05/03/2019	Spent most of the day preparing and exporting monthly CATCH reports for each service provider			

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
06/03/2019	Worked on "increasing uptake of digital health" presentation for OneHealthTech Liverpool.		Teaching and training	
07/03/2019	Prof Doc session - reflection and presenting	I feel confident about using reflection, but the session was a useful reminder to always use the reflection to improve- sometimes it can be easy to reflect on the surface and not make any changes (although sometimes you can't help but make those changes)		
08/03/2019	Finalised and sent out monthly reports to each area (contains app analytics, content updates and engagement)		Generic professional	
11/03/2019	Prepared and finalised presentation for increasing uptake of digital health at On Healthtech re-launch	I will not always experience the full story (in this case not around for co-creation and development of CATCH) but it's important to understand these processes as much as I can so that I can share the story accurately. This will likely be the case for other projects and roles.	Teaching and training, generic professional	
12/03/2019	Led a feedback session with final group of Health Visitors in St Helens. Received a lot of great suggestions about content and promotion and it helped to understand the issues experienced by the group. Also engaged with parents at a nursery and reception parents evening in a	I think that though it was useful for me to go along and understand the services available, if I do similar interaction in future, I need to guarantee that the right audience will be there for my time to be worth the experience. However, it's important to have	Generic professional competence, research (focus groups)	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
	Liverpool school. This was not as successful as I thought it would be despite having free stuff, but some children did have younger siblings so hopefully a couple found the app useful	these experiences to learn what is and what is not useful.		
13/03/2019	Went to a "soft marketing" event in Wirral - they are recommissioning their 0-19 service. Was useful to get an insight into where they are struggling and what we can do to help.		Generic professional	
14/03/2019	Went to a PPI in research conference. Will be useful in planning research and suggesting developments - could also help the team in co-creation sessions	I got a lot from it and learned of both innovative ways to engage the public and ways in which a seemingly great innovation could increase health inequalities inadvertently. I also learned that I do have something to bring to the table and should trust in this more.	Research	
21/03/2019	Prof Doc session - teaching and training and therapeutic relationships	It was really helpful to understand how a session should be laid out i.e., using less content to engage. Also learned about patient-practitioner dynamics.	Teaching and training, psychological interventions	
25/03/2019	Went to first of five baby clinics in St Helens of the week. Engaged directly with parents after Health Visitor directed them to me in the room		Generic professional	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
26/03/2019	Engaged directly with parents at second St Helens baby clinic. Held a presence in waiting area which meant that I had a little bit more time with each parent.	Although parents did come over to me yesterday, they just took the information, so I think it was more helpful to have a chat with them today and humanise CATCH more. I should look for this in future opportunities for engagement.	Generic professional, psychological interventions	
28/03/2019	Went to third St Helens baby clinic in Lowe House. Was a quieter baby clinic but more parents had already heard of CATCH. One parent spoke about reading everything and getting notifications. Another mother downloaded CATCH in front of me and said it sounded great	These "promotion" opportunities are also useful feedback opportunities and it's useful to open with a "do you use CATCH" then an introduction or a "how have you found it"	Generic professional, psychological interventions	
29/03/2019	Final baby clinic in St Helens. Again, was quieter but got some good engagement with parents. Also sat down with Health Visitor and discussed further content to be added to CATCH		Generic professional, psychological interventions	
April 2019				
02/04/2019	Sat down with colleague to brainstorm what should be included in a workplace "CATCH". We discussed what it should contain, questions to ask, target audience, features needed and barriers and facilitators to consider.	User research will be important to identify if a need exists to start with.	Research, psychological interventions	
03/04/2019	Interviewed a CATCH user and held update and feedback session with Eastern Cheshire Children's Centres	An aim I have by the time I finish the doctorate it is that I will be able to look back at my experiences	Research	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
		and draw confidence from them. If I sit back and I think I know I am more than capable of interviewing and getting people to open up about their experiences as it is something I naturally do on a day-to-day basis. I often ask lots of questions as someone who is quiet and struggles to come up with conversation subjects. I also genuinely enjoyed learning people's viewpoints and hearing about their backgrounds		
04/04/2019	Prof doc session - teaching and training pt. 2 and formulation therapy techniques		Teaching and training	
08/04/2019	Further work on workplace "CATCH". Worked on discovery phase and considered design question, context and constraints and appropriate timelines		Research, psychological interventions	
11/04/2019	Held a tutorial session with St Helens Health Visitors in which I ran through all of the features of CATCH in an effort to make them familiar with the app and increase their efficacy in using it, so they are more likely to recommend to parents. HVs seemed much more aware of what CATCH could do by the end of the session		Teaching and training, generic professional	
12/04/2019	Spoke to paediatric physiotherapist about content needed for upcoming training session. Listened to problems	Interesting to understand from a lived experience how parents can impact on recovery, and I will do	Teaching and training	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
	experienced with treatment adherence and mental wellbeing in both children and their support networks.	user research for all sessions if I can. I should also avoid overly academic language but also understand the level of expertise within the room.		
13/04/2019	Started work on training session. Finding it difficult to come up with content due to motivation in light of the deadline being far away.	I should set my own mini deadlines more as I know I work best to these. This will result in less last-minute panic.	Teaching and training	
15/04/2019	Identified and approached appropriate health professionals for the discovery phrase of CATCH workplace. Chose a range of professions across early years settings to represent the services as generally as possible	Was overwhelming to start an entirely new project from the discovery phase but it's just important to take this systematically.	Research, psychological interventions	
18/04/2019	Read up on smoking cessation in pregnant women in preparation for meeting with Halton stop smoking service next week. Wanted to get some ideas on what potential targets are so I can discuss in detail	I need to look at both through the literature and I need to use questionnaires to understand the target audience. I don't know use the demographics for the app, but I do know that cigarette smokers are more likely to live in lower socio-economic areas and people who live in lower socio-economic areas are less likely to engage with health behaviours so they may not be on the app.	Research	
22/04/2019	More work on training session. I want training to be inclusive to everyone a relevant but it's pretty much impossible to cover everything in one session.	I know that I learn much more when I am engaged. This is when slides are not full of text, the session uses practical examples, slides are clean and nice	Teaching and training	

Date	What happened	What I learned	Competencies reached	Placement/ outside
		to look at and the speaker is passionate about what they are talking about. I will judge my slides and presentation by this at the end.		
24/04/2019	Ran through WHO guidance for developing digital interventions to find guidance relevant for us. Also looked at brainstorming work for workplace CATCH and discussed with colleague what needed to be covered in the afternoon's discovery session with Children's Centre manager. Afternoon session was interesting and raised some issues for discussion re provision of standardised information to all healthcare and early years staff		Research, psychological interventions	
25/04/2019	Spoke to clinical specialist this morning about "workplace catch". Discussed how standardised information could be provided to different healthcare workers and how visual training materials could be shared. In the afternoon spoke to NHS Innovation Agency about opportunities for providing teaching and training sessions in their coaching academy from July-December		Research, psychological interventions, teaching and training	
26/04/2019	Had a meeting with Halton's smoking cessation team and Dave from the IA to discuss how CATCH could support smoking cessation in pregnancy and new parents. Later	I know that it's okay to hold ideas in my had but I need to take account of my end of preconceptions when formulating interventions and use a truly collaborative approach. This is particularly	Psychological interventions	

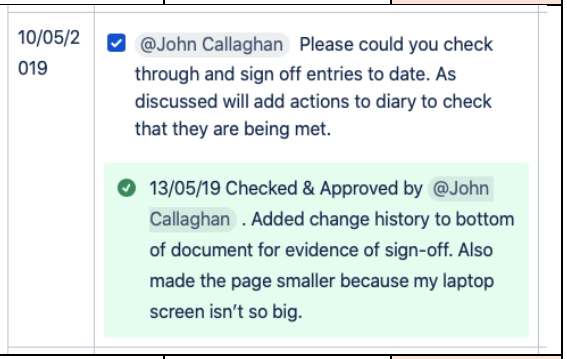
Date	What happened	What I learned	Competencies reached	Placement/ outside
	discussed Halton's A&E stats and planned how to measure impact	important when I have no experience of the health behaviour or stopping that health behaviour and myself. Although I do know that everybody is different and even if I had experience that health behaviour what works for me to change it would not necessarily work for someone else, so a person-centred approach is important.		
28/04/2019	More work on training session. I am struggling to get my head around the content in a practical way.	It would be really useful to get some hands-on, clinical experience or even to chat to health professionals about what they deal with on a daily basis to help me understand the practical solutions that health psychology can provide.	Teaching and training	
29/04/2019	"Met with the public health team at the centre of catch in Halton today to discuss notifications and content. We looked at developmental stages and stages in pregnancy as well as local campaigns in order to decide when would be best to push different pieces of information of the parents. Also Identified similar CCGs to current CATCH locations to compare data, watched Kings Fund discussion on using data in population health"	We looked at developmental stages and stages in pregnancy as well as local campaigns in order to decide when would be best to push different pieces of information of the parents. It would’ve been ideal to be able to base timings off research and models, but we don’t really have much leeway in that sense in that it's not my decision for now. It would be useful to look more into this in future.	Psychological interventions, generic professional	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
30/04/2019	CATCH notification meeting - sat down with Halton team to discuss notifications and customised public health content	Multidisciplinary working	Psychological interventions, generic professional	
May 2019				
01/05/2019	WCYP meeting to find out ongoing issues and work in the Eastern Cheshire area and to update on CATCH. Also had workplace meeting with Nichola where standardised information to be shared between professions and made easily accessible was raised as a need.	It's important to know what's important for the population and also the professionals responsible for distribution of the intervention.	Research, generic professional	
02/05/2019	Prof doc session. Psychobiology of stress and sleep and ACT therapy	I find stress and sleep fascinating and learned a lot. Also learned how to deliver ACT therapy and why it is important in management of long-term conditions.	Psychological interventions	
07/05/2019	Monthly reports AM (CATCH progress)		Generic professional	
07/05/2019	Teaching and training session with physiotherapists – treatment adherence	I found it difficult to engage with the group and feedback suggested that more of this was required. I need to look at how to deliver an interactive session that people will feel compelled to take part in, however I did not have long at all to deliver- only around 15-20 minutes	Teaching and training	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
08/05/2019	Prepared presentation for nursery event - adapted existing presentation provided to Health Visitors to the professional to make if more relatable to job roles		Teaching and training, generic professional	
09/05/2019	Nursery event. Presented/ trained CATCH to nursery managers (approx. 50), distributed flyers, answered questions and organised further engagement	Learned a lot in presenting to a larger group of professionals. The session was received in a really positive light, and I think it's because I adapted the session to suit their needs.	Teaching and training	
10/05/2019	Placement meeting. Discussed ways to meet competencies in my role.	Hitting all competencies will be difficult by my employer is willing to find ways to support. I may have to be creative in sourcing.		
	Signed by line manager: John Callaghan for within- placement work completed 18/01/2020 – 10/05/2019			
14/05/2019	Discussed ways in which to support reading and language development with Halton libraries. Explained how we can send notifications to Halton parents to support the service in the area		Generic professional, psychological interventions	



6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
16/05/2019	Prof doc session - non-verbal communication and solution-focused therapy techniques	Solution focused therapy was interesting and something that could be introduced in shorter sessions	Psychological intervention	
17/05/2019	Considered all patient and system benefits of CATCH and prepared applications to HIAP Scotland and NICE for innovation assessment	Preparing these applications was beneficial for evaluation of interventions and to identify where CATCH sits now.	Research	
21/05/2019	Engaged with health visitors AM to explain benefits of CATCH and to discuss how to align with Knowsley service. Carried out a user engagement session PM when we discussed usability of CATCH and matters important to them	This helped to develop multidisciplinary working and helped to understand users through the use of focus groups. Although they were open, it was hard to engage, and I had to ask more closed questions than I wanted to.	Research, generic professional	
22/05/2019	Second user engagement session held in Halton. This was slightly different as was during a busy stay and play session so spoke to each mother separately rather than holding a focus group. Got some honest feedback and managed to explain features so people felt more competent in using the app.	I had to adapt due to availability of time and there was no space for discussion. This could be a useful method for brief user research as users were in an environment comfortable to them although they did still have the responsibility and focus on engaging their baby.	Research, generic professional	
23/05/2019	Held a stand at Maternity Voices Partnership event and spoke to Wirral MVP re linking up (she was aware CATCH wasn't active in Wirral, but they use it). Passed over my card and she will get in touch. Also spoke about	I was able to use a promotional event to engage with potential new stakeholders and identify more suitable content for CATCH to improve the intervention	Generic professional	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
	challenges in breastfeeding with BAMBIS and what we could do to support and encourage breastfeeding mothers			
24/05/2019	Spent time preparing materials for upcoming CATCH briefing sessions. Looked into what could be important to Halton professionals and what components are effective in uptake of an intervention and chose to emphasise this next week.		Teaching and training, Generic professional, research	
28/05/2019	Held two CATCH briefings. Explained CATCH features to better competency in recommending to parents, updated with content and use of the app, and then held discussions with attendees on what they felt was important to include and how it would be best to reach parents.	It was frustrating that the Health Visitors hadn't engaged with CATCH before considering the push I have done previously, although some were vocal, most were quiet, and I wondered if this is because I need to find a way that relates to them more or if they don't think an app will be useful.	Teaching and training, research, generic professional	
29/05/2019	Considered meeting notes from briefings and took steps to prepare document containing enough information to answer as many questions as possible for distribution to health and social care professionals across the whole area	It was useful for me to prepare the document too, and to put answers in a relatable and engaging way.	Generic professional	
30/05/2019	Prof doc day - teaching and training to health professionals	Though this would have been useful earlier, reflecting on what I have already done was helpful as I was able to see where I can improve.	Teaching and training	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
June 2019				
03/06/2019	Held meeting with Knowsley GP to discuss methods to support in workplace. Discussed app to support health and wellbeing of staff to include at-home exercises, dietary advice, and stress management techniques		Research, psychological interventions	
04/06/2019	Held meeting with Whiston Matron to discuss methods to support in workplace. Discussed app to share policies and procedures among staff to increase level of care.		Research, psychological interventions	
05/06/2019	Attended an Innovation Agency maternity systems event which aimed to promote discussion surrounding patient and public involvement. The morning session consisted of a few presentations from service users and local networks and the afternoon used a “game” called “Whose Shoes” which asked players to read people’s POV on a subject and try to put themselves in their shoes and to plan what could be done to address these issues.	I learned a lot about the innovative ways to ensure PPI in research, and how it doesn’t just need to be an interview or questionnaire. Additionally, I realised that I shouldn’t be focusing on just stopping smoking and inundating with purely information. People smoke for different reasons and stress is a major factor in this and maybe an intervention should also focus on these areas. As a Health Psychologist in Training, I know I should always look at things holistically. I thought I did this already but maybe I didn’t think about it properly because I have no experience of smoking and cannot relate to symptoms of addiction. Moving forward I will try to be more empathetic towards this.	Research	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
06/06/2019	Met with Gabriel to discuss future of CATCH in Knowsley. Spoke about adaptation of CATCH and potential impact on different avenues in Knowsley alongside targets	As CATCH isn't a set intervention and aligns with area priorities, it's important to keep up to date to allow the offer to move with any changes. This may be the same for interventions I create in future.	Generic professional, psychological interventions	
07/06/2019	Reviewed public health intervention development scheme to identify opportunities for development/ adaptation of interventions	This will assist in any future business development and bid application writing.	Research	
12/06/2019	Attended seminar at Great Homer Street Medical Centre to find out more about social prescribing services before arranging consultancy piece	The session was held as a focus group, and I learned a lot about why social prescribing is important and what kind of individuals engage with the service. Loneliness seemed to be a key theme between them, and it was upsetting to know that sometimes the only social interaction they get is when they have their weekly chat with Julie. I do try to acknowledge people and I will engage in conversation when they speak to me, but I often feel uncomfortable in social situations with strangers. One thing I will take away from this in my personal life is that anybody could be lonely, and a smile can really help.	Consultancy, research	

6.2 PRACTICE LOG

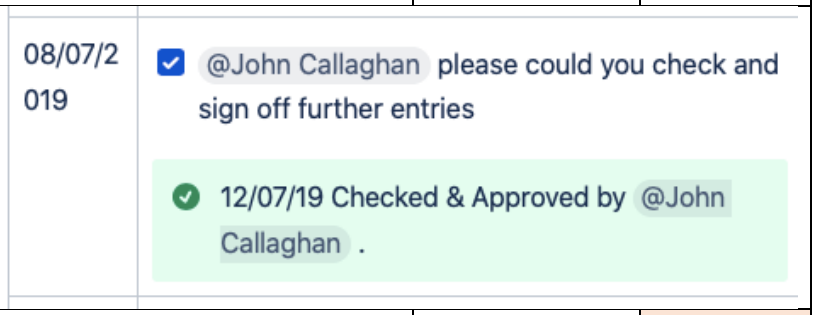
Date	What happened	What I learned	Competencies reached	Placement/ outside
13/06/2019	Looked into CATCH and Damibu's social value to support application for Liverpool public health project. Also worked on NHS Apps Library application	More development in bid writing and business development skills.	Generic professional, research	
14/06/2019	Worked on NHS apps library application and attended co-creation session for Thistle SBRI (digital solution to transport issues experienced by those with disabilities)	The engagement session was with people with dementia and their carers and engaging with this specific patient population group required patience and easier questioning- earned how to adapt in this situation and learned their struggles.	Generic professional, research, psychological interventions.	
17/06/2019	Spoke with HIAP Scotland about potential impact of CATCH and worked on information booklet for staff re CATCH features and benefits	Skills in business development and presenting ideas to new people.	Generic professional	
18/06/2019	Went through notes from discovery sessions for CATCH workplace and identified key themes and further research	This helped in skills for research analysis as I identified common themes and presented these in an easy-to-read format	Research	
19/06/2019	Presentation of doctorate experience to MSc students at MSc poster presentation session	This session was really engaging, and it really helped me to portray why I enrolled on the doctorate and the benefits it has already had. It was great to get the opportunity to share my experience and answer questions on the spot.	Teaching and training	
20/06/2019	Prof doc session - Teaching and training different group sizes	Learned about how to approach different group sizes differently and how to account for these differences.	Teaching and training	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
21/06/2019	Attended Alder Hey Festival of Innovation - learned about what kind of health innovations are being worked on and introduced to improve children's lives	This helped with business networking	Generic professional	
24/06/2019	Presented CATCH to parents (n approx. 40) at primary intake meeting	There were no questions asked which felt a little uncomfortable, but this did help with public speaking.	Teaching and training	
July 2019				
02/07/2019	Created survey to identify professional experience of CATCH. Also worked on NHS Apps library application (considering effectiveness and safety)	This supported skills in survey creation and bid writing.	Research.	
03/07/2019	Attended Digit@llathon. Discussed ways in which to improve patient experience in healthcare and worked with clinicians and digital professionals to come up with solutions	This improved skills in multidisciplinary and team working. I learned a lot about consent and information sharing and the impact that some services can have upon not only GP surgeries and Hospitals but also vulnerable populations (i.e., some digital solutions can widen the equality gap, something I have learned about and reflected upon previously). I think that taking a step back and trying to remain impartial and keep the person at the forefront of discussions, rather than the staff and IT systems (and potential lack of progress either way!) was helpful for the group to come up with feasible	Generic professional	

Date	What happened	What I learned	Competencies reached	Placement/ outside
		solutions as well as “no-go” areas. It’s often easy to focus more on what annoys you over what impacts on the person you are targeting and I’m sure that being able to step back, and focus will be important in finding suitable health solutions and driving long-term behaviour change		
04/07/2019	Prepared CATCH monthly reports	Worked on report writing skills.	Generic professional	
09/07/2019	Considered effectiveness of CATCH to date and started to compile annual report	The best I can do is to present the findings and to be honest in clearly stating that changes could be coincidence. It is frustrating that the right data isn’t being recorded but I need to acknowledge that this is out of my hands, and it is not my fault that I can’t conclude on the effectiveness of CATCH. This teaches me what I need to look out for when collecting data for future projects and my own research, particularly if it is longitudinal.	Research	
10/07/2019 – 11/07/2019	Attended BPS DHP conference	I actually found the ones surrounding health in pregnancy to be the most interesting and this is probably because it’s something I try to impact on a daily basis in my role. There is so much that can be done in pregnancy and early years that can have a	Generic professional	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
		lifelong impact on a child's mental and physical health and ongoing talks on prevention highlight how important this is to help the general population.		
	Signed by line manager: John Callaghan for within- placement work completed 10/05/2019 – 11/07/2019			
16/07/2019	Analysed case study report on CATCH effectiveness and reviewed A&E stats and calculated changes	Useful to understand what goes into consideration of cost effectiveness and what more is needed to strengthen this. It's hard to quantify cost effectiveness of public health outcomes in the general population.	Research	
18/07/2019	Held co-creation session with Henshaws to explore issues experienced in getting around with a visual impairment (SBRI).	There were parts of the session where I found it difficult to control the group as there were two very strong voices, but I found it useful to thank them for their input and direct similar questions/ the same questions to the rest of the group to make sure everybody's voices were heard without making the former feel unappreciated. I felt comfortable by the		

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Date	What happened	What I learned	Competencies reached	Placement/ outside
		end, and I do think that having a really open and positive group helped a lot. I'd love to get the chance to do more co-creation sessions/ focus groups and I think the more I do the more comfortable I will feel in opening the sessions.		
19/07/2019	Analysed survey data and prepared report highlighting CATCH progress to date			
23/07/2019 – 25/07/2019	Finalised CATCH progress report	It has been helpful to understand exactly what I need to know to identify a cause and effect, but I've found it difficult to find any true relationship due to the small number of users and the lack of data. This has been quite frustrating because I know how much CATCH could help but I'm finding it so difficult to reach the target audience. I could try and look into a more evidence-based approach or accept that uptake will be much lower than people approached.		
26/07/2019	Had meeting with Innovation Agency to organise teaching on coaching for spread and adoption		Teaching and training	
30/07/2019	Attended Health in Early Years multidisciplinary board meeting and reviewed articles read to add more information to report	While the debate over healthy food being expensive did come up, the more prominent issue discussed was the fact that it is societal and for real behaviour	Generic professional,	

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Date	What happened	What I learned	Competencies reached	Placement/ outside
		change it needs to be easier to be healthy than it is to be unhealthy. I know that this is the case, and it would be incredible to be able to find a way to have a cheaper and easier option to be healthy.	psychological interventions	
31/07/2019	More work on report, added impact areas to CATCH surveys and work on Practice diary			
August 2019				
01/08/2019	Work to adapt report to Halton and research on impact of local information v general information	I've been taught how to use basic My SQL commands and they have been really useful in analysing the really large database. I'm grateful that I've had the chance to learn another skill in analysis and I think it will help me going forwards.	Research	
02/08/2019	Session with Karla from innovation agency coaching programme re teaching competency	Karla was really helpful and provided a detailed breakdown of teaching styles and theories and has said she would be willing to meet on a regular basis to help progress. I left the conversation feeling passionate and excited to start planning and I think that this is exactly the kind of vibe I need to leave my students with when I undertake the sessions- interested and hungry for more. I need to use interaction and try to not just talk at them for the full 30 minutes.	Teaching and training	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
05/08/2019 - 09/08/2019	Undertook research re health information seeking behaviours and experience with NHS choices		Research	
07/08/2019	Took part in Halton's Health in Early Years Board Meeting (see meeting notes for actions)	It came out of the meeting that most of the midwives are older and aren't convinced by technology in general and maybe I need to focus on making it as easy for them as possible, highlighting what will make their job easier and what will reduce pressures to the service. This could both be something to look at content wise but also something to address in a step-by-step process from an engagement perspective. Either way, it's not working now, and I think that if I want the project in Halton to be successful, I need to try something new.	Generic professional	
08/08/2019	Research for SBRI bid. I've looked through lots of articles surrounding the value of locally relevant health information over national, particularly in the case of older adults so for chronic illnesses like arthritis, diabetes, dementia, cancer etc.	it seems like this area is vastly under-researched and could be a gap in the literature for future research.	Research	
12/08/2019	Worked on documents to inform front line staff of Halton progress		Generic professional	

