Running head: EVALUATING A WELLBEING PROGRAMME
A Multi-component Wellbeing Programme for Upper Secondary Students: Effects on
Wellbeing, Buoyancy, and Adaptability

1

Abstract

School-related wellbeing, academic buoyancy, and adaptability are valued constructs in their own right, as indicators of student welfare, and as predictors of academic achievement. In the present study, we examined the impact of a six-session multi-component, intervention on school-related wellbeing, academic buoyancy, and adaptability. Participants in their first year of upper secondary education were randomly allocated to early intervention groups, or wait list-control groups. Following baseline measurements, outcomes were assessed after the early intervention groups and again after the wait list-control groups. Following intervention, a slowed decline was shown in school-related wellbeing and adaptability was boosted. Buoyancy was boosted in the early intervention group but not the late intervention group. Findings show how a relatively short intervention can beneficially impact on student outcomes. Booster sessions may be required to maintain the benefits for wellbeing and adaptability.

Keywords: School-related wellbeing; academic buoyancy; adaptability; multi-component intervention; positive education

A Multi-component Wellbeing Programme for Upper Secondary Students: Effects on Wellbeing, Buoyancy, and Adaptability

A succession of reports have drawn attention to low wellbeing among children and young people in England (e.g., Cowburn & Blow, 2017; Ford, Mitofran, & Wolpert, 2013; OECD, 2017). Studies have shown how subjective wellbeing, and cognate constructs, can be developed in educational settings (e.g., Durlack, Weissberg, Dymnicki, Taylor, & Schellinger, 2011) and a growing literature has related subjective wellbeing to positive outcomes (e.g., Ben-Arieh, Casas, Frønes, & Korbin, 2014; Saab & Klinger, 2010). There is comparatively little research, however, to examine specifically whether *school-related* wellbeing can be enhanced or developed using a bespoke programme. In the present study, we examine if a multi-component wellbeing programme, drawing on elements of positive psychology, cognitive behaviour therapy, and mindfulness, impacted on the school-related wellbeing of students in upper secondary education. In addition to school-related wellbeing as the primary outcome adaptability and buoyancy were measured as process variables.

BePART: A Multi-component Wellbeing Intervention

Following concerns over the wellbeing of the student body, a wellbeing programme, referred to as BePART (an acronym for Be Positive, Ambitious, Resilient and Thoughtful), was designed by staff at a Sixth Form College in England¹. BePART was designed as a six-session evidence-informed, multi-component, programme to be delivered as part of students' personal, social, and health curriculum. The aim was to provide students with the opportunity to learn and practice personal resources required to be happy, healthy, and academically successful persons. BePART incorporated elements of positive psychology (gratitude), mindfulness (how to down-regulate negative emotions and improve the quality of sleep), cognitive-behavioural therapy (how to reappraise negative and stressful events), and a focus

¹ A Sixth Form College is a tier of upper secondary education that provides academic and vocational education for students aged 16-19 years in England, Wales, and Northern Ireland.

on setting positive goals (drawing on elements of both CBT and positive psychology). These elements were chosen to reflect perceived student needs in the college context, namely poor management of stress, giving up in the face of difficulty, poor sleep hygiene, and poor diet choices.

Positive psychology. Positive psychology is the scientific study of the conditions and experiences that allow for the optimal functioning of individuals, communities, and institutions (Gable & Haidt, 2005; Pluskota, 2014). Positive psychology interventions (PPIs) are instructions, exercises or treatments which aim to raise positive feelings, cognitions and behaviours (Sin & Lyubomirsky, 2009), and are being used by a growing number of schools (Oades, Robinson, Green, & Spence, 2011). One of the more common and successful activities included in successful PPIs has been to reflect on gratitude (e.g., Froh, Sefick, & Emmons, 2008); writing gratitude-based letters has been shown to increase positive affect (e.g., Toepfer, Cichy, & Peters, 2012; Watkins, Woodward, Stone & Kolts, 2003). Gratitude exercises were included in BePART to show students a method of up-regulating positive affect, which should result in enhanced wellbeing.

Cognitive behaviour therapy. Cognitive-behaviour therapy (CBT) was originally developed to treat affective disorders (Beck & Haigh, 2014) The core components of CBT, however, have been successfully adapted for use with a wide variety of additional clinical and non- or sub-clinical conditions including stress management, pain management, substance addiction, and school refusal (Ehde, Dillworth, & Turner, 2014; Hofmann, Asnaani, Vonk, Sawyer, & Fang 2012; Maynard, Heyne, Brendel, Bulanda, Thompson, & Pigott, 2018). CBT strategies were taught to students in BePART to show way of effectively managing academic pressures (e.g., high-stakes examinations) and not giving up in the face of academic difficulties.

Mindfulness. Mindfulness refers to the practice of purposefully focusing one's attention in the present moment and observing the flow of conscious experience without comment (Kabat-Zinn, 2003). This can be achieved through a variety of means through focusing on an attentional anchor such ones' breathing or a sensation (e.g., one heart beating). If the focus of one's attention drifts from the anchor, the practice of mindfulness is to return one's focus to the anchor (Meiklejohn et al., 2010). Meta-analyses have shown mindfulness interventions to show positive effects on a range of outcomes including lowered negative emotions, raised positive emotions, a reduction in stress, and an increase in subjective wellbeing, for clinical and non-clinical populations (e.g., Gu, Strauss, Bond, & Cavanagh, 2015; Khoury Sharma, Rush, & Fournier, 2015). Mindfulness-based programmes offered in schools have shown improved, sleep, reduced negative emotions, and increased wellbeing (Zenner, Herrnleben-Kurz, & Walach, 2013; Zoogman, Goldberg, Hoyt, & Miller, 2015). Mindfulness was included in BePART to show students ways of improving sleep quality and down-regulating negative affect (e.g., responsiong positively to academic setbacks).

Health and diet. In recognition of the role that a healthy diet and lifestyle can play in contributing to psychological, as well as physical wellbeing BePART also included one session on the importance of health and diet. This session was complimentary to, rather than being directly informed by, sessions based on the principles of CBT, positive psychology, and mindfulness. A summary of the aims, content, theoretical basis, homework tasks, and reflection tasks of the six sessions is summarised in Table 1.

[Table 1 here]

Outcomes: School-related Wellbeing, Adaptability, and Academic Buoyancy

Since BePART was developed as a programme to maximise school-related wellbeing, this represented our principal outcome measure. School-related wellbeing was defined as when positive school-related beliefs and emotions outweigh the negative ones (e.g., Hascher,

2003, 2008). School-related wellbeing can be viewed as a valued outcome in its own right and also as a facilitator of positive school functioning such as achievement, good behaviour, positive emotions, and positive relationships with teachers and peers (e.g., Carmona–Halty, Salanova, Llorens, & Schaufeli, 2018; Miller, Connolly, & Maguire, 2013; Putwain, Loderer, Gallard, & Beaumont, 2018; Weber, Wagner, & Ruch, 2016). The improved positive affect and cognition arising from the mindfulness (e.g., responding positive to academic setbacks), CBT (better management of examination stress), and gratitude (e.g., reflecting how teachers help students to achieve their aspirations), elements of BePART should, result in greater school-related wellbeing.

Academic buoyancy and adaptability were included as secondary outcomes.

Academic buoyancy is the ability to 'bounce back' from the kinds of routine setbacks and minor adversities experienced by the majority of students such as dips in motivation, competing deadlines, performance pressure, and receiving negative feedback on one's work (Martin & Marsh, 2006, 2009). Academic buoyancy is underpinned by the 5Cs of