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Date	What happened	What I learned	Competencies reached	Placement/ outside
14/08/2019	Worked on report for St Helens AM and spent PM connecting with community groups on social media to promote CATCH in St Helens and Halton		Generic professional	
15/08/2019	Discussed evaluation project with Julia Mueller re CATCH big for Salford CCG		Research	
16/08/2019	Worked on application for research bid for Salford CCG innovation fund - roll out of CATCH in Salford		Research	
18/08/2019	Work on consultancy contract. I wasn't sure where to start so I looked up contracts online and on the bps website to get an idea of where to begin. I thought back to the consultancy lecture and also advice I've been given by management regarding wording of contracts and what to do to ensure all parties are covered.	I need to be bold and unafraid to ask for what I want (within reason!), and I think I do need to include something regarding payment in the case of funding secured by the university. I'm slowly learning that I shouldn't underestimate my own qualifications and services and understand that people want my help	Consultancy	
19/08/2019	Worked on application for research bid for Salford CCG innovation fund - roll out of CATCH in Salford		Research	
20/08/2019	More research on conflicting health information impact		Research	
21/08/2019	Increased social media reach on Instagram to recruit users (gained 80 followers and noticed increase in downloads) and started Knowsley specific report		Generic professional	
22/08/2019	Completed Knowsley specific report, worked more on social media (tried using stories to get past algorithm, 18 more followers) and continued search for evidence re		Generic professional, research	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
	danger of inconsistencies in provision of health information			
23/08/2019	More work on Knowsley report (now finalised and sent off), re-familiarised me with Michie's behaviour change wheel and looked into nudge theory to write more for CATCH bid for Salford CCG		Generic professional, research	
27/08/2019	More work on consultancy contract	It's confirmed to me that I am capable of hitting competencies at part of my role and I just need to be thinking outside the box a little bit more. Just because I'm not working with patients every day doesn't mean that I'm not hitting competencies. Whilst I would love clinical experience this will all take time, and I should focus on one thing at a time.	Consultancy	
27/08/2019	Spent time working on bid for Salford CCG locality call funding	More work on bid for Salford CCG locality call funding	Research	
28/08/2019	Flyers taken to multiple drops in St Helens, pull-up banners also delivered for all children centres			
29/08/2019 – 30/08/2019	More work on bid for Salford CCG locality call funding	Worked on bid writing skills	Research	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
September 2019				
02/09/2019	Prepared breakdown of CATCH for innovation accelerator, finalised Salford bid.		Generic professional, research	
03/09/2019	Reviewed engagement in Cheshire to date and identified what impact engagements had on CATCH.		Generic professional	
04/09/2019	Took part in Cheshire Women's, Children's, Young Peoples and Family board and help CATCH Eastern and South Cheshire quarterly meeting. Prepared annual summary for CATCH in South Cheshire for AGM	It's always interesting to listen to the area's priorities and how public health and NHS teams are working together to improve the population's health and it's so useful to get ideas for CATCH content and development to take back to the team. Having the presence in the group is also handy to understand the amount of engagement work that needs to take place to continue the project.	Generic professional	
05/09/2019	Attended innovation agency coaching for spread and adoption workshop to observe how it is run.	There were a number of really interesting teaching techniques used that I was inspired by. One of them was sketch notes, which was used as almost an opener and a) helped everyone introduce themselves and b) learn a great way to understand what to bring to the table. Everyone had to write their name, what they did, what they would describe themselves as, their strengths and their	Teaching and training	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
		innovations. I thought it would be a really good way of either using as a means to find out what x means to someone in order to tailor future sessions or as a way to measure how much people have learned at the end of a series.		
06/09/2019	Prepared and sent out monthly CATCH reports			
09/09/2019	Meeting with Jackie Coulthard re set up in Runcorn Shopping City			
10/09/2019	Familiarised myself with resource impact in order to add more to NHS apps library application		Research	
11/09/2019	Attended smoking cessation in pregnancy workshop day run by Innovation Agency - looking at innovative ways to reduce smoking in pregnancy rates	It gave me a lot of food for thought on a) the kind of content that we need to be including in CATCH and, b) how we can use CATCH to provide some extra support. One interesting note was that a lot of women blow a high CO level who aren't smokers, and it can be associated with a faulty boiler, or maybe sitting near smokers regularly or even one was commuting with a hole in the bottom of her car. I thought that it would be good to address these points in CATCH to help midwives in directing parents to further help so they can focus on what they have the expertise to do in the appointment.	Psychological interventions	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
		This could in some way act as an intervention for both the parents and the midwives/ other health professionals. I like being able to interact with people directly experiencing the problem as I hear about challenges that I might not have thought of myself so it's something that I need to make sure I do more of to make sure everything I do is targeted and worthwhile.		
16/09/2019	Research on inconsistencies in health information and impact of local information - trying to find right searches as nothing is coming up. Prepared for user engagement session.		Research	
17/09/2019	Held user engagement session with two parents	They presented with some really interesting challenges in that most of their frustrations sat with the actual services themselves. They found it hard to trust health visitors (as did a lot of others they knew) as they felt that all they did was a tick-boxing exercise. As my main push is through Health Visitors at the moment, it's definitely something to think about and I'll look at focusing on midwives, nurseries, and children's centres a lot more. A really annoying part of trying to make CATCH work is that	Research – focus groups, generic professional	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
		people just don't really place as much trust in health professionals as I expect them to, either from bad experiences themselves (one, who had postnatal depression sought help from a GP and was told that everybody felt like that) or just because they feel that the advice isn't always practical and personal.		
19/09/2019	Research into smoking cessation and reasons for addiction - discovered its harder to quit in pregnancy.		Research, psychological interventions	
20/09/2019	Continued research into smoking cessation and prepared for Mondays meetings	Discovered that it's actually more difficult for women to stop smoking in pregnancy than it is when not pregnant due to hormonal changes and changes in the length of time in which nicotine is metabolised. It just reinforces what I've been thinking in that there are so many facets to changing a health behaviour and it's hard to truly understand something, especially addiction if you are not literally in their shoes. To future focus groups as effective as possible I think I need to focus on those from lower socioeconomic backgrounds as with the research I've been doing, it's these women and families that have the higher incidence of smoking	Research	

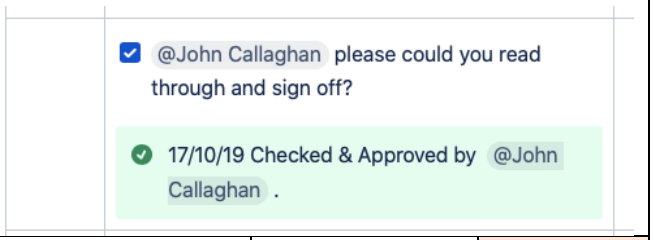
6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
		and experience a lower level of wellbeing. The more I look into it the more eager I am to implement something that actually works.		
21/09/2019	Engagement session with Halton midwives and quarterly meeting with lead in St Helens CCG	Improved communication skills and skills in multidisciplinary working	Generic professional	
23/09/2019	Held an engagement session with Halton community midwives this morning in which I took a different stance and explained exactly how the app worked so that they could demonstrate more to parents. The midwives seemed much more comfortable by the end and had more of an idea of the capabilities it has to support their service.	Understanding from the previous session that I needed to take a different approach and use more interactivity really helped with the group. It's not a one size fits all approach, but this is something I will be trying more of.	Generic professional, teaching and training	
24/09/2019	User engagement in Runcorn. Also ran through app articles in line with outcomes from yesterday's meeting and fed back to Content Manager	I've thought about this being the wrong approach before, but I thought I should give it another go. The reason I'm unsure it's not the best way to approach re behaviour change is because people just don't want to be "sold" to when they aren't interested straight off and when they have other things to do. I think that to back my assumptions up I should really look into some relevant research, perhaps health promotion in public spaces.	Generic professional	
25/09/2019	Worked on content for CATCH and Damibu flyer		Generic professional	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
30/09/2019	Work on bid for Manchester Innovation momentum fund - contacted research team and sent emails out to identify CCG for implementation. I used excerpts from previous bids, referring to feedback from lost bids and the direction in which CATCH is heading now.	Projects like this really help to understand the processes leading up to big research projects and applications for funding	Research	
October 2019				
01/10/2019	Prepared monthly reports and attended HHEYS board meeting. Took away actions for content and notifications for Content Manager	Practiced skills in multidisciplinary working	Generic professional	
02/10/2019	Work on NHS apps library application, finalised monthly reports, some research on smoking cessation		Research, generic professional	
03/10/2019	Talk at early years learning event to nursery and childminder professionals, sent out reports, contacted some more people for Halton push of CATCH	Promoting CATCH at learning events like this improves skills in public speaking and reaching different audiences	Generic professional, teaching and training	
07/10/2019	Went through articles to identify quotes to add to social media campaign - focusing on adding advice to photos so people have more reason to follow the platform	In a way, this could be seen as a behavioural intervention in itself, and I think looking back on it, identifying accessible and relatable quotes is key to improving engagement	Psychological interventions	
08/10/2019	More work on Manchester bid to include further work to identify health/ social care organisation		Research	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
09/10/2019	Further work on Manchester bid before stopping following discussions with Dave (not appropriate for CATCH). Drafted notes on Damibu's offering for new projects including details of co-creation	It's difficult when a halt is placed on work that I have spent a long time on them, but it was the right decision to make, and it builds resilience for similar instances. The work is also always transferrable to other bids and projects.	Research	
11/10/2019	Research on health information seeking and smoking cessation		Research	
14/10/2019	Worked on CATCH info document for commissioners alongside suggestions received from commissioner in Cheshire West and Chester	It was useful to understand the language in which commissioners are accustomed to and more likely to react to.	Generic professional	
15/10/2019	Finalised document from yesterday in readiness for formatting - spoke to graphic designer about layout		Generic professional	
16/10/2019	Research on public health commissioning structures.		Research	
17/10/2019	***Signed by line manager: John Callaghan for within- placement work completed 11/07/2019 – 16/07/2019*** 			
17/10/2019	Work on definition of deployment for generic Damibu document and (see below)		Generic professional	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
17/10/2019 - 18/10/2019	Research on five Manchester CCGs - looked at population data, public health and A&E usage data, locality plans and appropriate contacts		Research	
21/10/2019	Research on demographic data and investigation of socio-economic and ethnic differences in Manchester CCGs which CATCH could impact on		Research	
22/10/2019	Continued research on socioeconomic and ethnic differences in public health outcomes		Research	
24/10/2019	Doctorate day – motivational interviewing	As someone who has very little clinical experience at this point, I found it really invaluable and learned so much from it. I used motivational interviewing-style techniques for my MSc thesis interviews so understood the styles of open questioning and such but I didn't really feel that confident using them in a therapeutic setting. Things to be aware of such as the righting reflex were also very interesting.	Psychological intervention	
28/10/2019	Drew together CATCH support for healthy eating in preparation for WCYPF board meeting next week		Generic professional	
November 2019				
01/11/2019	Monthly reports and reformatted to look nicer and read easier	Though this wasn't directly related to health psychology as such, I understand the importance of making something easily understandable to ensure		

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
		that time is taken to take all of the information in. As an admin job that needs to be done once a month, it's nice to think of it in this way and to try to find ways to improve.		
04/11/2019	Drafted CATCH FAQs, continued research into NHS/ Public Health Structure and send out reports			
05/11/2019	Finished research into NHS structure and published hierarchy on confluence. Researched into health information seeking with a view to defining a research question and searched for tenders on Unilever and Nuffield	Despite it being quite frustrating, I feel confident that I've learned a lot more about these structures in the process and I can use this new knowledge across a number of projects and in tailoring my communication in the future. It's also helped my research skills as I had to "decipher" a lot of f information that was written in terms I wasn't used to.	Generic professional	
06/11/2019	Attended Cheshire WCYPF board meeting and presented how CATCH can help ongoing campaigns on healthy eating. Also discussed how CATCH can support other areas including smoking cessation	I was requested to talk for 5 minutes about what CATCH does to support healthy eating. I gave the few slides to the group, making sure I ran through articles that inadvertently supported healthy eating and then mentioned about how we can "push" notifications to users in specific areas with specific-aged children. This comment was very well received, and it made me feel much better about	Psychological interventions, Generic professional	

Date	What happened	What I learned	Competencies reached	Placement/ outside
		the reception of CATCH in the area, giving me insight in how to deliver in different areas. The toughest part of enabling behaviour change at a public health level, particularly as a third sector company, is knowing that you also have to effect behaviour change in health professionals and stakeholders in order to increase uptake. I've researched and found from experience that recommendations from health professionals are the most effective way to encourage uptake of health technology, so we know that it's the right path to take but more often than not it takes something that resonates with the highest people in the group before we notice a change in uptake.		
07/11/2019	Doctorate day - Ethics		Generic professional	
12/11/2019	Met with Knowsley PCN lead re Digital No Wrong Door idea	The GP seemed hesitant to engage from the start of the meeting and I found it difficult to translate the ideas of the project to her. I think though that this was partly due to it being unclear to me as well as it is just a concept at the moment, and I probably	Generic professional	

Date	What happened	What I learned	Competencies reached	Placement/ outside
		should have just listened to her challenges rather than selling something that isn't whole.		
13/11/2019	Updated CATCH information booklet to include updated stats and information relevant to GPs. Emailed around to existing contacts refresh CATCH		Generic professional	
14/11/2019	Work on bid proposal for app supporting users with hormonal dysfunction		Research, psychological intervention	
15/11/2019	More work on proposal for tender - supporting users with hormonal dysfunction. Including defining all potential features and considering evidence base	I've worked on tenders before, but this is the first one that I've started from scratch and am working on a more autonomous basis. I've found it challenging, especially because of the time limits, but it's given me the creativity to use health psychology to design a self-care intervention. I think the more of these I'll do the more confident I'll feel in my abilities.	Research, psychological intervention	
18/11/2019	Finalised and submitted proposal and looked over tender for new project - supporting community mental health services in Salford through creating a person-centred approach to self-management of data	Although I'm unlikely to have very many tenders to prepare with such quick deadlines, it's something that I need to be able to deal with in case it ever happens again and also if there's anything else that requires quick thinking.	Research, psychological intervention	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
19/11/2019	Ran through two more tenders: call to allow people using a “Living Well” mental health service to record symptoms and share with clinicians and a call to support health professionals with leadership training. I spent a few hours familiarising myself with the research process so that when it comes to writing bid proposals in the future, I can do it faster and can fully understand what is possible. I prepared some visual cues to help me take in the information more.	Working more creatively using colour and quick sketches really helped me at MSc level to take in the information, to read it back and to stay focused. While on the face of it it takes more time, I’m less likely to procrastinate and get distracted if I do it in this way. I read up on a few case study examples of using a “double diamond framework” in improving healthcare and it’s helped me to feel in shallower water when it comes to it all now.	Research	
20/11/2019	Started to compile a design process template for tenders. Spent some time researching human centred design and double diamond framework to understand the process for designing effective solutions		Psychological intervention	
21/11/2019	Prof doc session – application of health psychology in dentistry setting	There was a conversation that really made me think. Whilst talking about multidisciplinary working, I mentioned that I often didn’t really feel it was my place to pipe up when I had an opinion on a subject in a board meeting that wasn’t directly related to the job I was there to represent. This means that most professionals I come into contact with aren’t actually aware of my background and of how I can help. This not only works against me and my	Psychological intervention, generic professional	

Date	What happened	What I learned	Competencies reached	Placement/ outside
		professional development but also could negatively affect the company		
25/11/2019	More work on design process template for tenders, prepared for CATCH training session with Health Visitors tomorrow.		Psychological intervention	
26/11/2019	CATCH training session with Knowsley Health Visitors and research into 2-year review following on from issues raised in session	They said that they've tried different measures like changing from clinic to home visits and they see very few for this specific check-up, which is the last one with the Health Visitor and a chance to pick up on developmental issues. I was confused as to why people don't although drawing from previous experience, this was something that was brought up in a parent engagement session - lack of trust of the Health Visitor. I did some research on it when I got back to the office and it seems that this is the case nationally, with many parents feeling like they're passed between health visitors and not really listened to. It's not the impression that I get when I engage with the professionals so maybe it's a lack of understanding and professional relationship between the two? To start work on it, I asked	Teaching and training, generic professional, psychological intervention	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
		Content Manager to add info on the developmental reviews to each age range.		
27/11/2019	Started research on systematic reviews for use of health apps	It's been quite difficult to find relevant literature but that might be because I haven't found the right words yet.	Research	
28/11/2019	Researched for tenders, viewed webinar and application guidance for Health Systems Support framework submission in preparation for working on application tomorrow - will submit under patient empowerment and activation	Bid writing skills	Research	
29/11/2019	Work on HSSF framework application - looked at information prepared on design process and used CATCH as a case study within the answers	Preparing through doing the appropriate research was useful in making a good start to the application.	Research	
December 2019				
02/12/2019	Monthly CATCH reports and more work on HSSF application		Research, generic professional	
03/12/2019	Flyers to Whiston Hospital and attendance at Halton Health in Early Years meeting	Practiced multidisciplinary working		
04/12/2019	Work on HSSF application and finalised reports		Research, generic professional	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
05/12/2019	doctorate day - standards of conduct and inter/ multidisciplinary working		Generic professional	
06/12/2019	Work on application for digital offer for sexual and reproductive health and HIV services across Greater Manchester	It's interesting finding ways to adapt our existing technology to support other health behaviours	Psychological intervention	
09/12/2019	Work on SRH tender for Oldham CCG	Bid writing skills	Generic professional, research	
10/12/2019	Research into life course model and CATCH support for healthy ageing and work for healthy ageing awards submission	I already knew that what happens in early years can have an impact later on in life and stress was brought to mind as a risk factor for a number of NCDs, but I thought we had no chance of standing up to competition as we are SO focused on early years. However, I've spent time today researching and have found a lot of evidence based around the life course model so I'm now a little more convinced that we have a shot. I've spent some time reading a WHO paper on the life course model and it's really interesting, and something that I will definitely keep in mind for future versions and implementation of CATCH	Generic professional, research	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
11/12/2019	Amended SRH application and work on healthy ageing award submission for Liverpool CCG	Bid writing skills	Generic professional, research	
12/12/2019	Finalised healthy ageing award submission, submitted SRH tender and looked into lung disease and Healthwatch tender	Bid writing skills	Generic professional, research	
13/12/2019	Work on HSSF tender	I've been really struggling with it and wondering how on earth I can fill word counts and I discussed it with my boss yesterday who pointed out that it was a lot simpler than I first thought. I felt a little stupid to not have realised as I'd spent so much time on it and I'm also not really comfortable coming across as incompetent - reflect. I guess the lesson that was learned here is to make sure I understand what I'm doing and to ask for help and not be afraid to say "I still don't understand"	Generic professional, research	
16/12/2019	Finalised answers for HSSF tender	Bid writing skills	Generic professional, research	
17/12/2019	Meeting with St Helens Council to discuss how to address problem with school readiness and uptake of free childcare places in two regions in the area. Spent	People who don't engage are probably fairly unlikely to engage by downloading CATCH, despite them probably needing it the most. I discussed this	Psychological interventions	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
	afternoon working on screening questions for HSE occupational lung disease tender	last week with my supervisor when we tried to understand if reaching these people would be possible. It is frustrating, particularly as I just want everyone to have the same opportunities as I take up but there is so much going on in people's lives and I can't assume that they ever feel like they have the time/ capacity to access these services. Maybe that's where we look- at simplicity and time effectiveness?		
June 2020				
05/06/2020	Researching availability and support for informal carers in the Wirral	Information to support informal carers is out there but it's very poorly distributed and hard to find. This highlights the need for our project- bringing all information together	Research	
05/06/2020	Finalised short teaching session on self-determination theory which I have been working on to complement a training series in health psychology I am in the middle of delivering.		Teaching and training	
08/06/2020	Researching availability and support for informal carers in the Wirral, meeting with ML re new version of CATCH (plan created)		Research	

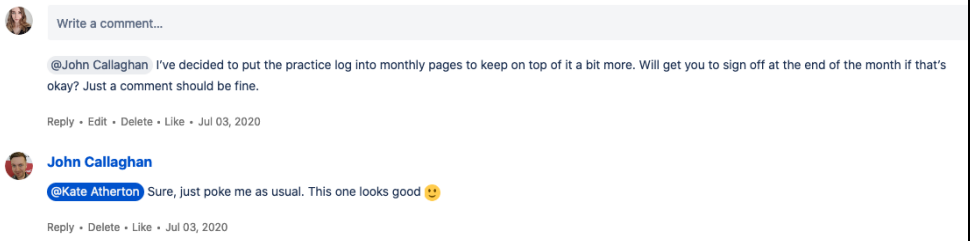
6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
09/06/2020	Researching availability and support for informal carers in the Wirral	Overall, the content needs to be understandable, accessible and inclusive. I've noticed in my own work over the last week that I tend to think about "people" as a whole more than I should. I should always consider the differences between cultures and socioeconomic backgrounds	Research	
10/06/2020	Tested CATCH and recorded tasks for improvement, more research on services available for informal carers		Research, psychological interventions	
11/06/2020	Tested CATCH and meeting re tasks, tested My House of Memories			
12/06/2020	Tested My House of Memories and discussed with team			
15/06/2020	Drawing up consultancy contract for teaching and training sessions with the Innovation Agency	As I've already done a contract, it made this one much easier. Also building and maintaining professional relationships makes the consultancy project easier to manage and negotiate	Consultancy	
15/06/2020	Preparation for multidisciplinary Early years meeting with Halton, attended meeting. Afternoon added tasks for CATCH improvement	Due to time restraints, it isn't possible to do as much with CATCH as I want to in response to feedback.	Generic professional	
16/06/2020	Brought together testimonials of previous projects. Academic research into how information is accessed (Wirral Feeds)		Generic professional, research	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
17/06/2020	Academic research into how information is accessed		Research	
18/06/2020	Finished questionnaires for research project: looked at from a user perspective and sought supervision re length of questionnaire	It's important to get a well-rounded data set but equally the participant experience is important.	Research	
18/06/2020	Ran through CATCH tests, meeting re Wirral carers		Generic professional	
19/06/2020	Work on semi structured interviews and document detailing what engagement we need to progress with Wirral Feeds, identifying participants	Structuring interviews keeping in mind that zoom will be used will be difficult to adapt to but will be a welcome challenge	Research	
22/06/2020	Meeting with Cheshire regarding CATCH. Discussed how to reach more users and how to work with more professionals to improve content offered to parents. More research into Wirral Carers information offering. Work on ethics for COVID research	Preparing and distributing a schedule could be positive in that it gives people real time to think about their views before speaking to me, but it also means that my responses might not be as authentic as I would like them to be.	Generic professional, psychological interventions	
24/06/2020	Work on Case Study for Liverpool CCG GP websites	Bringing together all of the information was definitely great practice for both research and report writing.	Research, generic professional	
25/06/2020	More work on interview guide for Wirral Carers and more work on case study		Research	
29/06/2020	Work on ethics form for research one including literature review	Struggled at first to find relevant evidence but when I worked systematically and identified key words through articles found to search deeper.	Research	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
30/06/2020	Test new version of CATCH and research business collectives in Liverpool City Region for new bid		Generic professional	
Signed by line manager: John Callaghan for within- placement work completed 01/06/2020 – 30/06/2020				
July 2020				
01/07/2020	CATCH testing and writing case study for GP websites	Preparing case studies on projects helps with writing to different audiences and report writing generally.	Generic professional	
01/07/2020	Considering ideas for second research piece, including potential measures and implications of discussing mental health in interviews		Research	
02/07/2020	Monthly CATCH reports and finalising ethics for research piece		Research	
03/07/2020	CATCH testing and work on IA training session - coaching for spread and adoption.	Approaching the sessions early has helped me to feel calmer and take a more rational approach to the content	Teaching and training	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
06/07/2020	One to one (virtual) engagement with Age UK Wirral re Feeds Wirral Carers, work on defining and documenting parties for engagement	Conducting interviews via video call can sometimes take away informality and familiarity due to it being more difficult to gauge behavioural cues. This might get better as it becomes more familiar. Engagement sessions like this also really help to improve research interview/ focus group skills as I can get used to asking open questions.	Generic professional, research	
07/07/2020	Engagement session and ethics application		Generic professional, research	
08/07/2020	Research to identify participants for engagement and work on IA teaching session (coaching for spread and adoption)		Research, teaching and training	
09/07/2020	Engagement session with three participants from Wirral Council, work on documents for CATCH real world validation and dementia UK webinar	I had my colleague taking notes as I ran the session and it made it much easier to encourage a better flowing conversation. I should request help more or record the sessions where possible (i.e., if zoom is used)	Research, generic professional	
10/07/2020	Test new CATCH and work on documents for CATCH real world validation		Research	
12/07/2020	Worked on innovation agency teaching session. Got a little overwhelmed with the amount of content to be fitted	It helps to step back when getting overwhelmed and to take a break. This helps me to calm down and	Teaching and training	

Date	What happened	What I learned	Competencies reached	Placement/ outside
	into the session but took a step back and found an ideal example	think more rationally which helps me to come up with new ideas		
13/07/2020	"Test new CATCH. Engagement session, identifying further participants and work on innovation agency teaching. The engagement session was more challenging than others as she took a different approach and was defensive at the start. Also had supervision with Mark regarding the research project and struggles with male participant recruitment. It helped to understand this was the case with all research."	"Don't assume that if someone doesn't speak in a way that you wouldn't, that it means that they're experiencing negative emotions- it could just be their own personality and way of communication and you can still get some valuable information. As with previous learnings, it helps to step back and reflect. It will help to understand the mechanisms by which males are less likely to engage in research and I understand that this might simply be down to personality types more seen in males. I should focus my male recruitment on populations that are more agreeable i.e., healthcare, teaching."	Research, generic professional	
14/07/2020	Analysed engagements and drafted insights and work on Innovation agency teaching - including work on visuals to make them more engaging	It was interesting seeing the key themes start to jump out at me. Most of them were obvious but some- including a need to translate information for local communities and service users- were nice to hear and interesting- there should always be a focus on personalised solutions on as small a level	Research, teaching and training	

Date	What happened	What I learned	Competencies reached	Placement/ outside
		as possible (individual - community- larger populations)		
15/07/2020	Work on participant information sheet for research two		Research	
15/07/2020	Engagement session for Innovateuk project- harder to engage but got some valuable insights	It can be difficult to engage less forthcoming participants but I have found that not every engagement can be perfect. There could be a multitude of outside factors that influence the outcome, but I think with practice my own interviewing skills will also get better.	Research	
16/07/2020	Innovation agency teaching session and test new CATCH	Too much was squeezed into the session so I could sense some confusion. I need to stop trying to fit everything in- people can research more if something catches their eye. This is not a qualification just an introduction!	Teaching and training	
17/07/2020	Ethics application for research two, including conducting literature review and preparing participant information sheet	It's easier to motivate yourself to do something you are really passionate about. I already know this re behaviour change but it's nice to see it in action	Research	
17/07/2020	Work on insights for Innovate UK project and reflection on project to date. I've received good feedback on how the sessions are conducted and recorded. Also had team meeting which was useful in thinking outside the box-	Be more open minded when considering target audiences for behaviour change projects and think outside the box. Accessibility is important.	Research, psychological interventions, generic professional	

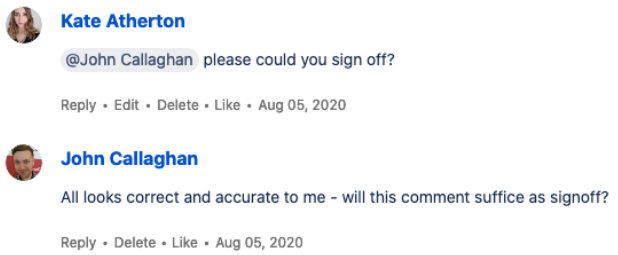
6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
	sexual health information for carers (older adults, people with disabilities)			
19/07/2020	More work on ethics application for research two- creating debrief sheets, consent forms and qualitative participant information sheet. It took longer than I thought due to cross referencing and considering smaller parts	Give more time to work on projects- they can take longer than you think	Research	
20/07/2020	Test new CATCH, create survey for GP websites report and work on identifying further participants	It's interesting to look at CATCH from a user perspective and to see what barriers users might come up against to using the app and therefore the behaviour change	Research	
21/07/2020	CATCH general work, engagement session with carer, write up insights	The session with the carer was interesting and threw a curve ball- she felt too busy to seek new information at all. This contrasts against older carers and created a new challenge of how to make the solution as simple and time saving as possible. This is why these engagement sessions are important.	Research, generic professional	
22/07/2020	Engagement session with infobank and write up of insights, work on literature review		Research	
23/07/2020	research to find more organisations for Wirral feeds, work on literature review, Finalise and email out survey to LCCG manual Practice Managers individually	I decided to send out the email individually in a hope to gain more responses than Bcc'ing everyone. It did work but was time consuming so	Research	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
		would need to weigh up if the response is worth the extra hours.		
24/07/2020	CATCH general work, work in identifying more organisations for Wirral feeds, research winter pressures for Liverpool CCG digital flyer, work on literature review		Generic professional, research	
26/07/2020	Recruiting participants for second research piece through existing networks and social media sports clubs. I also approached bodies and have had good uptake- 150 participants in 3 days.	It's easier to recruit for a project when the existing networks are available. This shows the importance of general networking.	Research	
27/07/2020	Prep and engagement with Practice manager for LCCG project, research content for digital flyer, CATCH general work, search for Wirral specific websites using new CMS tool		Research, generic professional	
28/07/2020	Looking through qualitative responses to research cohort to date and identifying themes from the surface	Social connectedness is already emerging as a theme which, from SDT, is unsurprising but nice to see. Responses are more insightful than I thought they would be, and participants have really opened up.	Research	
28/07/2020	Identifying more WordPress sites on Wirral and adding to document, work on how to improve CATCH website, CATCH general work, prep, engagement and write up with Practice Manager for LCCG project		Generic professional	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
29/07/2020	Research further winter pressures for front page of digital flyer and research for blog post- self-determination theory and digital behaviour change		Research, generic professional	
30/07/2020	More work on blog post and organising Innovate UK work	Started out the post thinking I could explain health psychology in general, but I think it's more important to focus on a theory and how it contributes. It's nice to have the creativity to write what I want	Generic professional	
Signed by line manager: John Callaghan for within- placement work completed 01/07/2020 – 31/07/2020 				
August 2020				
03/08/2020	Work on user engagement report for Liverpool CCG GP websites project. Finished blog post for company website	Finishing the blog post was helpful in understanding how I can combine my role with health psychology to assist with projects	Generic professional	
04/08/2020	More work on report, engagement for Wirral carers project (Dementia Together), work on blog post - "The science of behaviour change: how can digital play its part?"		Research, generic professional	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
05/08/2020	Monthly CATCH reports, work on practice log		Generic professional, practice log and diary	
06/08/2020	Work to understand how to improve negative google reviews for GP surgeries		Research	
07/08/2020	Work on CATCH overview, identifying further carer-supporting services, updating user engagement report for Liverpool CCG		Generic professional, research	
12/08/2020	Identifying and contacting more participants for Wirral project		Generic professional	
13/08/2020	Work on midpoint report	I noticed that it was easier than I thought it would be to summarise the main points of the carer interviews into a couple of sentences each and I think it was because I conducted most of them myself/ was there, so I had a real feel of the feeling by what people emphasised. This is why I think where there's time, the analyst should listen/ conduct the interviews	Generic professional, research	
14/08/2020	Work on midpoint report, engagement session with Catherine (included discussion on engagement for GP websites project)	The session with Catherine helped me to understand where Health Psychology sits within the GP websites project. Healthcare services need to	Generic professional, research	

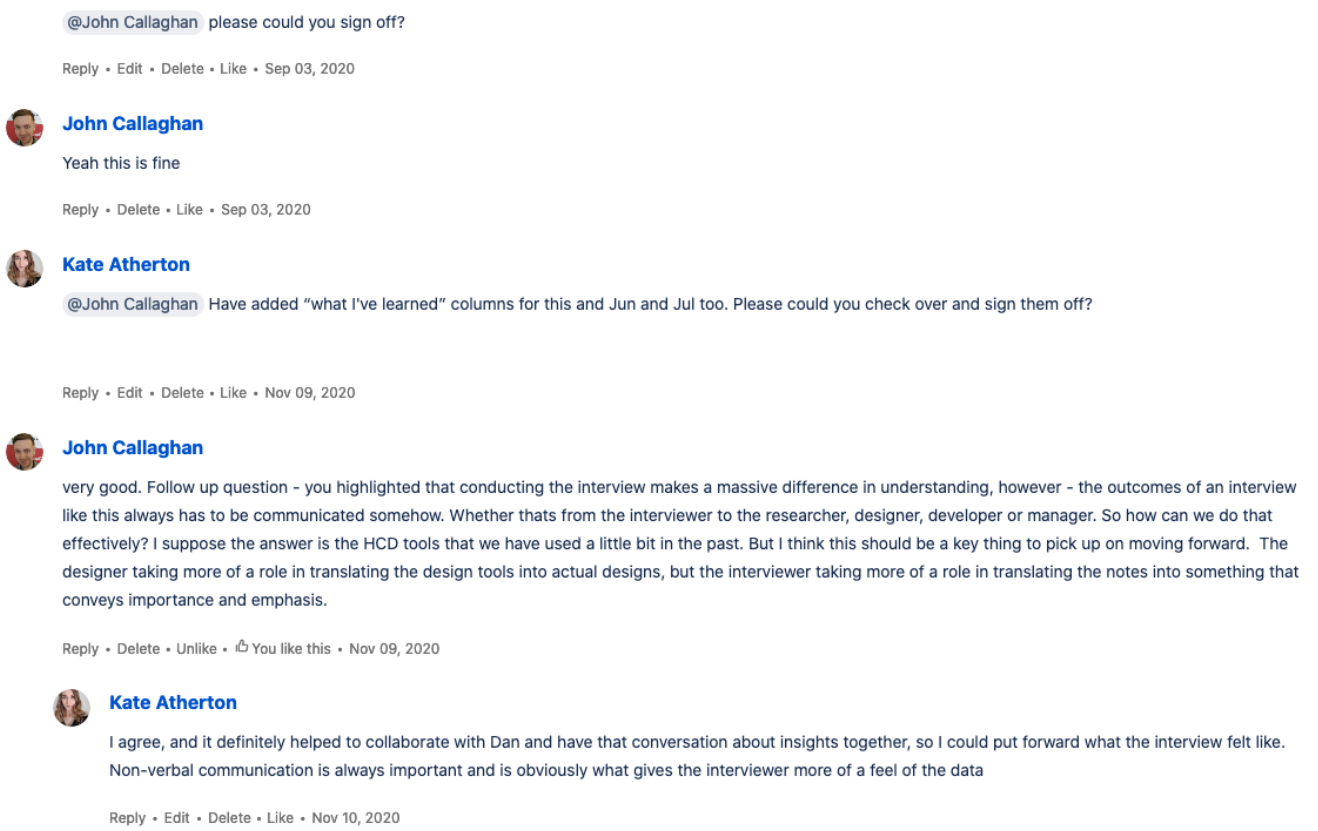
6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
		engage digitally, now more than ever, and there are some great ways to do this including using websites as a "virtual notice board"		
17/08/2020	Amended report for GP websites project, looked through and watched back conference for SBRI - psychological intervention for gastrointestinal symptoms in children, amended blog post to include an example. Had doctorate supervision session.	When it comes to proposing interventions for SBRI's, don't try and start it with a set plan- just a plan to investigate the problem and some potential solutions.	Generic professional, research, psychological interventions	
19/08/2020	meeting with LCCG team re GP websites		Generic professional	
20/08/2020	CATCH testing and information governance training			
21/08/2020 – 24/08/2020	CATCH testing			
25/08/2020	Work on SBRI bid - including research		Research	
26/08/2020	Research for SBRI bid, multidisciplinary meeting with CCG for GP websites project. During research I found some useful studies which I've been struggling to locate	Don't give up research search easily- sometimes you need to research to find the right search terms in the first place and I found this today by looking through a relevant paper. I was overwhelmed with the bid yesterday, but the key was taking the time to build solid foundations through research rather than jumping straight into a solution.	Research, generic professional	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
27/08/2020	3 x engagements for Wirral carers project, LCCG GP websites benefits session with Catherine Stukley	"I should take the time during engagement to think through questions more. This participant provided shorter answers and I found myself leading the conversation more which I understand can produce answers which may not have come up naturally. Also, its useful to consider benefits with someone who comes from a different background and perspective, and it helped to act as a (small) multidisciplinary team"	Generic professional, research	
28/08/2020	More research and work on documentation for SBRI bid	Sometimes I need to look deeper to find how health psychology can be useful	Research	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
Signed by line manager: John Callaghan for within- placement work completed 01/08/2020 – 31/08/2020				
September 2020				

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
02/09/2020	Meeting re GP websites project, identification and reporting on benefits of LCCG GP websites project, carer engagement		Generic professional	
03/09/2020	Engagement with carer, work on report including engagement summaries and conclusions of engagement	There's such a lack of practical information out there for informal carers and interviews are finding this out. In future I should look to explore this more if I get the opportunity.	Generic professional, research	
04/09/2020	Finished conclusions on engagement report, engagement with Barnardo's re young carers and added to report. Some work on SBRI bid	Needs are completely different for young carers as a lot of the time they grow up with their parent's condition so have good knowledge.	Generic professional, research	
07/09/2020	Halton HEYS multidisciplinary meeting, My House of Memories Testing, discussion work on SBRI proposal		Generic professional, research	
08/09/2020	My House of Memories testing, discussion with management regarding SBRI proposal	I was happy with where I was taking the project but I'm glad that this discussion took place as it offered different perspectives and meant that I can make the proposal stronger.	Generic professional, research	
09/09/2020	My House of Memories Testing, some work on innovation agency coaching sessions, work on press release for DNWD		Generic professional, teaching and training	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
11/09/2020	MHOM testing and team meeting	It really helps to understand what's going on as part of the wider team to know where my work fits in and to offer my own ideas where relevant.	Generic professional	
14/09/2020	Discussed SBRI bid with Dave, and we decided that it probably wasn't right for the company. Brainstorming session to understand user perspective when accessing Feeds, took engagement insights into account to raise questions and come up with potential solutions	Sometimes it's frustrating knowing that you can put a lot of work into something, and it isn't right but something I've learned from bid writing is that it can be uncertain, and materials developed as part of the process can always be used elsewhere.	Research, psychological interventions	
15/09/2020	Work on report showcasing potential benefits of GP websites project, further brainstorming re feeds and project meeting for GP websites project including introduction to healthcare videos	it helps to sit down and approach a project more systematically in a multidisciplinary team from the viewpoint of the user. It's helpful to ask the questions instead of jumping straight away to the solutions.	Generic professional, psychological interventions	
16/09/2020	Wrote CATCH post for Damibu website to communicate report, catch up meeting with programme manager for early start service in Cheshire		Generic professional	
21/09/2020	CATCH new feature report to inform professionals	It's important to get the right information down succinctly as in the past engagement with larger documents has been low, particularly among busy professionals, and this has amplified in the pandemic.	Generic professional	

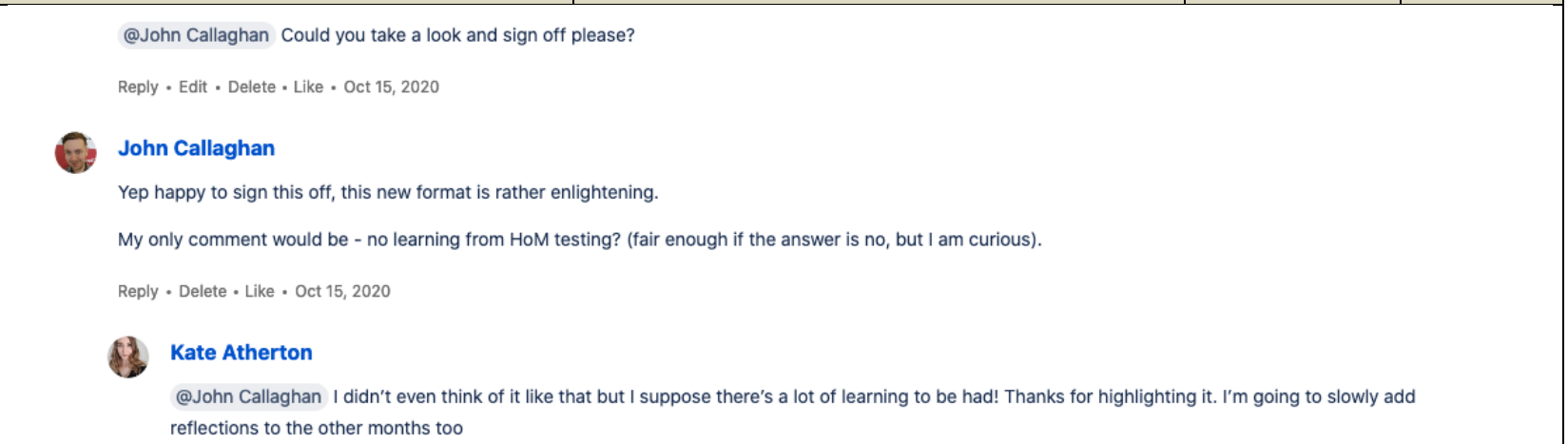
6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
22/09/2020	Work on CATCH new feature report. Doctoral supervision session.		Generic professional	
23/09/2020	Ran through LJMU electronic library and identified studies for literature review. Difficult to find the right words to bring up the searches but have saved a number to run through in more detail.	It helped when I looked at relevant study content to identify key search terms that brought more relevant research up. I also thought more outside the box as to knock on effects of perceived absence of healthcare.	Research	
24/09/2020	My House of Memories testing, communication of new CATCH features to professionals to push for new users, meeting for Liverpool GP websites project. An interesting point was raised regarding the inclusion of mental health and social prescribing support into digital leaflets.	I should reflect more on projects that I am not directly involved in to understand idea creation.	Generic professional	
25/09/2020	My House of Memories testing, preparation and communication of resources following final innovation agency coaching session last week		Generic professional, teaching and training	
26/09/2020	Read up on health inequalities and started reading "The Health Gap" in preparation for adding section on socioeconomic impacts of health in teaching session	There is a lot to learn on my behalf but I'm really excited to learn and teach others.	Teaching and training	
27/09/2020	More work on teaching series. Hit a block but acknowledged that I do this every time and trusted it would come to me. It did.	I am able to understand when I panic and address those thoughts in a more rational way.	Teaching and training	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
29/09/2020	My House of Memories testing, overview of CATCH uptake recently and attempt to understand how to increase uptake in downloading using the app. Looking at recent analytics and feedback.	The impact of covid has had a negative effect on use of the app. This is hard to get my head around as it should help. I shouldn't take for granted that people will change their behaviours even if I believe in the app and I need to look at this from a behaviour change perspective.	Psychological interventions, generic professional	
30/09/2020	Work to understand decreased CATCH uptake including brief plan for promotion using social media. Also worked on blog post - training as a heath psychologist within technology SME		Psychological interventions, generic professional	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
Signed by line manager: John Callaghan for within- placement work completed 01/09/2020 – 30/09/2020				
October 2020				
02/10/2020	Worked through data cleaning for research one.	Retrospectively I would have used more SPSS friendly measure	Research	
03/10/2020	Ran through first teaching session. Added some transitions to make content easier to see and removed a few things so that there was definitely enough time to run through all the content	It's important to practice and not include too much information	Teaching and training	
06/10/2020	Worked with Mark to clean up data and start analysis. Found some great levels of significance for an interaction so it will be interesting to look into this further.	I'm finding quantitative analysis really tricky as it's something I've always avoided in the past, but even though I needed a lot of direction today I think I'm better at using SPSS.	Research	

6.2 PRACTICE LOG

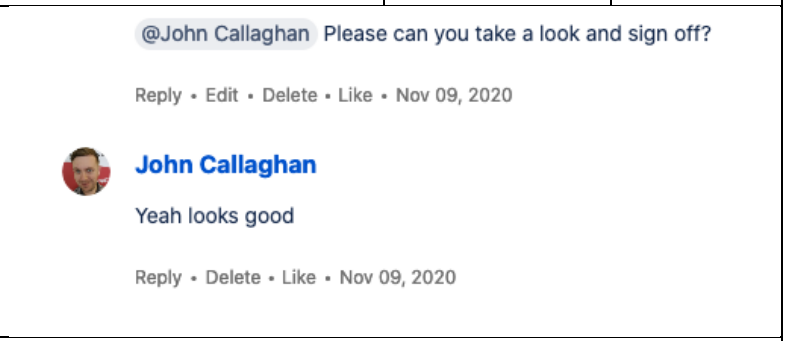
Date	What happened	What I learned	Competencies reached	Placement/ outside
09/10/2020	Delivered a teaching session as part of consultancy. Got all the information in but the session didn't go exactly as I had planned due to extra discussion.	I shouldn't plan to the minute and should aim to leave more time for interaction	Teaching and training	
11/10/2020	Work on second teaching session, reflecting on previous session to make sure it meets the needs of the group and has suitable levels of interaction.		Teaching and training	
12/10/2020	Work on final transcription and analysis session with Mark. Discussion with client re recommissioning		Research, generic professional	
16/10/2020	Work on SPSS data analysis for research one. Used excel formulas to bring together data on a scale for easy analysis next week. Managed to do this with all scenarios quickly instead of just one or two which was the plan.		Research	
16/10/2020	Delivery of second teaching session	Leaving more time for discussion is useful for fostering interesting conversation, reflection and confidence in students	Teaching and training	
17/10/2020 - 18/10/2020	Work on teaching session three. Adapting content from a previous session to the current audience, using different examples and working with more time	I should allow students to take control of where the lesson is directed and listen less to my worry of not knowing what to say or react to on the spot.	Teaching and training	
21/10/2020	More work on teaching session three. I've added a few examples to the end of the session which I can use if I	These slides will probably not be used but are there as a failsafe- something I have learned previously from a teacher (who is attending the sessions!)	Teaching and training	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
	don't feel I can get the level of interaction that I need to fill the time.			
22/10/2020	My House of Memories testing	Though testing apps can be a mundane activity and can feel like not much learning happens, acting as a user and putting myself into the shoes of someone with dementia whilst using the app will help me to relate in a small way, especially when considering intentional design features of the app.	Generic professional	
23/10/2020	Final work on teaching session, delivery of teaching session	Ran out of time but was due to high level of engagement and felt the class was working. Confident I can build what was missed into the last session, so I let the session flow. It's good to listen to intuition and read the room	Teaching and training	
25/10/2020	Work on teaching session four. Adapting previous session to new group with more detail	It's helped me to feel stronger in creating interventions myself as I've been through the book numerous times to familiarise myself with it and make sure I know how to teach it. Could I add criticisms to session four/ five?	Teaching and training	
26/10/2020	Finished My House of Memories Testing and moved onto work on research analysis		Generic professional, research	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
27/10/2020	Work on teaching session four including identifying group tasks and making the session more interactive		Teaching and training	
28/10/2020	More work on teaching session four- finalised and practice run through		Teaching and training	
28/10/2020	Worked on social media comms plan	Sometimes we really struggle with engagement. This could be due to social media algorithms, but social media can be a valuable tool to get health messages out to parents, not just to promote the app.	Generic professional	
30/10/2020	Delivery of fourth teaching session		Teaching and training	
Signed by line manager: John Callaghan for within- placement work completed 01/10/2020 – 31/10/2020				
November 2020				
01/11/2020	Worked on data analysis- ran ANOVAS on self-care and friends and family treatment groups. Also wrote up some of my practice diary which was handwritten	I've come a long way in terms of my reflective practice and my mental state	Research	



6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
02/11/2020 – 04/11/2020	Work on final teaching session of the series and also preparing all of the handouts and further reading for the whole series.	The process has taken me such a long time and I do think I've learned a lot. I probably spent the most time on this session as it included something I had never covered before in previous sessions with other cohorts - the theoretical domains framework. I decided to add it in to complement the series and to tie everything up and I'm happy that I've found the space to include it. I think this is because it just adds another dimension, and the cohort were so interested in the model. I think the big teaching point of this series is that people are interested even if you bring your prejudgement of what will happen. I think if I were to do the series again though, I would maybe aim for longer sessions and include more interaction.	Teaching and training	
05/11/2020	Finalised teaching session and started coding interviews by hand for research two		Teaching and training, research	
06/11/2020	Recorded teaching session and compiled materials and feedback questionnaire to finish off the series. Also worked on coding for second research project.	Although the session itself was only 25 minutes, I included a "take a break" in the middle. I understand that the length of time isn't that long and	Teaching and training, research	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
		is probably fine for attention span in some people but from my experience, if someone talks at me for 25 minutes straight, I disengage. I tried to include the break as a psychological teaching point, encouraging them to step away and think about why it could be important and how they can bring this into their life. It's something that I will bring to future teaching series, particularly pre-recorded sessions.		
09/11/2020	CATCH monthly reports		Generic professional	
10/11/2020	MHOM testing and coding		Research	
11/11/2020	Coding work this AM. Lost Nvivo work previously. Started to think if I should have done more by hand but this takes more time and I need to be efficient	It's important to save AND check where it has saved!	Research	
13/11/2020	Staff meeting and identification of Mersey care services		Generic professional	
15/11/2020	Work on updated plan of training to include new opportunities and to remove existing ones		Plan of Training	
16/11/2020	More coding for research two. Making an active effort to reduce bias by questioning myself and keeping	Be aware of bias at all stages of data collection and analysis.	Research	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
	awareness for any interpretation of words that I wouldn't otherwise have made			
17/11/2020	More coding for research two. Age seems to be a theme for ones I have coded already and also a comparison between male and female sport		Research	
17/11/2020	Worked on data analysis for research one, including recapping supervision zoom recordings and noting down analyses and process		Research	
19/11/2020	Worked on data analysis for research one- ran more ANOVAS to understand significance of changes in services considered			
21/11/2020	Finished ANOVAs for research one and caught up with practice diary using dictation.		Research, practice diary	
22/11/2020	Work on coding for research two	I'm finding enjoyment to be a really big factor and how it's important to enjoy the sport and how stopping enjoying the sport can influence participation. I'm finding the social aspect to be very very important and I'm finding that a lot of the participants like to encourage playing the sport in other people who are new to it.	Research	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
23/11/2020	Analysis work for research project			
24/11/2020	Undertook research for adaption of innovations by health professionals and the public- to be continued. Also attended multi-disciplinary grow-a-group meeting (website connecting businesses for CSR and community groups) where I presented the project (completely new to me). Was helpful to understand existing solutions and the work going on in Lancashire to support charities and community groups and how the tool can be used to support this.	Found that there was a similar tool out there that was more established but identified how Grow-a-group was different. Whilst it helps to do more research, I felt able to think quickly which I think is important in meetings like this where these things can happen.	Research, generic professional	
25/11/2020	Comms plan for CATCH- focusing on using user-friendly language and promoting non-NHS content providers due to previous lack of engagement		Generic professional	
26/11/2020	Worked on coding final interview- can move on to next step this weekend		Research	
26/11/2020	More work on comms plan		Generic professional	
29/11/2020	Work on analysis for research one.		Research	
30/11/2020	Finalised first draft of results session and submitted to supervision.		Research	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
Signed by line manager: John Callaghan for within-placement work completed 01/11/2020 – 30/11/2020				
December 2020				
02/12/2020	Meeting with Lara Nilssen (smoking cessation midwife in local maternity system). Explained what CATCH was and how it can be used. She could be a great contact for ensuring CATCH is pushed in Chester if commissioned. Also explained Feeds and how it could be used to curb information overload and allow information provided by different services (i.e., midwives, HVs) to complement each other.		Research, psychological interventions	
03/12/2020	Research on how to improve engagement with health professionals and users.		Research	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
03/12/2020	Work on grouping codes. I have 370 and lots can be combined	I feel like I have improved since last time I did a thematic analysis but in terms of efficiency I could maybe make codes more visible to help me remember more	Research	
03/12/2020	Research into adoption of innovations by health professionals and attendance at workshop for enabling social change and taking the first steps		Research	
04/12/2020	Systematic review session, GP websites meeting and My House of Memories testing	The systematic review session was really useful as this was something that I hadn't done before. I think I'll need a refresher before I start mine as it was a lot of information, but I learned how to navigate databases systematically using the right search terms.	Research, generic professional	
04/12/2020	More work on grouping codes.		Research	
06/12/2020	Aggregating codes for research project two	This stage is the most time consuming and in future projects I should account for this time. Also, if one excerpt is great to read but inly appears once for one participant that doesn't make it a theme.	Research	
07/12/2020	CATCH general engagement- sending emails and monthly reports. Also testing My House of Memories and Feeds software	Was interesting testing from a professional perspective and having to put on a different "hat". This is something I need to focus on when testing- what is the audience?	Generic professional	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
08/12/2020	More work on aggregating codes. Do I need a lockdown code, and do I need to focus on non-PA related lockdown experience?		Research	
08/12/2020	Work on literature review for research project. Found a number of sources regarding reductions in health service use over covid period.		Research	
09/12/2020	More work on aggregating codes - 155 codes down to 97. Identified codes in relation to lockdown specifically and identified commitment and enjoyment to focus on next session		Research	
09/12/2020	Attended virtual conference - Supporting students with additional needs in the shift to active blended learning. Lots of barriers and facilitators to learning and wellbeing were discussed, and I identified that Feeds could be a potential solution to this. Contacted the organiser to discuss this more	I think from listening to some of the barriers and facilitators, including accessibility issues, I saw a lot of Feeds ideas forming, including directly with the faculty, the university as a wider user and even student accommodation websites- bringing info from the university as well as local information and general advice. There are so many opportunities to share the right information.	Generic professional	
10/12/2020	Worked on creating a digital flyer for personal health budgets within Liverpool CCG today. Looked at all of the information that's out there on personal health budgets and tried to find easily digestible sources to be shared	I found that the information is quite difficult to understand for the most parts, it is quite dry. I did find a video which was a little bit more useful but	Generic professional	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
	online on GP websites. Brought some stuff together, trying to keep it in digestible chunks in accordance with what we have found to be most understandable from previous co creation sessions for other projects.	there's not really any local help and support that specifically points to the personal health budget.		
10/12/2020	More work on aggregating codes. Down to 32 codes now and it's getting more challenging- I'm starting to see how it will fit in the paper now and I think I need to start looking at journals soon for format of results		Research	
11/12/2020	Work on using Feeds software to build COPD flyer and project meeting with Liverpool CCG re GP websites project		Generic professional	
14/12/2020-16/12/20	Work on identifying Wirral based organisations to add Feeds to their website with the intention of sharing health related content	There are so many spaces for information sharing, particularly to spread information on health and mental health. Why has this not been done before		
16/12/2020	Work on coding for research two	I've figured out how to code to new selections and remove bits so I need to go through the NVivo file and clean it up a bit more so there aren't codes with just one reference in that I've dragged to another code that's the same.	Research	
17/12/2020	Testing Feeds software and more work on identifying Wirral based organisations		Generic professional	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
17/12/2020	Work on coding for research two	I was thinking about important to stay fit into exercise for health, but I think I need to stay aware of the types of motivation involved within this code. Some involves more intrinsic motivation, but some includes extrinsic forces e.g., weight. I think this will be something to explore.	Research	
18/12/2020	More work on identifying Wirral based organisations		Generic professional	
18/12/2020	Work on coding for research two	The process of thematic analysis is incredibly longwinded but quite rewarding really. It feels satisfying to see Nvivo look tidier and to not be overwhelmed by hundreds of individual codes. Everything is slotting into place, and nothing feels forced.	Research	
21/12/2020 - 24/12/2020	More work on identifying Wirral based organisations. Trying to understand who provides health information already and where it would benefit being placed.	It's been useful to look at organisations with an open mind to identify how information sharing can benefit them.	Generic professional, psychological interventions	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
Signed by line manager: John Callaghan for within- placement work completed 01/12/2020 – 31/12/2020 				
January 2021				
04/01/2021	Worked on comms plan for CATCH. We've identified a potential bid that we can apply for which involves working on the Wirral's "Community Together" project so today I spent some time looking through documents and discussing what we are able to provide and submit.		Generic professional	
05/01/2021	More research on identifying Feeds case uses for Innovate UK project, including rating organisations on suitability using my own criteria.	Research skills	Generic professional	
06/01/2021	More work on teaching and training case study - write up of session four		Teaching and training	
06/01/2021	CATCH monthly reports, read through newly sent discovery document for Community Matters tender and	The take home from the document was that adequate and personalised support is important. Person centred is something that comes up again	Generic professional	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
	further team meeting to discuss potential solutions with this in mind	and again in research and all co-creation. It was great to see how Feeds could be applied to fit every level of the brief		
07/01/2021	More work on teaching and training case study - write up of session five		Teaching and training	
07/01/2021	Had meeting with Cheshire CATCH lead. We discussed how CATCH was being used in Cheshire and how to increase uptake. Also explained Feeds and how it could be used in the region.		Generic professional, psychological interventions	
08/01/2021	Meeting with organisation submitting Community Matters to. I led the session and asked questions on the brief, and it was easy to see where Feeds sits well.	I struggled with leading the meeting and felt a bit unengaging- just asking questions. With reduced social contact due to covid I can't let this happen more. Nevertheless, this will help in submitting bids in the future.	Generic professional	
09/01/2021	Work on teaching and training case study, including looking through evaluation		Teaching and training	
13/01/2021	Work on teaching and training case study, including looking through literature and strengthening self-reflection as discussed in supervision.	Improved research skills. This also forced me to think more about how I handled this project and what I could have done to improve next time.	Teaching and training	

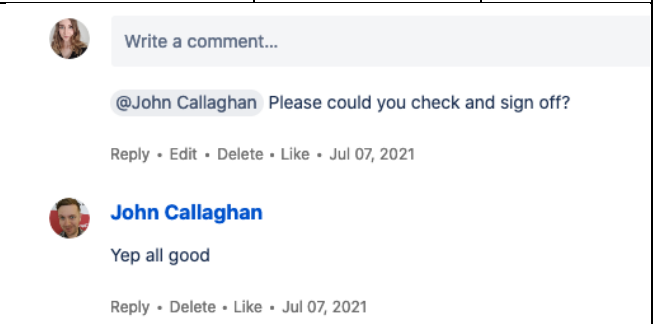
6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
13/01/2021	Drafting example emails to sources, sinks and both to provide more details when requested- sent to Cheshire CCG, Age UK and Zircom at request so far.	Communication skills to multidisciplinary organisations. It's really important to think of language and the presentation of the organisation.	Generic professional	
14/01/2021	Contacting more organisations - including suggestions for Feeds uses (i.e., self-care, employee wellbeing etc.)		Generic professional	
14/01/2021	Childline training	There was an interesting discussion on empathy, and I learned that when I think I am being empathetic, this is not always the case. This will be important in a therapeutic context moving forward.	Psychological interventions	
17/01/2021	Finished first draft of teaching/ training case study		Teaching and training	
18/01/2021	Looked at quantitative results in line with feedback received. Identified whether a MANOVA was suitable. Also started on Methods	Research skills	Research	
18/01/2021	Work on identifying processes for getting new organisations on board including taking part in team discussions with aim to understand how best to retain contact	This is the first level of behaviour change in the Feeds process- understanding what works to encourage response. Every sector is different, and every individual is different and it's important to understand this.	Generic professional, psychological interventions	
19/01/2021	Work on Methods for quantitative research project	Research skills	Research	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
19/01/2021	Work on understanding flow of communication with potential Feeds users - identifying what can and can't be automated and when to set up tasks		Generic professional	
21/01/2021	Attended project meeting with Liverpool CCG regarding GP websites and digital flyers.		Generic professional	
22/01/2021	Working through CATCH analytics for year previously and identifying most popular articles in Crewe and Macclesfield as requested by Cheshire	Popular articles broadly remain similar across most areas. Doing this analysis helped strengthen my ability to search through databases and to pull out the right information.	Generic professional	
26/01/2021	Research discussion meeting with Helen	It was pointed out that some of the themes seemed similar and I could merge and compare the experience before and after. I think I was so focused on getting the themes compressed that I didn't think of it like that, and it was almost like a bit of a lightbulb moment. I could put myself down for this but sometimes it helps to get a fresh pair of eyes on something to see something new, and that's the whole point about increasing reliability and negating bias.	Research	
27/01/2021	Chasing organisations and organising contacts and work			
28/01/2021	Identifying information- delivering organisations within the mental health and wellbeing sector		Generic professional	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
31/01/2021	Work on coding large dataset for research project two	Identified a number of themes and reflected how they fit in with the qualitative interviews.	Research	
Signed by line manager: John Callaghan for within- placement work completed 01/01/2021 – 31/01/2021 				
February 2021				
01/02/2021	Organised templates and contacts and reached out to those previously engaged with. Considered how Feeds can remove barriers to information sharing.	Understanding barriers	Generic professional, psychological interventions	
02/02/2021	More work on results section for research project two - moved away from separating general experience and lockdown and identified three major themes which compared experiences and some sub themes (following on from session with Helen)	Research skills - Stepping away from and discussing the data is useful for looking at it from another perspective.	Research	
03/02/2021	Started writing up results for qualitative project- using coding notes, diagrams and NVivo file to refer to	Research skills	Research	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
03/02/2021	Worked on webinar session for Liverpool GP surgeries- introducing the concept of digital flyers and identifying how it addresses barriers in information delivery. Aim is to get more GPs using digital flyers for their patient population. Also identifying School Improvement Liverpool as an organisation which could support delivery of Feeds information to schools and making first contact.	Preparing training sessions, working with other health professionals	Teaching and training, generic professional	
04/02/2021	Childline training session - identifying need	Clinical skills working with children - it's important to identify a need to make sure the child gets the most out of the conversation		
04/02/2021	Work on understanding selling points of feeds, understanding analytics and how these can be used moving forward. Also looking at barriers to health information delivery	Helped me to understand more how Feeds could act as a behaviour change intervention for both professionals and the public	Generic professional, research	
05/02/2021	Worked within the team to understand what email notifications should be sent to Feeds users and how often these should be. This is important for retained use of the platform. I also suggested that a feature to only send emails in working hours would be beneficial to employee wellbeing.	Multidisciplinary working, consideration of intervention aspects	Generic professional, psychological interventions	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
06/02/2021 – 07/02/2021	Work on writing up results section for research two.	I know that creating a flow is important for the reader to stay engaged and whilst you do tell a story with qualitative. breaking the text up with quotes can be disruptive. I think I need to find a healthy balance between representing the dataset in the text and ensuring the flow of the story and I think just by reading more qualitative papers and writing and refining I should be able to do this well.	Research	
08/02/2021-09/02/2021	Worked on abstract for submission to Kings Fund conference – using Feeds for Liverpool GP websites. Considering background, progress and results.	Report writing skills, results interpretation	Research, generic professional	
10/02/2021	Work on digital flyers video to sell concept of flyers to GP website managers in Liverpool	Was able to share information in an accessible format, something that can be built on for disseminating health information	Psychological interventions	
11/02/2021	Looking at GP websites report	Improved report writing skills	Generic professional	
11/02/2021	Childline Training - SFT and stages of change	It was good to relate to models I have already used in my health psychology training and to be able to apply them to practice.	Psychological interventions	
12/02/2021	Finalised Kings Fund abstract to include more of a collaborative approach. Work on GP websites report- looking at analytics to date alongside work undertaken	Refining detailed information into a concise abstract, report writing	Research, generic professional	

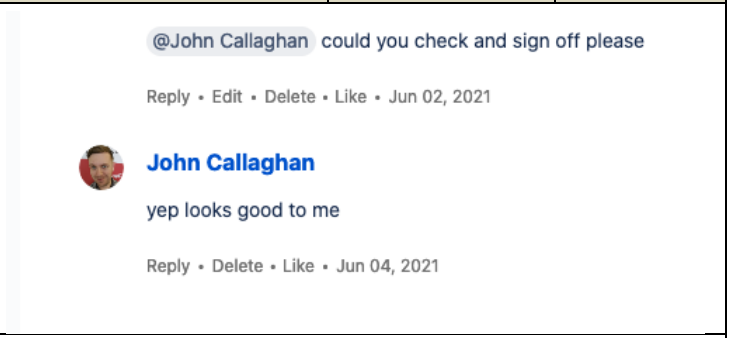
6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
15/02/2021	Client communication training - Looking at how to understand behavioural styles and how to adapt conversations to reflect this. Also, to focus more on understanding what the client needs than what we can do	Understanding client communication and sales from a behavioural approach- will take this forward to new conversations	Generic professional	
16/02/2021	Put together and information- focused CATCH overview and more work on information video using client communication techniques (client focused approach)	It's beneficial to focus on solutions for the client instead of selling what I think the benefits are.	Generic professional	
17/02/2021	Linked in with Sarah from SixtoSeven to discuss how to reach out to schools. Attended research meeting with Prof Lucy Yardley. Work on video	Learned from both meetings today that eliciting an emotional response to enable behaviour change is helpful (i.e., using helping patients or schools as a motivator). Lots of great advice from Sarah that I will put into practice to elicit a response.	Generic professional, psychological interventions	
18/02/2021	Childline training - abuse and how to identify risk. Including skills-based practice which went really well	Understanding risk and how to identify it in a counselling setting, importance of not conforming to gender bias, therapeutic skills	Psychological interventions	
18/02/2021	Second client communication training, finalised video (and thought about using emotive language for an alternate) and started writing up notes about communication with schools	Focusing on solving an immediate pain can be more emotive and encourage uptake	Generic professional, psychological interventions	
19/02/2021	Meeting with Tara regarding research one results. She felt that at this point it wouldn't be accepted at peer review	quantitative research skills, problem solving	Research	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
	and we discussed options for how to present the data differently			
19/02/2021	Finalised report with new analytics, school research	Report writing skills, research skills	Generic professional, research	
22/02/2021	Identifying school alliances and nature of information needed	Research skills	Generic professional	
23/02/2021	Researched social care information provision in anticipation for potential project	Research skills	Research	
25/02/2021	Work on monthly CATCH social media comms plan; identifying awareness days and relevant health information to be shared.	Improved communication skills which will be helpful when producing print or digital resources	Generic professional	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
Signed by line manager: John Callaghan for within- placement work completed 01/02/2021 – 28/02/2021				
March 2021				
02/03/2021	Met with Practice Manager to understand barriers to screening and to discuss how Feeds can support. I also reached out to Practice Managers for website feedback and compiled the CATCH monthly reports.	Understanding the role that health inequalities play in screening was emphasised here- the Practice Manager actually went to people's homes and supported bus fare to increase attendance successfully. It is time consuming, but this less engaged population does need more support than others to reach equity.	Psychological interventions, generic professional	
03/03/2021	Work on consultancy case study		Consultancy	
03/03/2021	More work to reach out to Practice Managers to identify where websites can be improved- arranging meetings to discuss feedback.		Generic professional	
04/03/2021	Examining more feedback received from GPs/ Practice Managers and adding to report for final analysis.	Though some feedback is purely practical, it's nice to understand there is a space for Feeds in this area.	Generic professional	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
05/03/2021	Work on consultancy case study - started to look at evaluation		Consultancy	
05/03/2021	Undertaking research to identify places to display health-related Feeds content and contacting relevant organisations. Also had engagement with GP on challenges surrounding information sharing and layout of website and how it could be improved to support patients.	Strengthening interview/ research skills.	Generic professional	
07/03/2021	Childline mentored shift. Listened to a YP with suicidal ideations until her brother was able to take her to Hospital. Also talked to a YP with ME with an emotionally abusive family. Spoke through options and assured her that she was heard and believed.	Was so nervous beforehand but with each contact my confidence to support more independently group. All seemed to have felt supported and thanked me for listening to them.	Psychological interventions	
08/03/2021	GP websites meeting - sharing information across surgeries within a PCN. Also attended Innovation Agency celebration event and received positive feedback for teaching series last year.	PCNs can be really useful to collaborate and reduce workload and this can be emphasised in the use of Feeds to support centralised management. This is a selling point of the project that should be used moving forward, especially in healthcare.	Generic professional	
08/03/2021	Research meeting with Mark. Talked through the data and identified potential statistical tests that could be run.	Research skills (analysis)	Research	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
09/03/2021	Work on research two analysis after meeting with Mark. Still struggling to identify the correct statistical test but I think I might have found a way to look at the between subject factors - sent to Mark for his opinion		Research	
10/03/2021	Put together a report based on engagement with organisations to date. Also attended webinar - Patient and user engagement in the delivery of virtual care.	Seeing it set out in front of me highlighted how difficult it is to encourage response when cold emailing. I know the level is expected but it's still frustrating. Though the webinar wasn't as useful to Damibu as I thought it would be, it was interesting to understand how other organisations have engaged with patients/ users over the pandemic and strengthened the idea that Damibu is doing the right kind of engagement.	Generic professional	
11/03/2021	More work on research two analysis. Finally figured out the correct statistical test to use. Was what Mark advised me but wasn't showing in that way through google searches.	I've noticed my	Research	
11/03/2021	More work on analysis for research one project surrounding healthcare use. Continues to be very frustrating to work out the right statistical tests to be used with the layout of the data but I think I am slowly getting there.	Quantitative analysis skills. Need to keep at it.	Research	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
11/03/2021	Meeting with Practice Manager for a number of Liverpool practices about how the website is used currently, what challenges they face in information sharing and how the website could be improved to support this. She was much more open and willing to support the project including digital flyers than expected.	It's helpful to understand both the end user and Practice Managers experience and this improved skills in interviewing for research and also potentially in consultancy skills (identifying needs).	Generic professional	
12/03/2021	Analysing CATCH data in Cheshire and putting together brief report on downloads for the past year to support commissioning process and evaluation of future relaunch		Research, generic professional	
14/03/2021	Continued literature search for research two. Found some really interesting papers and also kept in mind the findings and saved papers for the discussion.	Research skills	Research	
15/03/2021	Compiling results from discovery project with GPs into a report to move forwards with the project. Also had research meeting with Mark. We tried to find a way to analyse the data in keeping with some of the original aims of the study. Decided to run with specific services to keep the study simple and to reduce family wise error.	Report writing skills. Still finding my way with quantitative analysis but I have come far in understanding. Think giving myself a difficult dataset has helped me to learn so much even if I am still struggling.	Research, generic professional	
16/03/2021	Completed literature search for research two. Was great to get something like this finished as haven't done one for a few years.	Research skills	Research	

6.2 PRACTICE LOG

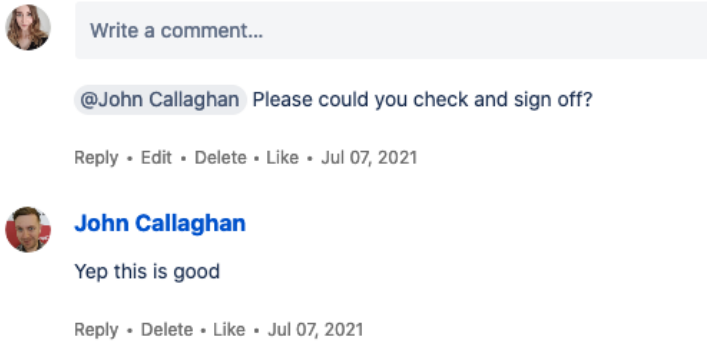
Date	What happened	What I learned	Competencies reached	Placement/ outside
16/03/2021	Research on housing associations across the Liverpool City region. Understanding existing information provision. Housing associations can assist in getting health information to tenants for prevention and treatment adherence for long term conditions. They're also a great way to get local health news out there as tenants need to access the website to make payments and access maintenance. Again, it's about bringing the information to them.	Improved research skills. Was also useful to understand alternative methods for delivering an intervention. This is something to think of moving forwards.	Generic professional	
17/03/2021	Finished putting together an easy one-page explainer for Feeds with a mini case study for Liverpool to send to a contact from a Dementia support organisation. It is the aim that this document will be shared across their contacts in third sector and public services	Was difficult to fit it in to a one-page document and I didn't include everything I wanted to. This helped with concise report writing and keeping within word limits.	Generic professional	
18/03/2021	Childline training session. Work on how to guide a young person towards a consensual referral. Also, skills-based practice using goldfish bowl again. Took it slower and felt a little more able to deal with the situation.	Still need to work on not panicking but I think the thing I need to do here is practice. I know I didn't say anything wrong it was just hesitation and stuttering.	Psychological interventions	
18/03/2021	Met with Wirral Council to provide an update on Damibu Feeds. We discussed ways in which it could be used, and I explained how having this information in multiple areas	Was a really good chance to explain Feeds and I was happy I did this well. This helped to further skills in working with professionals from different disciplines	Generic professional, psychological interventions	

Date	What happened	What I learned	Competencies reached	Placement/ outside
	at once would improve accessibility and could get more unpaid carers to access the right support.			
19/03/2021	Researching PCNs - including priorities, structure and existing website offering in order to understand how best to improve information offering across the patient population. I learned that PCNs can have completely different priorities as their populations differ. Also comparing more comprehensive website offerings will help to draw up a bigger picture when deciding on how best to use Feeds to align with NHS guidelines (from GP contract) and also make information accessible.	More work on research skills. Learned again that different patient populations have different priorities and a national or one-fits-all approach won't always work well.	Generic professional	
20/03/2021	Have been working on methods for research two across the course of the week. Been looking at existing similar studies to understand how best to set out a mixed methods paper. Looks like I will need to be concise to comply with journal word counts.	Research skills, understanding how to format to journal guidelines.	Research	
22/03/2021	More research on PCNs including priorities and service specifications. Included reading GP contract, re-read of Long-Term Plan and also academic research	Research skills and more familiarisation with NHS process- this has helped in my role in the past substantially so it's useful to remain up to date	Generic professional	
23/03/2021-24/03/2021	Working on more of the qualitative results		Research	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
23/03/2021	Work on proposal for Damibu Feeds use and PCNs. Calculated time to be taken at each stage and started draft of background.		Generic professional	
25/03/2021	Attended final Childline training session. Learned about distraction and other management techniques for emotional crises. Had another skills-based session using the newly learned techniques	I managed to use PICUP technique to prepare the child by validating their feelings and reassuring, introducing destruction technique, running through the technique with them, and ensuring that they were able and prepared to plan for any future occurrences. One thing I maybe would change was how I phrase things like “that sounds great” or “that's great news”. I'm not sure if that makes it about me and takes it away from empathy a little bit more. I think in this situation I could say it sounds like this is something important to you.	Psychological interventions	
26/03/2021	CATCH app review meeting with Cheshire- this has been a monthly project meeting to identify how to support a second relaunch of CATCH in the area following lockdown.	Practice in multidisciplinary working.	Generic professional	
29/03/2021	Rearranged research one data. I have created three new files focusing on important non-covid symptoms including chest pain and mole (change or new). I could use this data to look at appropriate healthcare usage. I can't think		Research	

Date	What happened	What I learned	Competencies reached	Placement/ outside
	of how to analyse with DVs so arranged meeting with Mark to discuss next week.			
Signed by line manager: John Callaghan for within- placement work completed 01/03/2021 – 31/03/202				
April 2021				
07/04/2021	Literature search for chest pain and healthcare access during the pandemic - this is a potential avenue in which I can take my data.	Research skills	Research	
08/04/2021	Work on Consultancy case study - identifying areas on which to reflect		Consultancy	
09/04/2021	Research meeting with Mark - ran through analysis on spss together but nothing came from it at all. Chose to abandon the project	I've gained a lot of knowledge on quantitative analysis over the past few months, I can use SPSS a lot more freely. My mind can think in a way of how could I analyse this, so I think that it's just a really	Research	



6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
		big learning curve but it's a shame that I've spent so many hours.		
11/04/2021	Looked through Childline training sessions and condensed notes in preparation for shift. Included crisis management and suicidal feelings.		Psychological interventions, generic professional	
12/04/2021	Liverpool CCG GP website project meeting and Wirral Council Feeds pilot project meeting	Multidisciplinary working	Generic professional	
13/04/2021 - 14/04/2021	Work on Cheshire PCN proposal following feedback received. Working to offer the project on two different levels - integration of Feeds system or a full discovery project		Generic professional	
20/04/2021	Have spent the past week and a half continuing to work on the PCN proposal document. This has included identifying work to be undertaken (discovery, development, deployment and post engagement) and ascertaining costs for the project on the two levels.	It's been useful to calculate project costs and understand where the hours need to be assigned to each stage of the process. It's definitely helped in bid writing experience.	Generic professional	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
21/04/2021	I updated the CATCH presentation to include updated data and relevant information for professionals engaging so they are able to feel more ownership. Also discussed how we could use Feeds to market the idea of information sharing across the health sector as it has been difficult to get the idea across	It was useful to sit down as a team and understand exactly where the ideas are heading. It's an opportunity to use Feeds to foster new relationships and exciting opportunities but this meeting helped us to address how we can go about this. I reflected on my previous experiences delivering this presentation and had started to make it more interactive, but I had to find a middle ground as it will just be made into a video	Generic professional	
22/04/2021	Engaged with weight management session provided by Lisa.	Found it really informative and helped me to make sense of thoughts I already had surrounding this.	Psychological interventions	
22/04/2021	Spent more time updating the CATCH presentation for a video to be shared across Cheshire EAST and South Cheshire. This is in replacement of webinars and can be shared more widely. It means I don't have to rely on having to present CATCH to make sure professionals understand it. Also had a task and finish meeting based in digital flyers to be created for GP websites across Liverpool.	Improved presenting skills and helped to translate concept of CATCH and progress in an accessible and timely way. Improved multidisciplinary working and consultancy skills	Generic professional	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
23/04/2021	Meeting with Knowsley council regarding potential recommissioning of CATCH. I explained the project in detail as the attendees were new to the role and answered all questions, including how I thought best to promote the app and how it could be used effectively. Afternoon spent with more work on PCN proposal document	Opportunity to lead a meeting and presenting skills	Generic professional	
25/04/2021	Spent some time writing up a chunk of the discussion for research two. Forced myself to write something to address the writer's block and after a bit it started to work	Research and report writing skills	Research	
26/04/2021	Recorded CATCH informative video for professionals. As mentioned last week this involved drawing down data and specifying how CATCH can help both parents and professionals' barriers. Also submitted PCN proposal. Meeting with diabetes service in Liverpool CCG to discuss creation of a digital flyer.	Presenting skills, bid writing/ report skills/ multidisciplinary working to support behaviour change	Generic professional	
29/04/2021	Few days researching accessibility standards for websites and best way to measure this for GP websites project to make sure it is fully inclusive to the clinical population	Research skills, also helped to understand how important accessibility is and how the process should be implemented into any materials produced	Generic professional, research	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
Signed by line manager: John Callaghan for within- placement work completed 01/04/2021 – 30/04/2021				
May 2021				
04/05/2021	Monthly CATCH reports. Also considering how to integrate CATCH with Feeds for self-management	Report writing skills	Generic professional	
06/05/2021	Accessibility research. Also had digital flyers task and finish meeting.	Multidisciplinary working and research skills	Generic professional	
07/05/2021	Accessibility research over the past week. Looking into WCAG guidelines and doing desk-based research to identify any common accessibility concerns in website design.	Research skills (see 11/05 for learning)	Generic professional, research	
11/05/2021	Finished work on accessibility research including formulation of accessibility design and checking process	Research skills. Learned about accessibility processes and how important they are for everyone to be able to engage in health promoting content online.	Generic professional, research	

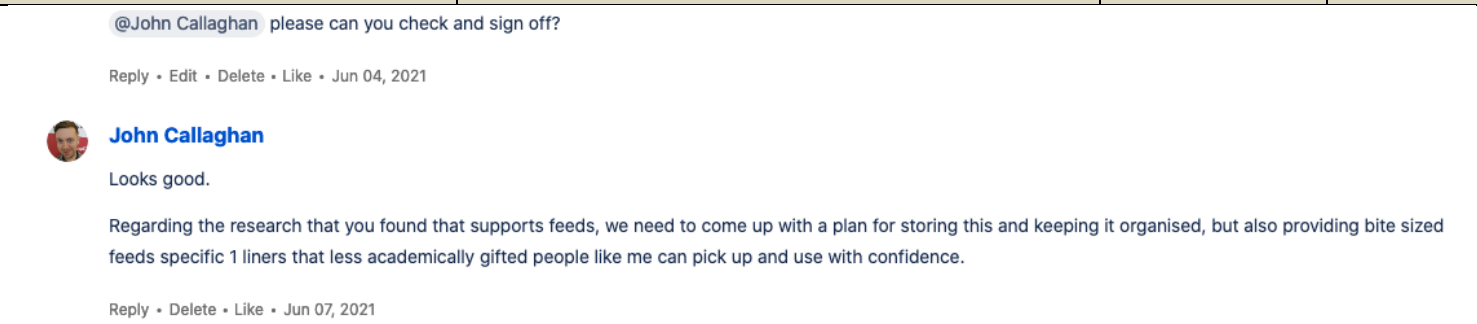
6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
12/05/2021	Started research for blog post - looking into how people access health information, what is trusted, not trusted and ways of making this more reliable through reducing misinformation	Research skills	Research	
16/05/2021	Finalised team sports research paper and sent to supervision for checking. Still struggling to get it down to the specified word count.		Research	
17/05/2021	More research for blog post and work on GP websites update report		Research, generic professional	
18/05/2021	Finalised GP websites update report which included analytics and next steps. Work on identifying Sefton GPs in preparation for submission of proposal.		Generic professional	
20/05/2021	Meeting with adult mental health team at CCG and Mersey care in order to decide on most appropriate direction for mental health flyer on GP websites.	The team wanted to direct patients away from the GP website to the Mersey care website and I think more work needs to be undertaken to ensure that digital flyers don't just turn into links. More research could be required.	Psychological interventions	
21/05/2021	Identifying content for schools and reaching out.	Research skills	Generic professional	
23/05/2021	Started to do some more work on my consultancy case study and report		Consultancy	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
25/05/2021	Research into the use of online information and impact of links in response to learnings from 20th May. Struggling to identify relevant studies	Research skills. I found that information processing theory suggests that information overload can influence engagement with health information intake and searching.	Research	
26/05/2021	Company discussion about digital flyers and the nature of information to be shared with the patient population in light of Children's mental health flyer. Also, time spent putting together CATCH comms plan for June to include sharing health information		Psychological interventions, generic professional	
27/05/2021 - 28/05/2021	CATCH comms plan to include scheduling posts. Included more posts relevant to pregnancy to support Cheshire maternity push.		Generic professional	
29/05/2021- 30/05/2021	Work on consultancy case study and preparation of consultancy report		Consultancy	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
Signed by line manager: John Callaghan for within- placement work completed 01/05/2021 – 31/05/2021				
June 2021				
01/06/2021	Scheduled comms plan, monthly CATCH reports and tested new version of CATCH		Generic professional	
02/06/2021	Creating yearly report for Feeds. Looking at existing analytics and how best to present, understanding if there are any causational links and any associations and identifying further data needed.	With the minimal data we have available it was challenging to produce a comprehensive report. Think this will need relaying to the wider project group to search for ideas.	Generic professional, research	
02/06/2021	Childline shift. Supported contacts struggling with mental health and self-harm and with problems presenting at school. Used motivational interviewing skills and motivated change using stages of change model and miracle question.		Psychological interventions	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
03/06/2021	Spending more time on consultancy report and considering feedback from Mark on how to improve layout and write up		Consultancy	
03/06/2021	Research into Liverpool City Region organisational websites and understanding what information they could benefit from	There are lots of avenues to get health information out to more of the population.	Research, generic professional	
04/06/2021	Creating a process for how to pitch employee's Feeds ideas			
06/07/2021 - 07/06/2021	Working on consultancy report and integrating seven c's of consultancy framework into the write up.	I was panicking and blanking and struggling with feelings of am I good enough. This led to procrastination and me stepping away from the work to go and exercise and relax for the night. This is something that happens often and makes me feel quite unproductive. However, I came back to it today and managed to see it in a different light, adding a lot to it and managing to ascertain a good direction in which to take the case study. Sometimes stepping away from a (non-urgent) problem and trying to get out of that negative headspace can be really useful in allowing my head to process the information and come up with solutions.	Consultancy	

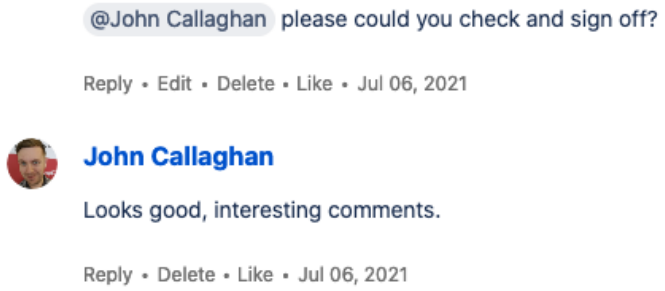
6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
07/06/2021	Looked at schools for Feeds, contacted Archdiocese of Liverpool and created survey for teachers to investigate what information is best to support change through websites	I reflected on engagement with previous surveys and understood that in order to get a good response, that I need to keep the survey short (especially with teacher schedules).	Research	
08/06/2021	Research for blog post and started to write introduction. Also attended digital flyers project meeting with Liverpool CCG team		Research	
09/06/2021	Researched GP surgeries in Salford (including website and CMSs) in preparation for submission of proposal to improve GP websites. Also took part in Liverpool CCG Feeds meeting, which involved discussion surrounding progress to date and actions needed to measure success and complete annual report.	There was a discussion surrounding how to distribute the survey (in LCCG meeting) and a few attendees said that they would be able to support. Sharing challenges is important in multidisciplinary working as there are often people who can a) see if from another perspective and b) provide the right contacts to increase engagement.	Research, generic professional	
10/06/2021	Finished GP/PCN research for Salford services and also corroborated data for LCR project report.		Research	
11/06/2021	Had a shift at Childline supporting a young person with compulsions who hadn't sought support before. I asked open questions and provided reassurance and from this encouraged her to seek support from her GP. She thanked me for listening to her when other people didn't.	I felt able to really use my motivational interviewing skills and felt really competent as a Counsellor. This is a case I will positively reflect on moving forward.	Psychological interventions	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
11/06/2021 + 14/06/2021	Undertook research of Sefton companies for which Feeds could support.		Generic professional	
14/06/2021 - 18/06/2021	Researching organisations in Liverpool City Region who could benefit from Feeds content/ distribution of content. This included corporate organisations, more schools, and third sector organisations and it spanned across lots of industries. The aim is to reduce the spread of misinformation and get the right content to more people (i.e., mental health information etc.)	It was useful to be creative in thinking how an organisation could implement Feeds onto their website or where they could share their information. Receiving rejections and being ignored is still something I find difficult to deal with.	Generic professional, psychological interventions	
21/06/2021	Meeting with children's mental health team to discuss what can be done to improve the digital flyer.	Though I didn't engage much in this meeting, I learned a lot about how the formatting of the digital flyers can work and how is best to display the content so that it avoids duplication and information overload.	Generic professional, psychological interventions	
22/06/2021	Team discussion surrounding the future of CATCH in Cheshire and how best to move forward. Also attended meeting with diabetes team for digital flyer and had engagement with Baltic Triangle website manager for using Feeds to share more information.		Psychological interventions, generic professional	
24/06/2021	Researching GP practice structure in Cheshire and Merseyside for NHS England proposal for Feeds (started		Research, psychological interventional	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
	this yesterday). Also had meeting with adult mental health team to discuss digital flyer and next steps.			
25/06/2021	Participated in CATCH meeting with Cheshire CCG. Discussed plans for relaunch and how to support evaluation.	Skills in multidisciplinary work.	Generic professional	
28/06/2021	Work on Consultancy case study – adding more reflection in response to feedback.		Consultancy	
Signed by line manager: John Callaghan for within- placement work completed 01/06/2021 – 30/06/2021 				
July 2021				
05/07/2021	Bringing together CATCH analytics on app usage to share with Cheshire		Generic professional	
06/07/2021	Preparing CATCH monthly reports and adding more to survey to strengthen evaluation		Generic professional	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
07/07/2021	Attending meeting for GP websites project and discussing contents of annual report with the group. Also adding more information to the annual report	Improving skills in multidisciplinary work	Generic professional	
08/07/2021	Engaging in adult mental health digital flyer meeting, running engagement with teacher in relation to school websites research and reviewing tender for Innovation and Improvement fund with the intention of submitting Feeds	I got the chance to practice open questioning and interviewing skills.	Generic professional, research	
12/07/2021	Work on Salford innovation fund bid, including carrying out relevant research for rationale. Also ran engagement session for Feeds with Liverpool Chamber of Commerce	Supported literature searching skills.	Generic professional, research	
13/07/2021	More work on defining proposal for Salford innovation fund bid		Generic professional, research	
14/07/2021	Watched long-covid training for potential role at hub	Learned how to apply health psychology theory in practice to people with a long-term condition	Psychological interventions	
16/07/2021	Childline shift. Supported a few young people with suicidal thoughts.	One call in particular really helped me to understand the power of grounding techniques. The YP was actively suicidal, and I used the 5,4,3,2,1 technique with her and as she was talking to me, she visibly calmed down with each question. This is something I'm going to bring forward with me.	Psychological interventions	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
18/07/2021	Amending research paper in line with comments and reformatting to fit journal guidelines.	I'm finding it really difficult having to remove lots of the work I've worked really hard to include and that I find really valuable to the study. However, this is all part of the process and being ruthless to cut down page counts will not only help with what to remove in future but will help me to write more concisely.	Research	
20/07/2021	Engagement with teacher in order to understand website provision and information that could support parents and children.	It was hard not to guide the interview to get them to say the "right" thing- what my own research identified. I can still see the merit in using feeds on school websites, but reality is that these websites aren't used. This is where it is important to be impartial, but it can be frustrating to not be in the mindset of "I know best". This is what research is for.		
23/07/2021	Challenging Childline shift with two very high-risk callers.	Spoke to one high risk caller who was evidently in emotional crisis and came across as actively suicidal. I found it really difficult to focus them and to get them to answer my questions, but I don't think I would do anything differently as the call did end well. I did need the support of my supervisor to figure out what to say so I think this kind of	Psychological interventions	

Date	What happened	What I learned	Competencies reached	Placement/ outside
		experience will help me to grow both as a ChildLine counsellor and in my upcoming role in community mental health.		
28/07/2021	Have spent the last two weeks in work creating the bid to bring Feeds to Salford GP practices as part of their Improvement and Innovation fund. This included research and writing a project overview, summarising previous projects, calculating costs and aligning priorities.	Although it has been a slow process it's been one that I've actually enjoyed and having that time and being able to be thorough resulted in work I was proud of that also had good feedback. A lot of it was cut down before submission which I understand why (needed to be shorter to keep attention) but it still was hard to accept as I had put the time into it. I'm not sure if it's better to start with a more embellished submission and cut It down to make sure all the information is included, or to keep it basic from the offset which will be less frustrating for me. This applies to future bids and research projects.	Research, generic professional	
August 2021				
02/08/2021	Cut out section of research two report to compress for journal guideline of 35 pages	This was a bit frustrating as I've spent so long on that section analysing over 100 responses, but I learned a lot myself and improved my research skills, so this wasn't a waste of time for me.	Research	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
12/08/2021	Reading and making notes about dialectal behaviour therapy. Also had introductory meetings with the other Assistant Psychologist and the Trainee Clinical Psychologist.	Have found reading more into DBT really interesting- it's very different to the person-centred counselling techniques used at Childline but I can see how this form of therapy does really sit well with my own values- promoting acceptance whilst pushing for change. I'm really interested in seeing how I can use it.	Psychological interventions	
16/08/2021	Observed phone call assessment and multidisciplinary team meeting.	Found the assessment really interesting and I could see how much of an impact the service users' mental health was having on her life. One thing I did find really helpful was seeing how my colleague kept the assessment on track even when the client's thoughts and words were racing, and she just wanted to share. It will be difficult I think not to give as much space to talk in the assessments, but I could see how it was important to run it this way.	Psychological interventions	
17/08/2021	Observed coping skills group session and face to face ACT session.	it was really interesting to see how the different methods were brought into the session. Although it did help me, I felt like an additional barrier for the client at times as I could tell that he was hesitant to share things. However, I wasn't at previous sessions, and it would probably be wrong to make	Psychological interventions	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
		these assumptions. Overall, I did think I learned how to apply some ACT and mindfulness theory in a therapy session		
18/08/2021	Attended staff meeting and MDT meeting.	Still finding it quite hard to follow, especially as I don't have access to the information discussed yet (IT problems) but it's useful to see how the MDT works		
16/08/2021 – 25/08/2021	General reading surrounding DBT, CBT and ACT around meetings	It's been really interesting to read about therapies in more detail and I can see how DBT is applied to the coping skills sessions run by the service.	Psychological interventions	
20/08/2021	Childline shift. Took four contacts including phone calls and online chats. Young people presented with anxiety, embarrassment and depression but no high risk.	I spoke to one YP who was really difficult to engage, giving me one or a few word answers. I continued to ask questions that were as open as possible to encourage sharing and the tone did improve as the conversation went on but then dropped again. Working with YP like this offers practice for ways in which to explore but I also need to know that there is only so much that I can do as a Counsellor, and I shouldn't take disengagement personally all the time.	Psychological interventions	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
24/08/2021	Attended social GGRRAAACCEEESSS training which included teaching on how to apply the model and some breakout discussion.	I found the training really useful. I'm already conscious about socioeconomic differences and how they affect but this made me reflect a lot about the number of differences that can influence how a person/ therapist reacts. It's something that I'm going to look into further.	Psychological interventions	
25/08/2021	First clinical supervision	I found it really useful and I'm looking forward to having a space to talk through patient contact. I think having an objective opinion will help with any ruminating, will aid decision making and build confidence in my own decisions and will help me to offer the best care to patients.		
27/08/2021	Childline shift – I supported very different contacts, including someone who was worried for a suicidal friend, someone struggling with controlling their emotions and also someone who had found out that their grandad didn't have long left to live.	It's testing to have completely different contacts but what's important is that I am there to listen and to support change if needed. I struggled with the contact who was grieving, and I wasn't sure how best to support. I encouraged sharing good memories and advised it was okay to cry and to talk and afterwards I looked at the ChildLine website to find more suggestions- it suggested a memory box and writing things down which I will take forward.	Psychological interventions	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
30/08/2021	Work on systematic review – identifying whether subject matter (self-help resources for pain catastrophising) is worth taking forward.	Struggled to find the right kind of studies with the words I was using but by the end of the day I had figured out some search terms- improved skills in research and writing.	Research	
31/08/2021	Spent some time reading up on CBT, in particular behavioural activation, in preparation for a potential upcoming piece of work.	Added to my basic understanding of CBT and behaviour change. Took my time to read through and summarise.	Psychological interventions	
September 2021				
01/08/2021	Spent the day in the office and attended a number of meetings including a group supervision, a clinical supervision, an MDT meeting and a psychology team and managers meeting. An outline of the plans for an upcoming coping skills group which I will be co-facilitating with two other Assistant Psychologists was discussed.	So far, I've found a high-level of reflection and team discussion has been so important in helping me to understand processes and what's expected of me, and also to feel less overwhelmed in the role. It's something completely new to me and is what I'd love to take forwards. Was also helpful clinical supervision to learn about linked services and differences between all of the therapies offered.	Generic professional	
04/09/2021	Work on systematic review. Identified a potential research question and contacted supervision prior to moving forward	Improved research skills.	Research	
06/09/2021	Attended MDT meeting and more reading on CBT	Finding the book really useful to strengthen my understanding of CBT. There are lots of examples of questions to ask and today I read about using	Psychological interventions	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
		some of the methods surrounding addressing automatic thoughts as a practitioner. It was hard to process doing but something I will be aware of.		
08/09/2021	Group assistant psychologist supervision, MDT meeting and psychology team meeting	Communication skills and MDT working.	Generic professional	
10/09/2021	Childline shift. Supported two young people with suicidal thoughts. One exited the chat unexpectedly so after risk assessment by supervisor wrote an email to offer more advice and support to encourage return to Childline. Also supported change in someone who wanted support with obsessive thoughts but didn't know how to do it.	Struggled a bit on chats today with coming up with the right thing to say so felt I took a bit longer to reply than normal. However, I think that this was also partly due to contacts not engaging fully with questions. I used supervisor support appropriately but didn't feel like I over-relied on, and I think outcomes from tonight's chats and calls improved my skills as a counsellor.	Psychological interventions	
13/09/2021	Peer supervision – spoke about boundaries and how rigid practices could negatively impact patients	The discussion spoke of the importance of community and although I'm still not sure of where I would stand with sharing my own experiences, I learned about how boundaries can and have impacted therapeutic relationships.	Generic professional	
14/09/2021	Discussion with Mark surrounding upcoming research projects and placement and work on preparing manuscript for submission to journal.	First experience of readying a manuscript for publication. There are lots of little things to think about, but I think now I know it will be easier next time.	Research	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
15/09/2021	Group supervision with Assistant Psychologists re upcoming coping skills group, MDT meeting, psychology team meeting and initial placement visit/ clinical supervision (discussed areas in which to hit remaining competencies and how to bring health psychology into the service).	Improved MDT working skills and identified areas to work within the doctorate moving forward.	Generic professional	
Signed by Clinical Supervisor: Dr Kyle Boyd for within- placement work completed 12/08/2021 – 15/09/2021				
17/09/2021	Had a screening appointment with a service user in anticipation of coping skills group next week. She was doing well and was excited to take part. I created a loose script beforehand to make sure I covered everything which really helped, and I was surprisingly not nervous right before the call which I thought I would be.	Figuring out what I was going to say was really helpful however I know I shouldn't over-rely on this. It was a good appointment to start with as there was no identified risk or lack of engagement on the call, but it's helped me to feel more at ease for the next patient contact.	Psychological intervention, generic professional	
20/09/2021	Finalised preparing manuscript and submitted to journal of applied sport psychology		Research	
20/09/2021	Attended MDT meeting, discussed upcoming coping skills group plan with other facilitators (starting Fri)		Generic professional, psychological interventions	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
21/09/2021	Research on sleep hygiene in preparation for potential self-care resources. Also called service user to arrange initial session for potential 121 intervention (arranged for 4/10)	Looking at the service users notes, she has a number of physical conditions that impact on her life significantly. I'm both excited and anxious to work with her (being my first one to one patient) but I'm confident I have the support to do this.	Psychological intervention	
22/09/2021	Attended MDT meeting, group supervision and psychology team meeting. Took minutes for meeting and followed up actions including supporting potential referral to another service.		Generic professional	
23/09/2021	Spent some time on Rio today going through Assessments and progress notes for members of the coping skills group tomorrow to understand how the sessions could help.		Psychological interventions	
24/09/2021	Co-facilitated first coping skills group session. Only three of thirteen turned up and a further two contacted with technical problems who will try next week. This group involved introductions, explaining what the group is and working together to identify and set ground rules. As this is my first group, I will not be delivering as much content, but I will be observing, contacting members and engaging in discussions. I took responsibility for entering progress notes afterwards.	I felt naïve in thinking that at least 10 service users would turn up to the group but was told that this is an unusually low turnout for a first session. It might be useful to understand why turnout is so low and how this could be improved.	Psychological interventions	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
24/09/2021	Childline shift. Contacts include YP with an anorexia diagnosis who felt let down by people around her and wanted someone to talk to and YP who was being physically abused by a parent. I provided emotional support for both and encouraged to come back to Childline so we can support further.	Improved counselling skills. It's hard to bring a contact to a close when there is so much more to talk about and you don't know if the YP will come back for subsequent sessions but I'm starting to understand that it isn't my responsibility to make them come back, but to set the foundations and pick up further from other counsellors.	Psychological interventions.	
25/09/2021	More work (through the week too) in identifying search terms and working out exact question for systematic review which included further review of the literature. I found a recent (2020) SR asking a very similar question to what I had decided upon and so I may have to take this in a slightly different direction.		Research	
27/09/2021	Came into Moss House to observe some sessions – all DNA			
29/09/2021	Attended group supervision MDT, when it was discussed whether to contact DNAs from coping skills group. We discussed how following up DNA's might be useful to check if they had trouble logging in but agreed doing this every week would constitute more work when it could be that people just aren't activated to attend at this point. I called DNA's afterwards to check and managed to reach a	Re: calling DNA's, it's difficult to not know how the service user is doing, particularly as they are a vulnerable population, but they do also have regular contact from the wider team and are aware of what to do if they feel unsafe. Re: the assessment, I found it really interesting, although it was already done in part, I could see where the service user	Psychological interventions, generic professional	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
	few who intend to attend on Friday, but I am still unsure if this will happen. chaired psychology team meeting and observed a psychology assessment.	was struggling and that they really wanted and were working on change, and it was useful to watch how Charlotte reacted calmy with compassion whilst continuing to move the conversation forward.		
October 2021				
01/10/2021	Co-facilitated second coping skills group which taught participants to understand emotions. Turnout was again poor but those who stayed remained engaged throughout.	I held an observational role, and this helped me to understand how best to deliver the content	Psychological interventions	
01/10/2021	Edited research two to fit new journal guidelines of 25 pages. I have managed to get the page count to 30 and am struggling to find where else to remove content.	As before, it's hard removing work but amending to fit article guidelines is teaching me how to word things concisely and to acknowledge that it is okay to leave some things unsaid.	Research	
03/10/2021	Work on readability paper- got started on literature review	As a migraine sufferer myself I'm finding the literature review interesting. There's lots of evidence out there. I'm also now keeping in mind journal guidelines from the start, so I don't have to cut down on as much text.	Research	
04/10/2021	Observed coping skills session for Alex (pseudonym) run by psychologist (line manager) and ran first coping skills session by myself with line managers observation and brief input. Discussion afterwards surrounding how to move forwards with the coping skills intervention.	I found the session I delivered challenging and caught myself not showing enough empathy and sometimes asking too many questions. However, not all service users will talk lots and I need to be able to adapt to this. I got good feedback following	Psychological interventions	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
		the session and will look into cbt “hot cross bun” to potentially cover in session two.		
05/10/2021	Work on resources to support CPA patients and those on waitlists	I want to be able to put lots of information into the resources but at the same time I want people to want to read them. I’m trying to keep language simple and provide real life applications where applicable.	Psychological interventions	
06/10/2021	Was given list of service users for one-to-one coping skills sessions. Spent some time reading through clinical notes and documentation to identify how coping skills could help them moving forward. Also attended group supervision where low attendance at coping skills group was discussed, as well as how to measure effectiveness.		Psychological interventions.	
08/10/2021	Co-facilitated third coping skills session. It was a poor turnout again but the two service users who did attend engaged really well with the material. The session focused on the fight or flight response and used cbt techniques to understand how we react to events and where this could lead. Also prepared for coping skills session with service		Psychological interventions	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
	user on Monday- focus on low mood and behavioural activation.			
Signed by Line Manager Charlotte Cox (in absence of KB) For within- placement work completed 16/09/2021 – 08/10/2021 CC				
11/10/2021	Psychology team peer supervision- session on ACT and using it in the context of relationships. Also, clinical supervision where we discussed how to move forward with patients for coping skills 1:1s	I've been reading up on ACT and find it really interesting as a concept in terms of being able to accept thoughts and emotions how they are. The delivery of the session of using it in the context of a real case to manage relationships will be useful to take from moving forward and could be used in coping skills sessions.	Psychological interventions	
12/10/2021	Work on research- literature review on migraines and readability of healthcare information		Research skills	
15/10/2021	Co-facilitated group coping skills session based around thinking styles. Managed communication with one member of the group where it was unclear if they were present (no camera and no reply to any questions) whilst ensuring rest of group were unaffected.	Learned how to deliver this session for future groups, the AP delivering the session as the main facilitator showed some really good reflections that I'm going to take forward in 1:1 and future groups.	Psychological interventions	
18/10/2021	Work on clinical audit proposal form. Looking to examine diversity of service users referred to Moss House and to psychology.		Research	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
19/10/2021	Have spent some time this week conducting literature review for readability of online health information for migraine.	Practiced literature searching.	Research	
20/10/2021	Group supervision where non-attendance and confidentiality were discussed. Also observed coping skills session which focused on hearing voices. CBT skills were used to rationalise thoughts in response to the voices.	Although I knew that confidential space was important, I did not consider this in the context of needing to leave a camera on. Seeing the person is important not just for safeguarding but also to stay in line with data protection.	Psychological interventions	
21/10/2021	Coping skills session two with Alex. This was my first 1:1 session facilitated alone. General chat about how they had been doing. Helped them with a referral to RASA to support reporting childhood sexual abuse. Ran through some behavioural activation work, teaching the connection between thoughts, emotions, behaviours and the physical body. Alex expressed that she wasn't aware of the link and seemed interested to know this. Worked to produce a plan for new behaviours over the next week and discussed next session- to talk through sleep.		Psychological interventions	
22/10/2021	Emotional coping skills session five. Again, only two service users attended this session, one of which was not in a confidential space for much of the session. General	Found the clinical supervision session really useful as it helped to give me a clearer way forward. I was focusing on delivering content but actually taking	Psychological interventions	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
	interaction and engagement were low, and the facilitators had to provide examples regularly because of this. Meeting with clinical supervisor in afternoon to discuss work with SUA. We talked about formulation and structuring of the next session and discussed how to incorporate behaviour change in the sessions to attain psychological intervention competency.	time to run through formulation is important to figure out how best to help someone.		
22/10/2021	Childline shift. Had three long contacts. One was struggling to accept the loss of grandma, one who wanted to talk about family relationships and one who was struggling to stop drinking alcohol. Used the Childline counselling tool to provide emotional support and support change.	Struggled to leave the YP who was having alcohol problems at the door as she was drinking very heavily at only 15 and was alone and drinking heavily at the time of our conversation. I had guidance from a supervisor throughout and he made the decision not to break confidentiality as she was coherent and meeting up with friends, but I could hear that she was struggling and I wasn't convinced that she would remember the conversation when she sobered up, which was her agreement to call ChildLine after school before she started drinking next time. I spoke about it in debrief and they helped me to understand that the YP had contacted Childline before, and that she would likely	Psychological interventions	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
		call again. I think debrief is important to rationalise those thoughts.		
23/10/2021	More work on literature review – migraine online health information readability	Practiced research skills	Research	
27/10/2021	Observed ACT formulation session. Noted questions asked and areas explored and discussed with colleague what the next steps are. I will be observing these sessions moving forward. Clinical supervision afterwards where note taking was discussed. I was worried about my memory if I didn't take notes, but I understand that there is mixed consensus on the amount of detail to go into notes in electronic record. Agreed that any notes away from Rio (i.e., for doctorate, memorising) should be completely anonymised and I would check with BPS. Checked later and got the following definition: "Psychologists should make, keep and disclose information in records only in accordance with national policy and legislation, and the policies and procedures of the organisation(s) they are employed by or working in collaboration with."	All notes taken during sessions with patients should be recorded only in Rio (electronic record system).	Psychological interventions, generic professional	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
28/10/2021	Third session with Alex which was used to work more on formulation as per clinical supervision. I asked more behavioural activation-based questions and have more of an idea on how to move forward.	It's important to take time to fully understand a patient's situation, and asking these questions definitely helped to solidify goals and work together.	Psychological interventions	
28/10/2021	Work on research three. Wrote more of literature review but struggled to find the appropriate statistics. I did eventually find what I needed through searching different terms.			
29/10/2021	Co-facilitated coping skills group six which focused on problem solving. Faced with reduced attendance and received feedback from an absent participant on accessibility of the information. Discussed this afterwards with co-facilitator and in supervision. Also, some work on formulation for Alex to create a potential plan moving forward.			
November 2021				
02/11/2021	Work on research three – readability analysis. Completed literature review and started on methods. I've been struggling to find appropriate resources but after some time managed to find some. It looks like there is a research gap surrounding user search engine behaviour.	Improved research skills. Readability analysis, or any research without participants is new to me. It's not something I thought of doing previously but there are lots of literature gaps and unanswered questions in this sphere.	Research	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
	In order to create methods, I examined existing readability analyses.			
05/11/2021	Prepared and submitted research two to Women in Sport and Physical Activity Journal. This included compiling a cover letter and checking through the manuscript to ensure accuracy		Research	
08/11/2021	Fourth session with Alex with focus on current sleep hygiene habits and asked further questions based on com-b model and theoretical domains framework. This information has given me more of a base for me to plan the intervention.		Psychological interventions.	
10/11/2021	Observed ACT formulation and had space to contribute observations to the patient. Feedback following the session from my colleague was positive. However, I did resonate a lot with the patients' problems and took this to clinical supervision as I wanted to understand how to possess these feelings whilst providing good psychological care. Also observed coping skills session, where patient was in distress. Was useful to observe how my colleague leading the session talked through feelings and used relaxation	As an observer, I have more emotional availability in these sessions, and this could explain why I resonated more. However, if I am to feel this way in a session I am delivering, there is the option to revert to key therapeutic skills to finish the session and seek support from supervision.	Psychological interventions	

Date	What happened	What I learned	Competencies reached	Placement/ outside
	techniques. Assisted by liaising with MDT colleagues to locate a prescription during the session.			
11/11/2021	Work on sleep intervention for SUA. Looked at formulation sessions and identified intervention functions. Looked at existing evidence to support for this patient population. To start intervention with sleep hygiene psychoeducation		Psychological interventions	
12/11/2021	Co-facilitated coping skills group based around distress tolerance. Only one patient attended but they engaged well, understanding that they were the only one left. Reflected with co-facilitator afterwards on the group moving forwards and if changes should be made to content- to be discussed in group supervision. Also, first coping skills one to one session with new patient. I have had a lot of DNAs, so this was a new opportunity to talk about the sessions. I feel like the call went well, although the patient was very talkative, and I found it hard to move on with the session content at parts. However, it was clear that the patient needed to talk, and I got to understand where to focus session content moving forward.	Lack of interaction with the group on the whole part provides a space to reflect on whether this needs to improve. As mentioned, 2 weeks ago, we have received feedback and it will be important to act on that. Also improved skills in patient interaction and use of therapeutic skills. I think I still need to develop skills in how to direct conversation and to know when to move forward and when to sit with something.	Psychological intervention	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
15/11/2021	First intervention session with Alex. I took CORE-OM and WEMWBS measures and explained what they would be used for. Answers suggested some risk, so I explored this afterwards, but these thoughts hadn't changed since they were previously raised. I then provided some psychoeducation surrounding sleep hygiene and checked in with her throughout to check understanding and relatability. She seemed eager to try and asked questions throughout. This part of the education aimed to address psychological capability. I had also spent some time preparing a physical resource encompassing the session which I have shared with her.	Skills in delivering interventions and tailoring resources to the patients' needs.	Psychological interventions	
16/11/2021	Group supervision for emotional coping skills group in the morning where we discussed how to move forward with the next group. This included making plans to look at content. I suggested a compressed version as it is currently 12 weeks which is a big commitment and could impact on attendance. I also called a patient today to ask about disengagement with the group. I knew from notes that the patient was experiencing suicidal ideation, but they shared more with	This was my first incidence where I have had to share risk for suicidal ideation with a colleague. It was reassuring to know that I did the right thing in escalating, and I now understand how this is handled within the team more and how to apply it to future situations.	Generic professional	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
	me on the call including sharing that they had written notes to their sons. I asked if they had made any plans and they said that they had tried to hold themselves under water in the bath and had been googling methods to kill themselves. They did also mention protective factors including their sons who they had a strong relationship with. I advised of what to do in a crisis and although I didn't feel that their life was at imminent risk, I wanted to make sure that they were safe, so I asked my colleague and line manager what she thought about it. She called me and we talked some more about it and decided to make duty aware as well as other colleagues they had appointments with this week. She also called them and was satisfied that the risk was not imminent, but we agreed to discuss next steps in the team meeting tomorrow.			
17/11/2021	Co-facilitated ACT formulation session and observed coping skills session. Chaired psychology team meeting where referrals were discussed and accepted	I'm learning a lot from the observations. The ACT session is helping me to make more sense of how to use formulation by itself and how that can impact on a patient. I can see how you take time to explore what's important to find values and I can see how I can use it in a health context moving forwards. The	Psychological interventions, generic professional.	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
		patient taking part in the coping skills sessions is struggling at the moment and I can understand why it's suitable in this context to manage emotions through talking rather than rushing through with the piece of work.		
18/11/2021	Held two initial coping skills sessions with two very different types of patients. The first was very talkative and could see what she wanted to change. The second came across as very anxious and although she shared a lot, it was harder to see a direction and how coping skills could work. I explained what the sessions were for to manage expectations and discussed what sessions would be suitable.	Developed therapeutic skills. I drew on counselling skills to explore situations fully. Moving forwards, I want to be able to become more competent at knowing where to explore further (if the patient needs) and where to acknowledge and leave for therapy.	Psychological interventions	
19/11/2021	Work on intervention including planning mindfulness session and developing accompanying resource.	Learning to be concise in the development of resources. It can be tempting to include everything, but I need to leave space to talk in the sessions to give context and to understand that I'm not teaching someone all about mindfulness, I'm giving them the tools to practice it themselves.	Psychological interventions	
20/11/2021	Work on research piece – readability of migraine information. Finalising methods and understanding next steps.		Research	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
Signed by Clinical Supervisor: Dr Kyle Boyd for within- placement work completed 11/10/2021 – 19/11/2021				
22/11/2021	Researched and used existing documents to prepare resources and plan coping skills sessions. Also delivered session two of the intervention for Alex. This involved delivering a psychoeducation session on mindfulness.	When asked about home practice, a potential issue of religious conflicts was brought up by Alex who said she would need to discuss with Elders. I researched and consulted with a friend who practices the faith (maintaining confidentiality) and discovered that meditation goes against the faith. This wasn't something I had considered and moving forwards I will try more to understand how any cultural/ religious differences could impact interventions		
	Preparing content			
24/11/2021	Group session with Assistant Psychologists in which content of coping skills group was discussed. Clinical supervision with Kyle (boundaries as AP)	I find group working useful but quite challenging at the same time. I struggle to accept ways of working which I don't think would be useful when delivered and I think with the piece of work we are doing this is something that I could encounter (different approaches to streamlining content). I want to be able to try communicating assertively as I often fester in silence.		

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
25/11/2021	Delivered two coping sessions. Taught skills in mindfulness and interpersonal effectiveness. I had a chance to use learnings from supervision on Wednesday by validating feelings and moving forward with session content.	I'm happy that these sessions helped me grow my clinical skills and share teachings in two distinct areas.	Psychological interventions/ teaching and training	
26/11/2021	Prepared resource on DEAR MAN skill. Was challenging to make it engaging and easy to understand as the acronyms are not memorable to me. However, it's a crucial part of DBT and has evidence to support. I managed to produce a document which I felt was easily accessible and covered all aspects.	Improved skills in delivering complex information in a more accessible way.		
28/11/2021 – 29/11/2021	Conducting searches for readability analysis and removal of duplicates. Noticed that on some sites there is a main link and then sub links – need to consider what links to analyse. Have been left with 34 pages to analyse but with links this will be more	This is a new area of research for me so it improved skills in this area.	Research	
29/11/2021	Session with SUA- intervention session three. We discussed mindfulness and whether they felt able to participate in this in light of religious beliefs- they felt unable to do this. Identified hobby (screenwriting) which could motivate earlier sleep schedule and worked together	It is positive to see that Alex is seeing progress. Understanding religious barriers to undertaking mindfulness is enlightening and although this will mean that I have to adapt my sessions slightly in response to this, I've learned to ask more questions before delivering content.	Psychological interventions	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
	to plan gradual change in sleep time – 1 hour each week- from 1am-10am to 8/9pm – 5am to pursue hobby. Alex commented that they have been following wind down suggestions and feel less stressed and have been sleeping restfully. Also, better coping with pain – despite colder weather.	Also reflecting on changes made in intervention plan, I think its valuable to have to do it at this stage so I can understand the process of adapting more.		
30/11/2021	First coping skills session with new service user. They have bipolar disorder and are stable now but are looking for skills to support relapse prevention. Explored current situation and previous episodes of mania and went through options for future sessions.	I learned a lot about how bipolar disorder impacts on a person. It's something I don't have much knowledge of.	Psychological interventions	
30/11/2021	Supervision with Mark about readability research project. Discussed inclusion and exclusion criteria and readability measures to be used. Also discussed systematic review and my position regarding suitability of search moving forward. Agreed to write an email up to send to Mark first.	Regarding the systematic review, I feel like I'm letting people down, but I know that sometimes a piece of work is unsuitable.	Research	
December 2021				
01/12/2021	Observed ACT formulation session and coping skills session to support a patient struggling to cope with hearing voices. Also participated in team meeting with assistant psychologists to plan ahead for next coping skills	Learned more skills in formulation and working with patients. The discussion in clinical supervision I think will change my thinking surrounding low periods and suicidal thoughts in terms of paying	Psychological interventions	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
	group. I have taken away a module on mindfulness and grounding to take away. Had clinical supervision in the afternoon where we discussed Tuesday's coping skills session and nature of content to be shared. We talked about relapse prevention work and had an interesting discussion about suicidal ideation and potential causes.	more attention to general discussion rather than just responses to risk-based questions.		
03/12/2021	Work on mindfulness session for coping skills group. Compared existing sessions alongside mindfulness resources I have prepared for individual coping skills sessions and used previous teaching experience to make the slides and content more engaging. To be discussed in group AP meeting next week.	I tried to keep the slide text to a minimum as per previous teaching feedback. It was challenging as the slides were information heavy but it improved skills in making complex information more accessible	Teaching/ training, psychological interventions	
05/12/2021	Conducted further research on online self-management resources for patients with chronic pain and drafted overview of research and my own suggestions for further work to pain management service	I prepared a detailed email and received positive feedback from them. Next time, I won't ruminate and worry about not being able to deliver and will instead increase my transparency and understand my boundaries.		
06/12/2021	Looked through resources for self-management of bipolar disorder and mindfulness in preparation for session tomorrow.			

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
07/12/2021	Group supervision. Also, second session with patient working on relapse prevention skills. This session focused on mindfulness and introduced the wise mind and mindfulness skills to act as a base for relapse prevention work moving forward. The patient explained how he doesn't always see hypomania is bad as he can accomplish a lot but acknowledged the effect it has on others. He seems to be chronically busy but has good understanding of his triggers.	I'm learning about bipolar disorder together with the lived experience of it as I go and it's interesting to be doing work with someone who is high functioning and well engaged with the content.		
09/12/2021	Session with service user on stress and worry. Shared information on stressors and physical and mental impact and went through skills on visualising a stress bucket.			
10/12/2021	Conducted screening for emotional coping skills group. This included delivery of CORE-OM via telephone with me asking the questions. I made sure to acknowledge the emotional heaviness of the questions and that they could take a break or stop if needed. One service user got particularly distressed as I went through the questionnaire though said she would continue. I ended up going through some grounding techniques with her which helped her to calm down, but I remained a little concerned that I had left her in a worse place than I got to her. I spoke to Kyle, and	I was happy with how I dealt with the service user's distress in talking to her and going through grounding exercise (5,4,3,2,1) but I felt that I should have stopped the questionnaire sooner than I did. However, on discussion, there are some people who psychology can bring up strong emotions, and there are also people who don't show their distress as transparently. There is a balance and I do think that the measure is important to understand any	Psychological interventions	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
	we discussed risk and Kyle contacted her to ensure that there were no safeguarding issues to be raised.	changes and to aid reflection for both the service user and I.		
12/12/2021	Work on readability analysis. Inputted results into spreadsheet and identified problems with analysis for some pages. I noticed that the software was analysing unnecessary text as one of the entries reading time was hours. To address this, I'm going to have to go back over the entries analysed so far and copy just the text for analysis.	I'm really annoyed that I didn't spot this earlier, but I'm glad that I was thorough in my analysis as without it the results would have not been representative of the dataset. It's meant that I've had more work to do but this is a new area of work and I'll know how the software works for next time. It's helpful that I could see reading time as without it I may not have spotted this.	Research	
13/12/2021	Attended MDT meeting. Also had peer supervision in which we discussed intelligent kindness. Spent some time working out methodology for service evaluation			
14/12/2021	Face to face session with patient focused on relapse prevention for bipolar disorder. Shared information on mood and symptom monitoring and discussed early warning signs for elevated and depressed mood. Was unable to print resources to share on time and had to show some things on laptop and draw things out. I felt somewhat unorganised and don't know if I read this in the patients face too.	Preparation and how I come across myself is an important aspect of the therapeutic relationship. Though I still feel I have a positive relationship with this patient, I want to ensure that I am well prepared in spite of technical difficulties.	Psychological interventions	
15/12/2021	More work on readability analysis			

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
16/12/2021	Conducted research surrounding inequalities in access to mental health and talking therapies in order to add more information to service evaluation proposal. Also, research on anger management and detecting warning signs in this regard. I found some videos and resources, but patient did not attend their session.	Improved understanding of inequalities existing across the country. Evidence supported my own assumptions which I have observed working in the service and also through engagement with literature previously and on social media. It's helpful to broaden search across multiple avenues including literature and anecdotal, whilst knowing the boundaries and reliability of each. Trying to learn to deal with feelings of rejection when patients cancel or do not attend (two today). I think I am improving. I spoke to one patient who cancelled today and said that they only wanted to rebook with me. This was helpful for my own self-esteem, but this is something I want to reflect on further as a practitioner.	Research	
17/12/2021	Completed coping skills screening call including completing CORE-OM measure and worked on intervention write up for SUA. This included running through each session so far and drafting brief overview.		Psychological interventions	
19/12/2021	Spent some more time running through readability analysis. Added more web pages to the analysis in light of		Research	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
	decision to use all relevant health information pages from Migraine Trust landing page. This added 50 more blocks of text to the analysis so resulting total currently stands at 100.			
22/12/2021	Observed final ACT formulation session. The service user had evidently processed a lot and I could see a big change in his thinking styles and how he presented himself.	To see a formulation therapy, take place from start to finish has helped me to understand how to apply it more. I think I still have a lot longer to go before I understand the therapy, but I definitely see how it can be useful in its application for people with a number of different mental health problems including those with limiting physical conditions	Psychological interventions	
30/12/2021	Completed readable analysis on all headache and migraine articles. Due to a number being landing pages and also some consisting of multiple parts, the resulting pages analysed totalled 126 (up from 33). I used word and the readable editor to make sure the text was copied over correctly.	There were a number of reflections I made throughout the analysis which I included in a reflections document. One of the main things I noticed was that it's difficult to truly gauge readability using software. I felt that not all texts were comparable as some were split into different pages where others were as one document (although this is a potential readability issue in itself). I also found that some texts showed good readability, but words were not those generally in everyday text (they were just short words and	Research	

Date	What happened	What I learned	Competencies reached	Placement/ outside
		sentence). All of this can be used in limitations and suggestions for future research.		
31/12/2021	Calculated averages for readability analysis within links in which multiple pages were included. This left me with the original number of sites. There are some pages which are from the same website so need to decide whether to group these together or leave as is. Also corrected practice diary transcriptions from previous audio recordings.	Research skills	Research	
January 2022				
02/01/2022	Conducted brief search and design of group-based intervention. I want to look at increasing fruit and vegetable and water intake using a mix of practitioner led and self-help resources. This will be based on the transtheoretical model. I submitted my ideas to Mark for his thoughts and started design on habit tracking resource.		Psychological interventions	
04/01/2022	Worked on results section for readability analysis. Reviewed published readability analyses to understand detail required and general length of papers published to journals.			

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
05/01/2022	Work on bringing presentation together for coping skills group, amending styles to fit a coherent design. Also attended MDT meeting, psychology team meeting and clinical supervision. Matters discussed included training sessions to be provided to the MDT, how to respond should I become emotional with a service user and also potential subjects for systematic review.	Regarding the presentation, I'm looking through slides and I feel that people aren't putting effort into their own content. It looks like information has just been jumbled on a page without thought for how it will translate in the delivery. However, I am wary that I have had experience in teaching that others have not, and it is my role to bring things together. I know I need to trust other points of view I was concerned about how to respond should I become emotional in response to a situation I have familiarity with (in this case a service user whose mother has dementia with losing my own grandma before Christmas who had dementia). I feel more confident in acknowledging and potentially exploring the service user's response to this (see practice diary for more information)	Teaching/ training	
06/01/2022	First coping skills appointment with new service user. She has a lot of chronic pain and mobility issues as a result of nerve damage caused by a stroke. She was very anxious and emotional at times, especially at the start. I allowed her to talk about her experiences and emotions and she	I'm trying to consider what has been discussed in supervision and not follow a rigid structure all the time. I felt that allowing the service user to talk more this session was important and allowed her to feel more comfortable in our therapeutic relationship. I	Psychological interventions	

Date	What happened	What I learned	Competencies reached	Placement/ outside
	expressed that she felt better for coming and taking the first step.	did still get the chance to briefly talk through coping skills, but I need to make sure I allow time to talk through expectations more. I can do this by validating and explaining that, for a little bit, I need to tell her this/ go through that, but that doesn't mean that what she is saying is unimportant and it can be talked about at another time (if safe and suitable).		
07/01/2022	Finalised group presentation. Also drew together some session ideas to provide training rooted in health psychology for the MDT. I have suggested "understanding the relationship between brain and body", "improving motivation to engage in health behaviours" and "sleep hygiene". I have since had feedback that all sessions would be useful but improving motivation to engage in health behaviours would be their priority. This is to be discussed in the psychology team meeting.		Teaching/ training	
08/01/2021	Spent some more time understanding the design for an online intervention in light of comments received from Mark and Tara. I intended to provide the intervention to a small group (approx. 20) but I now understand that in order to increase effect size I'm going to need to aim to			

Date	What happened	What I learned	Competencies reached	Placement/ outside
	provide it to around 300 people. This obviously impacts on how I can provide the intervention and I will have to take away some of the personalised features (i.e., overview of progress at end and possible interaction in the zoom presentation). This is frustrating as I thought that the personal factor would be important (increasing connectedness)			
10/01/2022	Had a peer supervision session on the topic of working with veterans. Topics including relatability of experiences, anger and the issue of masculinity were discussed amongst others. First session ran jointly with colleague in the afternoon with a service user who is a Hillsborough survivor. It felt emotional and he was evidently still very close to the trauma of that day. He talked about not having any hope or wanting to be happy but there were evidently glimmers of hope throughout the session. I am glad that I observed for the majority of this because it was helpful to see how my colleague handled his frustration, repetitiveness and interruptions with patience and validation.	I found the discussion within the peer supervision session useful. I've never worked with a veteran, but I understand that the trauma they may have experienced could be extensive. It's given me lots of thought in anticipation of any future service users who I may work with. Looking back at the supervision in relation to the service user's session, there could be some similarities drawn in that Hillsborough survivors survived a collective trauma (to some extent) and subsequent instances of having to live through it publicly.		

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Date	What happened	What I learned	Competencies reached	Placement/ outside
11/01/2022	Fourth relapse prevention session. This is the first service user for whom I'm coming to the end of level 2 therapy for, and I can see how the sessions will come to a natural end. He spoke about how he has found the sessions useful though I can tell he is hesitant about finishing and finds comfort in being actively engaged with someone. He doesn't want to get lost after which I met with validation and explained what would happen after.		Psychological interventions	
13/01/2022	Two face-to-face coping skills appointments. These were both first sessions and both service users came across as very nervous coming into the sessions. They were open about their experiences and seemed more relaxed at the end. Had supervision after the sessions in which we discussed service user A, who cancelled another session this week.	Improved therapeutic relationship skills and skills in delivering therapy. Also, it's helped to reflect on reasons for not attending, and how it can be indicative of disengagement.	Psychological interventions	
14/01/2022	Finalised results section. Ran analysis in SPSS to understand standard deviation, added some tables and figures to make it clearer.			
17/01/2022	Observed an initial assessment carried out by Kyle. The outcome was discussed with Kyle, and I wrote up the clinical notes.	The past trauma experienced by this service user is one of the worst I have come across in my role this far, and I felt very split as she had also committed a serious crime. Overall, I could see how deeply	Psychological interventions	

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Date	What happened	What I learned	Competencies reached	Placement/ outside
		trauma in early years had affected the service user both mentally and physically and I think it was a very interesting session to observe. I noted how the assessment was run, how Kyle validated emotions and statements, whilst not giving too much space for exploration in order to get enough information from her to understand next steps, as well as encouraging the service user to engage in the future.		
18/01/2022	Work on teaching session for the MDT based on motivating behaviour change. Decided on most essential information to include and finished outline of each slide.		Teaching/ training	
19/01/2022	Observed final session delivered by my colleague. The service user has been struggling weekly and now safeguarding is involved as she may be putting her children under stress. I think by the end of the session she understood why social services were involved and felt reassured that she wouldn't get her children taken away, but it's been eye opening to see how a service user can worsen alongside psychological input (not that the input has necessarily had a bad effect). The service user	As an unusual case, sessions with this supervisor have been helpful to observe. I can see how to potentially react quickly to uncomfortable situations (i.e., distress, bringing child), an active process of safeguarding procedures, working with the MDT (i.e., requesting further medication, identifying further help from nurses) and how to adapt to sessions through re-formulation.	Psychological interventions	

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Date	What happened	What I learned	Competencies reached	Placement/ outside
	brought one of her children into the session and I observed my colleague handle it well. Also had supervision in afternoon where future work with Alex was discussed. She has now not been seen for 7 weeks after a cancellation for this week's session and I am beginning to wonder if she has disengaged with psychology services. We spoke about how to give her permission to be honest about future work whilst continuing to validate her reasons. I will try this should she attend her session on Monday	Re supervision outcome, it's disheartening to notice disengagement especially as this was to be used for my behavioural intervention case study, but I understand that the service user is more important in this situation.		
21/01/2022	Was the lead facilitator of the first group coping skills session today. All ten service users turned up to the session which was very unexpected. I felt that I delivered the content well and this was confirmed by my colleague, and I got a nice level of engagement from the group. I saw how a small number of group members spoke out and engaged more than others and noticed how this helped the group atmosphere. Hoping for a good turnout next week.	This is the first group therapy session I have led, and I was very nervous coming into it, but it's definitely improved my teaching delivery skills and how to manage group dynamics and move the group forward. Though I feel positive, reflecting on previous group experience, engaging in the group doesn't necessarily mean that they will come back so it will be interesting to see what happens next.	Teaching/ training, psychological interventions	

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Date	What happened	What I learned	Competencies reached	Placement/ outside
22/01/2022	Added more analysis and information to results section in line with feedback from Mark and made plan for discussion		Research	
24/01/2022	Session with SUA. She attended the session though arrived late. I used this session to explore what happened in the 7 weeks I didn't see her and to see where she is now. She had been following aspects of the intervention (using wind down) and has reported previous abuse and spoke of how she has been feeling better both mentally and physically (a big thing to consider here was that she had reported abuse which could have been the main factor).		Psychological interventions	
25/01/2022	Final relapse prevention session. This is my first completed therapy with someone. This session focused on organising ideas and also what would happen following the sessions. He spoke about what he had learned and how this had helped him to manage his symptoms over a stressful time in his life and he seemed happy to leave the sessions knowing he had continued support from the service.		Psychological interventions	
26/01/2022	Attendance at MDT meeting and psychology team meeting. Discussed incoming referrals and		Generic professional	

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Date	What happened	What I learned	Competencies reached	Placement/ outside
27/01/2022	Telephone session with service user who has been finding it hard to cope with mums advancing dementia and daughters own mental health struggles. She has no time to herself and also feels like she doesn't deserve to help herself. It's hard to talk through coping skills work with her when she doesn't want to try much but I talked her through the CBT cycle (thoughts/ emotions/ behaviours/ physical) and how she could do small things in her day to feel better and she did seem receptive and asked for a list of activities I referred to. She doesn't want to engage with others or leave the house, so I need to seek further supervision about this.	Although it is more difficult to work with people who don't feel comfortable helping themselves, there is always space to talk and support. Sometimes it can just be the headspace at the beginning of the session and using open questions to explore and listen can result in more openness to explore new things.	Psychological interventions	
28/01/2022	Delivery of second online emotional coping skills group. Nine service users attended. This session acted as a "part two" to understanding emotions and included a section on identifying physical manifestations of emotions. Service users found this section particularly interesting, and it provoked a discussion. From questions asked at the end and the survey, this session really helped the group to feel connected to know others were in similar boats. There were a small number of service users who were distressed or asked for further support and I telephoned	Managing risk and communicating with service users during the online group was challenging but improved online group facilitating skills.	Psychological interventions	

Date	What happened	What I learned	Competencies reached	Placement/ outside
	them following the session to check in with them and understand risk. I referred one of these service users to the duty nurse and followed all relevant safeguarding procedures.			
29/01/2022 - 30/01/2022	Work on online behaviour change intervention. Refining proposed content and considering availability of time, nature of target participants and length of the intervention. 10 weeks looks to be a suitable amount of time, but I will need to be writing up alongside delivery as this will take me to close to the end of the doctorate.		Psychological interventions	
Signed by Clinical Supervisor: Dr Kyle Boyd for within- placement work completed 22/11/2021 – 30/01/2021				
February 2022				
01/02/2022	Intervention session with SUA. She shared her progress and current daily schedule.			
02/02/2022	Supervision session. I wanted to bring a service user who I am struggling to gain contact with after she told me she was undergoing investigations for breast cancer. I have previously needed to get support for safeguarding following disclosure of a suicide note and I am worried that she is struggling. We discussed the nature of suicidal	This concept is something I feel like I understand more than last time but I have a hard time getting my head around. I feel it requires a lot of headspace but I do understand the theme of anger. Was also interesting trying to understand why I was worried for this service user and why I wanted to	Psychological interventions	

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Date	What happened	What I learned	Competencies reached	Placement/ outside
	thoughts from a psychodynamic approach and tried to understand why I feel the connection that I do. Also discussed next steps with SUA. Will discuss what she feels would be best for her moving forwards in the next session.	look after her- this is something I do need to remain aware of.		
03/02/2022	Emotional coping skills one to one session. Working with service user mentioned 27/1.	Still finding working with this service user challenging as she has a number of ongoing life challenges, and her behavioural activation is low. I will seek more supervision around this to understand how I can address this and if I can still support her.	Psychological interventions	
04/02/2022	Delivered group session on mindfulness as part of week three of the emotional coping skills group. Participated in training – facilitating groups in emotional regulation		Psychological interventions/ teaching and training	
07/02/2022	Co facilitated coping skills one to one session with my colleague. The service user is presenting with low mood and anxiety, and it was difficult for either of us to get a word in at times. The service user acknowledged this and told us to tell him to stop and it was difficult to respond to	Improved skills in psychological interventions. Both of these service users present completely differently engagement wise; where one speaks lots, the other replies in	Psychological interventions	

Date	What happened	What I learned	Competencies reached	Placement/ outside
	this from a therapy perspective and to know at what point to jump in and how to do it. Also had another session with SUA. Though they have improved in mood and pain (primary outcomes), they are still struggling with sleep and are worried about going back to where they were before the intervention. We talked through setting achievable goals and set some together and I will find more activities for her to do to fill her day, so she feels ready to sleep at night.			
08/02/2022	Meeting with university around methods of using reminders for my behaviour change intervention. We spoke about how email could be useful, but some may not regularly check. They will see what resources are available to me. If text messaging resources aren't an option, I may have to use email and ask further questions about whether this was monitored in my outcome measures.		Research	
09/02/2022	Attended and participated in MDT meeting, psychology team meeting and clinical supervision. Discussed difficulty I am having with a service user who is hard to engage. Spoke about how my own life experiences could be		Generic professional	

Date	What happened	What I learned	Competencies reached	Placement/ outside
	contributing to my feelings and how to work with her moving forwards.			
10/02/2022	Emotional coping skills with service user discussed in clinical supervision yesterday. We talked about how using the session to run through the coping skills material might not be helpful for her right now with everything that she is going through at the moment, and she agreed and confirmed that she wanted a space to talk. She was more open with her past experiences this time. We also discussed next steps as her last session is next week.			
11/02/2022	Facilitated coping skills group. Colleague was unable to attend the session and it was her turn to deliver the content. As I found out at 7am and my group supervisor wasn't in work until 9am (the group was due to start at 9.30am), I had to prepare for the potential eventuality of me still delivering it on short notice (I had never delivered a session on this topic before - distress tolerance skills). I tailored it to my delivery style and prepared for simultaneous delivery of content and sharing resources (something we usually share), and at 9am, my supervisor advised that if we were unable to reach another AP to co-facilitate, I would have to cancel the session. One of the	Having to prepare and facilitate the session at short notice improved my skills in working under pressure and adapting to new circumstances quickly. It helped that I had looked over the session previously in my capacity as a co-facilitator, but I was proud of my ability to focus and tailor the session to my delivery style in the hours between me finding out I might need to lead and actually running the group. Managing the situation of having one person monopolising the conversation improved my skills in facilitating groups and I think I need to be clearer in	Psychological interventions/ teaching and training	

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Date	What happened	What I learned	Competencies reached	Placement/ outside
	other AP's agreed to co-facilitate at 9.25am. The group itself mainly ran smoothly however one group member spoke a lot and interrupted myself to ask me for advice. Whenever I shared methods that could work, he spoke with anxiety (that was felt by the co-facilitator too) in detail how this wouldn't work for him. I tried to revisit content and involve other members of the group and it didn't take over, but it was a real challenge.	setting boundaries and enforcing them even when it feels uncomfortable for me. The group is for everyone, not just one service user at a time.		
12/02/2022 - 13/02/2022	Worked on discussion for readability analysis. Finding it more difficult than usual to find appropriate sources to guide the discussion. Not sure if this is due to my own headspace or the nature of the literature around this subject. It's hard to focus on the right topic without wanting to cover everything. I decided in the end to take a step away from it and work on other projects that were taking up my headspace.	Improved research skills. I'm still learning to understand how to work around my capabilities and manage my workload.	Research	
14/02/2022	I had a phone call with someone who had been abstinent for over a month, was dropped from an alcohol service and had bought a bottle of vodka. Explained to her what the next steps might be for psychology and sought supervision in light of risk. My supervisor spoke to her and was happy with the level of risk (she said that she	This is an example of an instance where everything was done correctly but the behaviour wasn't stopped. It's hard knowing that I didn't manage to stop her but I'm learning that as a service we can't control people and we can't read minds to understand intentions. We will continue to try and	Psychological interventions	

Date	What happened	What I learned	Competencies reached	Placement/ outside
	wouldn't drink the vodka) but she presented to the duty service a couple of hours later having drank and taken pills.	support this service user until she can get psychological intervention from us.		
15/02/2022	Worked on teaching session – motivating behaviour change. Researched relevant health psychology models and thought about the needs and presentations of the CMHT's service users to determine session content. Identified the Health Belief Model as a suitable theory to use and paired this with the use of SMART goals as these are something that have previously been suggested in the team.	I took feedback from previous teaching experiences and feedback from Team Manager in order to decide how I should deliver the session. Interactivity and discussion are always fed back as important, so I decided to leave a good amount of time to facilitate this. Preparing this session also helped to refresh and improve my own knowledge on the HBM.	Teaching and training	
17/02/2022	Last session with service user. These sessions have been used as a space to be listened to- something that she doesn't always get at home. She is going through lots at home that is out of her control at the moment. Also had an initial session in which the service user shared that she was often quick to shout at her 12-year-old son and that these things could be personal. Although I didn't identify in the session, when I was writing the	These sessions have been used as a space to be listened to- something that she doesn't always get at home. Working with her and being supervised throughout this process has helped me to learn to recognise that if someone isn't ready for change or want psychoeducation, I should listen and understand.	Psychological interventions	

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Date	What happened	What I learned	Competencies reached	Placement/ outside
	outcome, I identified a potentially emotionally abusive situation that may need implementation of safeguarding. I sought supervision on this.			
18/02/2022	Co-facilitated final coping skills group session of the first part of the series. I am starting to see that the service users are becoming more comfortable in sharing and are well engaged with the content. This is reflected by survey feedback which highlights that it's comforting to know that there are people with similar experiences and also that learnings from the session are being put into practice with positive outcomes.	I'm learning a lot from co-facilitating this group. One thing to take away from this session is practicing knowing when to allow and encourage group discussion and when to move forwards to ensure that the content is covered. I think it's more important to be guided by the group and at the moment there is a good mix of both.	Psychological interventions/ teaching and training	
19/02/2022 – 20/02/2022	Work on video for online intervention which focused on setting achievable goals and habit tracking. I want this video to be short which was challenging but I feel that I've managed to cover everything that I wanted to without miss anything out.	I'm still learning to work concisely- something that I've also taken from reading about the concept of essentialism. Working concisely from the start means that I can put more effort into what matters.	Psychological interventions/ teaching and training	
21/02/2022	Work on questionnaires for online intervention. I want to be able to get all of the information I need but for them to also be minimally invasive to discourage intervention dropout.		Psychological interventions	
21/02/2022	Final session for one-to-one behaviour change intervention. The service user spoke of an incident that	This marked the end of my work with this service user who was my first in the service, and first as an	Psychological interventions	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
	happened with her brother that has brought up her past and that she is struggling to deal with. This was affecting her sleep which we spoke about being understandable. We talked about the improvements that she is made and planned for next steps including engagement with social support groups and further therapy. I delivered the final outcome measures and noticed improvement, but she scored highly in risk which was unexpected and didn't align with our conversation. This will be taken to MDT to identify if she is to be discharged from the service.	Assistant Psychologist. I've learned a lot in therapeutic skills and in how to manage expectations as a therapist and understand the real human journey and motivation, not just the one presented in textbooks.		
25/02/2022	Delivered training session on motivating behaviour change to MDT. Covered Health Belief Model and SMART goals. It was attended by 10 members of the team spanning psychology, occupational health and mental health nursing. I built on previous learnings and included more time for group discussion which worked out well.	The group was really engaged, and I learned a lot from them about the challenges that they face and also what content they engage with well. If I provided any more teaching to this group, I would include more time for discussion and to use worked examples.	Teaching and training	
26/02/2022 – 28/02/2022	Finished second video for intervention. Finished script and presentation, added questionnaires, created SMART goal worksheet and habit tracker and drafted initial email and recorded audio for videos.	Things took longer than I thought. I have been trying to consciously not go all out but I still feel that I have.	Psychological interventions	
28/02/2022	Drafted final letter for Alex to be sent to her summarising the intervention and next steps. Also participated in group	This helped to understand the experiences of an MDT	Psychological interventions	

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Date	What happened	What I learned	Competencies reached	Placement/ outside
	reflective session. It was hard to listen to the experiences of some of the team about how they've been treated by patients and their families.			
March 2022				
01/03/2022	Work on letter to Alex summarising intervention. Tried to write it in language that was easy to understand whilst also including as much information as I thought would be helpful for her and would make her feel heard.		Psychological interventions	
03/03/2022	Attended full day of motivational interviewing training.	Although I have had training in MI on the doctorate and with Childline, it was helpful to do something which was more intensive. It helped me to realise that I'm maybe guiding service users a little more than I should be doing and I'm going to consciously try to be more curious.	Psychological interventions/ generic professional	
04/03/2022	Delivered first session of second half of coping skills group. This was on interpersonal skills. I was not the main facilitator in this session, but it was useful to see how participants interacted and the similar issues they came across. It seemed that they took comfort from knowing others in the same situation. Kept an eye on cameras and the chat to manage risk issues.	Improved skills in group facilitation	Psychological interventions/ teaching and training	

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Date	What happened	What I learned	Competencies reached	Placement/ outside
07/03/2022	Attended formulation training with other Assistant Psychologists. This focused-on CBT formulation and it was something I found really helpful. Also facilitated stress and worry session for service user who was hard to manage as they pulled focus back to trauma and living without mental health support for years. I understood that this was important to them, and I used motivational interviewing skills (OARS) at times to explore this, and to identify what was important for him. However, there were times when the focus needed to be pulled back to move forwards towards a goal and I was grateful to have my colleagues support here.	One thing I took away from the training was to explore how emotions/ thoughts/ behaviours/ physical symptoms are interpreted by the person. I could interpret crying as a physical symptom, but others could interpret it as a behaviour and in order to truly take a person-centred approach, the patient should have full autonomy in this. Re the coping skills session, I ran this with my colleague, a clinical psychologist. I was grateful to have her there as at one point, he reacted negatively to her approaching DNAs. She also helped to guide the conversation when he was talking a lot and moving away from the session content. I think if I am to take the session alone in the future, I need to be firmer and move things forward (as the service user has asked us to do)	Psychological interventions, generic professional	
08/03/2022	Finalised online intervention. Final edit of videos and opened recruitment. Have posted to WhatsApp groups and on social media and asked others to share. I'm not sure how else to manage this as it isn't a research project		Psychological interventions	

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Date	What happened	What I learned	Competencies reached	Placement/ outside
	so some of the platforms, I used for research are unavailable.			
09/03/2022-11/03/2022	Work on discussion for readability analysis	I have been avoiding coming back to working on this piece of research as last time I really struggled to make sense of the literature when writing the discussion. However, I utilised the pomodoro technique, and made sure I stepped away from the screen at regular intervals, and I think this really helped me to come at it from a calmer perspective. I found some really interesting information and made significant progress with the discussion as a result.	Research	
13/03/2022	Considered write up of research two alongside British Journal of Pain submission guidelines and modified to create first draft.	This was much easier than the last as I now understand from last time that page/ word counts are much lower than examples of thesis research. I therefore already had a much more concise piece written so I just needed to format references etc.	Research	
14/03/2022	Work on case study for one-to-one psychological intervention. I'm on 2500 words of a 3000 limit and still haven't covered half of the intervention and the evaluation. I need to revisit once everything is typed up and I think I will need to remove some of the session		Psychological interventions	

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Date	What happened	What I learned	Competencies reached	Placement/ outside
	details, but it's hard as the content makes the case study nicer to read.			
15/03/2022	Work on end of treatment letter for coping skills work which was used more as a counselling/ talking space. I know that this service user may find more academic writing difficult to understand but I'm finding it difficult to talk through the process in a simpler way.	I've been considering readability research when writing this. This process I think helps with formulation skills as well as learning to summarise therapy in a way that makes the service user feel heard.	Psychological interventions	
17/03/2022	Had four one to one coping skills sessions, which involved listening, exploring challenges and coping skills and building on previous work. I want to mention two of these sessions in the log. Session one – Prior to the session I spoke to the team's family support worker in light of my concerns surrounding safeguarding of the service user's son and what support can be offered in light of this. She helped me to understand options and provided me with some resources to share on Early Help. This helped me to do some more fact finding in the session. The service user responded positively to seeking more support and advised that she is already seeking family therapy. I'm consciously working to understand the child's risk but the more I work with and	I'm starting to feel more confident in guiding sessions with service users and knowing how to use supervision to manage risk and explore options. This potential safeguarding issue has helped me to understand processes more moving forward.	Psychological interventions / generic professional	

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Date	What happened	What I learned	Competencies reached	Placement/ outside
	hear from this service user, the lower my concerns are. I will still discuss in supervision and with safeguarding officers to ensure I'm not overlooking anything. This service user also shared how she has put into practice the skills we have covered and how they have helped her over the last week. Session two- I ran a session on relaxation skills in which I shared different techniques with the service user. She was very receptive and after going through a progressive muscle relaxation script, shared with me that she would like to try it more to manage her anxiety and try to go for more walks (without prompt!). This is an example of how I could visibly see how attending to the body physically through breathing and muscle relaxation helped mentally.			
18/03/2022	Second session of Motivational Interviewing training. This included content on rolling with resistance and identifying when to guide and when and how to direct if necessarily. It helped to watch a role play and see how reflections and affirmations were used as questions with the right intonation.	I can already see how I can apply the skills learned in these sessions to practice, and I will use reflections-as-questions more.	Psychological interventions/ generic professional	

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Date	What happened	What I learned	Competencies reached	Placement/ outside
31/03/2022	Two coping skills sessions. Worked with one service user to understand barriers she experiences daily. Identified that she is struggling with day-to-day tasks due to pain and suggested referral to occupational therapy for support with this. Spoke with other service user about social support and she told me that she wanted to find more of this through social activities.	I've been trying more to consider the full biopsychosocial picture where needed to make learning and working with coping skills easier. In this way, I'm able to work with the MDT and remove some barriers to make intervention delivery easier.	Psychological interventions.	
April 2022				
05/04/2022	Coping skills session with service user who has been struggling with her mental and physical health. Space offered to talk and agreed to move forward with session on mindfulness next week		Psychological interventions	
05/04/2022	Over the past few weeks, I have been preparing a presentation answering the question "How can we support Care Home staff with their psychological wellbeing and how would you draw on your experience?". I've done a thorough literature search and with the 10 mins I have available, selected some interventions to share. I've also prepared for the interview through looking back on past reflections.	It's been really challenging to prepare for this interview. It's taken up a lot of time over the past few weeks, but I've learned a lot about applications of health psychology to real life roles and the experience is invaluable.	Generic professional	
06/04/2022	Had interview for health psychologist post. Delivered my presentation and answered a number of questions.		Generic professional.	

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Date	What happened	What I learned	Competencies reached	Placement/ outside
	Feedback received was positive and though I was unsuccessful, I was told I was appointable, and support was offered for future roles elsewhere.			
09/04/2022 – 10/04/2022	Work on second draft for readability analysis. Considered feedback from supervisors and make significant changes to the literature review and discussion.			
11/04/2022	Spent the day putting together charts/ visuals to represent the service evaluation data. Also engaged in peer supervision surrounding psychological treatments for psychosis.		Research	
Signed by Clinical Supervisor: Dr Kyle Boyd for within- placement work completed 01/02/2022 – 11/04/2022				
14/04/2022	Coping skills sessions with three service users			
15/04/2022	Work on one-to-one case study, including adding reflections and more detail to evaluation section			
20/04/2022	Work on identifying research question and search terms for systematic review			
21/04/2022	Coping skills session with service user who was feeling very low and struggling with motivation and suicidal thoughts. I validated feelings and gave space for her to talk, and also delivered some psychoeducation surrounding distress tolerance. She found breathing	I'm still finding it difficult not to worry when someone presents as high risk. I know that I followed the right procedures, but it was talking to my colleagues that helped to dissipate some of the anxiety, and to help me to understand that I will always hold some of	Psychological interventions/ teaching and training	

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Date	What happened	What I learned	Competencies reached	Placement/ outside
	exercises particularly useful and shared that it helped her to breathe more deeply and calm. After this session I felt it important to follow safeguarding procedures as I was unsure, she was able to keep herself safe. I got the duty practitioner to check in and I also reflected with two of my colleagues.	that emotion and worry even when everything is done.		
22/04/2022	Ran last coping skills group. Delivered content and facilitated discussion surrounding the inner critic and managed distress surrounding the same with one group member. Encouraged reflection of the group as a whole and explained next steps.	It's been great to see this group through from start to finish and I've learned important skills in delivering teaching, managing distress in a group environment, facilitating safe discussion, time management as a group facilitator and working with endings. One thing I learned in particular today was how to frame endings positively- my colleague spoke about happy endings, and this is something I plan to take forwards to future endings I will have.	Psychological interventions/ teaching and training	
24/04/2022	More work on systematic review question and search term definition. Found it difficult and overwhelming to approach so I went to the library and took out the book "doing a systematic review". It really helped to take it slow and right down to basics and I think I am ready to get started.		Research	

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Date	What happened	What I learned	Competencies reached	Placement/ outside
26/04/2022	Emotional coping skills session. Worked on identifying unhelpful thinking styles and how to address them		Psychological interventions/ generic professional	
28/04/2022	Coping skills session with high-risk service user. I felt unsure again that she was safe, and I used supervision and discussion with CMHT team manager to take action. She was later contacted by duty nurse and referral to a support worker was completed.	Since working clinically, this is the first time I have had almost a physical reaction to a session. In supervision, we talked about how the service user is aware that the sessions are coming to an end and this presentation could indicate a want to remain under the care of someone, and in someone's mind. We talked about how this is important to keep in mind, but to also not negate risk and take the right steps should this happen again in future.	Psychological interventions/ generic professional	
May 2022				
01/05/2022 - 02/05/2022	Work on one-to-one intervention case study.	I'm finding it hard to stick to word counts. I view my writing as precise, but I think that I sometimes want to cover everything	Psychological interventions	
05/05/2022	Three coping skills sessions with service users including two final sessions in one day.	I've been thinking a lot about endings and have taken on board talks with my clinical supervisor, a fellow Assistant Psychologist and also a podcast I have recently listened to called "edge of the couch"	Psychological interventions/ generic professional	

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Date	What happened	What I learned	Competencies reached	Placement/ outside
		delivered by two clinical psychologists, and this made these endings feel less daunting than I had anticipated. The more I am here, the more I see the importance of building the concept in earlier on.		
06/05/2022	Cofacilitated coping skills group session on mindfulness and took on role of managing risk. Also worked on service evaluation data	Experience in clinical group management and delivery of psychoeducation	Psychological interventions/ generic professional/ research	
08/05/2022	Worked on search strategy of systematic review. Rented book “Doing a systematic review” which has already really helped me to understand the process and define a question and inclusion and exclusion criteria. The searches I’ve done have resulted in a few hundred results but it’s evident that there are a lot of studies I can immediately disregard. I’ve checked an initial strategy with Mark and Tara, and I am also sending it to our academic liaison so I can make sure I’m not missing anything.	Using the book has helped me to be able to work through the process really systematically to make sure I’m not leaving anything out, and I’m doing everything correct. I’ve learned that its more structured than I had planned, and to do everything right I need to take my time to complete every stage.	Research	
10/05/2022	Attended and observed three assessments. They were all very different and it was helpful to observe how my colleague managed the themes that came up and also how she experienced the same feelings that had been	Observing assessments helps me to understand the structure of the process, and the kinds of questions to ask. It helped to observe how to handle situations which could be explored further.	Generic professional	

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Date	What happened	What I learned	Competencies reached	Placement/ outside
	transferred. I took notes for the sessions with the aim of writing the assessment letters.	It's tempting to ask more questions to understand more but it's important to know that this is just one session, and psychological safety needs to be considered I (I understand that exploring more can open up things that then can't be managed)		
12/05/2022	Two coping skills sessions, including one session which was with a service user who I have had problems engaging. I brought this to her attention in a telephone call last week and explained the importance of attending and that she deserved to be seen, and it felt like the therapeutic relationship improved.	Being able to address the elephant in the room was important and by taking advice from my clinical supervisor on how to bring the issue of nonattendance up helped to quell anxieties about ruining the relationship.	Psychological interventions/ generic professional	
13/05/2022	Worked on assessment letters for assessments I observed on Tuesday.	I enjoy the process of bringing the assessment into a story that can be made sense of by the patient. It was particularly challenging for one patient as there was less awareness of the psychological self, and we agreed that moving forward with therapy was not the best way forward. In this case, I learned how to break this kind of information sensitively. I received positive feedback for both, which were sent out unchanged.	Generic professional	
14/05/2022	Completed searches for systematic review and removed duplicates. I found a tool which helped me to do this, I	I was a bit daunted by the search at first, but the tool really helped to make the job manageable. It	Research	

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Date	What happened	What I learned	Competencies reached	Placement/ outside
	imported all of the searches and it automatically detected duplicates which I went through to check and deleted.	made the process much more efficient than it would have been had I copied everything by hand into excel which was my original plan. I like being able to have set steps and doing this process now will help with any future reviews and has also improved my skills in general database searching.		
15/05/2022 – 17/05/2022	Stage 1 screening: removed all completely irrelevant studies and started combing through again alongside screening and selection tool. I went through all the articles with a broad criterion, but I think I need to add another level of exclusion criteria as I have 46 in included and 34 in maybe. Options that I have seen in other studies include the removal of those focused on a physical condition, RCT studies only and excluding acute bouts of walking.	I'm enjoying this process, and I think it's because it is so systematic; there are set stages, and I don't have to rely on creativity as with other projects. Whilst I enjoy being creative, I am often distrustful of myself when I don't have validation from others that what I am doing is the right thing. Knowing that there is space to take a step back from that (which can have an emotional toll and is worse when stressed) helps to regain that focus and increase the feeling of productivity. I think the next stage might start to introduce some of those feelings of insecurity with me having to make decisions based on the papers themselves, but for now I'm learning to make decisions based on brief information.	Research	
18/05/2022	Received training session in autism and trauma	It was interesting to understand the similarities in presentation between autism and trauma, and I	Generic professional	

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Date	What happened	What I learned	Competencies reached	Placement/ outside
		took part in a really interesting discussion on the difficulties of diagnosis, and whether treatment should actually focus on the diagnosis at all or should just look at symptoms.		
19/05/2022	Facilitated two coping skills sessions, one on communication and one on understanding emotions		Psychological interventions/ generic professional	
20/05/2022	Cofacilitated coping skills group	Improved skills in clinical group facilitation and risk management	Psychological interventions/ generic professional/ teaching and training	
20/05/2022	I've gone through the systematic review references, and I've gotten to the point now where the references I'm finding I already have, so I think it is exhaustive enough. I did consider whether I should have added pedometer and step count to the search strategy, but these don't necessarily indicate that a walking intervention has taken place, running and dancing and cleaning etc all ups step count.	This is still a completely new experience to me, and I continue to be challenged by the need to focus on a topic and not bring in other areas. I have limited time and resources and whilst a larger systematic review could focus on a wider scope, I am learning to understand my own boundaries and abilities when it comes to time-limited work.	Research	

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Date	What happened	What I learned	Competencies reached	Placement/ outside
	I'm down to 24 studies identified through literature searching, and 1 extra study found in a systematic review reference list (walking on sunshine).			
22/05/2022	Work on teaching diary. I've been looking at all of the entries in my practice diary and translating them into an overview for each journey. I'm not entirely sure if this is the right thing to do, but I think it will breakdown my learning and progress more clearly.		Teaching and training	
24/05/2022	Coping skills session with a service user, facilitated by my colleague and me. It's useful for both of us to be here as I am finding that sometimes it's hard to guide the sessions as she does just want to talk about what is happening in her life, and not how she is reacting to all of these things.	Working with a real person can be unpredictable, and although there are two of us, we find it hard to direct the sessions without invalidating the patient's thoughts and emotions. Sessions like this help me to distinguish when a person is ready for psychological change, and when they just want someone to talk to. I got the sense that this patient is lonely, and although she does have friends, she can seek support and validation from health professionals. I think on reflection in the future, being able to address direction and focus of the sessions earlier on could be helpful in being able to bring it to attention at later stages. This could mean	Psychological interventions/ generic professional	

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Date	What happened	What I learned	Competencies reached	Placement/ outside
		talking about how psychological interventions work, and how to treat them as a “treatment”.		
26/05/2022	Three coping skills sessions. Ran sessions on distress tolerance and breathing and assertiveness communication		Psychological interventions/ generic professional/ teaching and training	
27/05/2022	Spent some time today working through public health population data in order to confirm Moss House demographics. It’s something I’ve been putting on the backburner, but I feel that I managed to gain some good progress today.	It was challenging to locate the data in the first place, but this process supported research skills in being able to understand the representative population.	Research	
29/05/2022	Work on online intervention case study. Completed rationale and started writing up assessment and formulation.		Psychological interventions	
31/05/2022	I had three individual coping skills sessions today. One was a final session with a service user who was worried about what would happen next. The session focused on behavioural activation and activities to manage low mood, but I also took some time to explore and talk about this and she left understanding that support was available, but	It’s uncomfortable sometimes to be the face of a service that can’t fully meet the needs of a person, and I’m still learning to be able to accept that. Reflecting on this in supervision was really helpful, I suppose that it is an inevitable part of working in this service at times but I know that something I	Psychological interventions/ generic professional/ teaching and training	

Date	What happened	What I learned	Competencies reached	Placement/ outside
	that her work with me was finished. This was my first service user who gave me a thank you card and flowers, although the contents of the card made me feel a little uncomfortable as I could sense her anger at the system.	need to work on to protect my own mental health is taking that guilt and responsibility away from my person, and trusting the team to manage risk, and also knowing that it is not my fault that the system is not set up to always hold patients in the way that they need to recover “efficiently”.		
June 2022				
02/06/2022	Work on case study. This included finalising the evaluation and final reflections section and preparing the appendices. Also received feedback from Helen Poole regarding the further work done for resubmission of the manuscript to the Women in Sport and Physical Activity Journal and made changes and resubmitted.	I’ve really enjoyed this project and doing this intervention has helped me to prepare and reflect for a clinical case, which will benefit me when aiming to move into a clinical health field. Making these final changes and submitting progressed my skills in the publication process.	Psychological interventions/ research	
03/06/2022	Received an “unsubmission” from the Women in Sport and Physical Activity Journal, which requested that I work through each comment and add the relevant line numbers. I had already produced a detailed letter in response, but I had to run through all comments and cross-refer with the original paper and the new paper to address this and resubmit.	I found this frustrating, as I had already put so much time and effort into the resubmission, and this was demanding more time the day before I was due to go on holiday for a week. However, on reflection, as I had changed the paper a lot, the line numbers in the original comments had changed and it would have been a lot of work for the reviewers to ensure	Research	

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Date	What happened	What I learned	Competencies reached	Placement/ outside
		that I had responded properly to the changes. I think it's easy to get frustrated by what is already a very time consuming and frustrating process that did involve a lot of scrutiny for my work, but it's important to not let my emotional mind take over here, and to take a step back to be more efficient in dealing with these setbacks.		
12/06/2022	I spent some time today creating a presentation on my one-to-one case study for an interview I have this week. Having only 10-15 minutes to present, I worked to bring out the key points of the background, assessment, formulation, design, delivery and evaluation and I'm really happy with the outcome.	Turning the case study into a presentation definitely could be transferred to the creation of presentations and posters for future conferences throughout my career. Having this succinct presentation will also help to support any future interviews.	Generic professional	
14/06/2022	Had initial coping skills session with service user, in which we took time to understand her current difficulties, and to explain what coping skills were. She spoke a lot about feeling "busy" in her head a lot of the time and I think it helped me to empathise more as I also feel the same. Also had peer reflection session in which we discussed vicarious trauma in healthcare staff.	The discussion in peer reflection was really interesting and we spoke about how the support can be available physically but not always accessible by staff. We also discussed how important clinical supervision is for us as psychologists to be able to process vicarious trauma. I think for me, I find that sometimes things "get in" even when I'm unaware, as I notice a difference in my mood after a tough day. I also	Psychological interventions/ generic professional	

Date	What happened	What I learned	Competencies reached	Placement/ outside
		sense that sometimes my mind puts up a wall and doesn't allow me to think about things in too much detail, which upon sharing I wasn't alone with. Being where I am now with low resilience due to the doctorate workload has meant that that supervision has been more important than ever.		
16/06/2022	Coping skills session with patient who was really low the last time I saw her. She presented completely different today, and it was challenging to understand how to react. I noticed her laughing a lot at some difficult things, and she found it harder to focus. She questioned whether she had bipolar disorder and I think the difference noticed for me was enough for me to bring it to the team.	Again, I found that I resonated with a lot of things she shared with me, including worry about hurting people and being a bad person. I had to remember my previous reflections that sometimes I may have similar feelings, but that this session is hers. I can however use those feelings to learn how to understand the patient more, and they can help me to offer accurate reflections and ask relevant questions for them.	Psychological interventions/ generic professional	
17/06/2022	Spent some time preparing an end of treatment letter for the patient I finished sessions with before going on holiday. I used session notes to reflect on main themes, including initial non-attendance, importance in talking to process memories (and issues with safety), progress and also next steps. I was contacted by the patients partner yesterday who asked the service to contact her as she	The more of these letters I write, the easier they become. They give a real chance to show that I have listened, and what positives have happened on their journey (something I find that a lot of patients struggle to bring attention to). I can sometimes still find it hard to be succinct, but I am	Psychological interventions/ generic professional	

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Date	What happened	What I learned	Competencies reached	Placement/ outside
	was deteriorating so I felt it important to focus on that progress and hope for recovery more.	learning how to denote that feeling of hope in my words.		
18/06/2022	Spent all day working on my online intervention case study. I used the pomodoro focus timer again and it worked really successfully, meaning I managed around 10-11 hours without feeling out of control. I detailed the intervention components and spent some time cleaning the data and inputting all data from each week into one database for ease of analysis. I decided to manage qualitative data as a separate dataset, using it to reflect on what may have influenced change (or lack thereof).	I found this challenging as there was so much, but I focused on what I wanted to report to make sure I didn't get carried away by calculating new variables and creating unnecessary work for myself (which I almost did). It is a little upsetting to see the dropout, but on the positive side, 18 people did finish my intervention. I think looking back, it might have been interesting to run this as a research study and focus more on the data then, but it's helped me to understand the intervention process separately, something I would do more of should I work with individuals or populations intervention-wise.	Psychological interventions	
20/06/2022	Had an initial session with a patient who has OCD and wanted support with her compulsions. The intention was to do exposure and relapse prevention work with her, and I'd spent some time before researching the concepts, discussing with my supervisor and planning content.	Unfortunately, I don't think I'll be able to work with her due to securing my role, but it was really valuable to be able to learn more and see the direction in which I would have taken it.	Psychological interventions	
24/06/2022-27/06/2022	Work on teaching and training diary. Using practice diary to bring in reflections and conducting literature searches to understand more	It's been insightful to bring everything together into one document. I can really see how utilising	Teaching and training	

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Date	What happened	What I learned	Competencies reached	Placement/ outside
		reflection through the doctorate has strengthened my skills as an educator		
28/06/2022	One to one session with service user who hears voices. I found it challenging to understand how to manage this and validate her feelings without categorically agreeing with her. The session focused on mindfulness and relaxation techniques, and she was really open and receptive to what was discussed. I talked through a progressive muscle relaxation and noticed a difference in disposition following.	I had a conversation with the CMHT team manager a few weeks ago about mindfulness, and it made me think a lot more about how I portray it to patients. I've been trying to practice it more at home and have done more research so I can talk more about the benefits. I think although this patient was already open to meditation, I did notice a difference in how I felt talking about it, and the receptiveness.	Psychological interventions/ generic professional/ teaching and training	
29/06/2022	Had clinical supervision in which yesterday's session was discussed.	We talked about how past experience likely contributed to the service user's current presentation, and it was interesting to understand it from a psychodynamic perspective, although it's still quite hard to grasp. I understood how these experiences harm emotional development and how voices, although they can't be heard by us, are still a real experience and should be treated as such in this case.	Psychological interventions/ generic professional	
30/06/2022	Two coping skills sessions. One focused on assertive communication, and we had space to discuss how not being assertive had had an impact on the service user's		Psychological interventions/	

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Date	What happened	What I learned	Competencies reached	Placement/ outside
	mental health. I think I used the space to educate and provide therapeutic support simultaneously and the service user left with intentions to practice this at home.		teaching and training	
01/07/2022	Working on and finalising teaching and training diary.		Teaching and training	
04/07/2022	Had a review session with a service user who had finished coping skills sessions but was not ready for therapy. This was led by my colleague who is a Clinical Psychologist, and it was valuable to observe.	Observing how the conversation was directed to retain focus of the session was interesting and, similar to another recent experience, at times felt uncomfortable. However, I could see that it was needed as the service user found it difficult to answer any question without changing the subject. The session resulted in a plan for next steps. It's often easier to just listen and give space and whilst that's important, it can result in an unproductive session.	Generic professional	
05/07/2022	Ran a mindfulness skills-based session with a service user (building from 28/6). We discussed the benefits of regular practice alongside her own barriers for participation. Although she asked lots of questions about the content and was generally well engaged, I found it challenging to encourage her to try regular practice away	This is something that happens regularly, particularly with mindfulness. I've taken my learning from last week and really researched into it and practiced it, and I do think that it helped my confidence in delivering the material and piqued more curiosity (she asked me if I practiced it if I was	Psychological interventions/ generic professional/ teaching and training	

6.2 PRACTICE LOG

Date	What happened	What I learned	Competencies reached	Placement/ outside
	from when she just “needs” it. I understood that pushing the matter would take away her sense of autonomy so although the session ended with encouragement, it didn’t result in a resolution to practice.	calm and this isn’t the first time this has happened). I think when it comes to psychoeducation there is some aspect of autonomy taken away, but I wonder if being more curious and exploring barriers could be done without pushing the subject.		
Signed by Clinical Supervisor: Dr Kyle Boyd for within- placement work completed 11/04/2022 – 07/07/2022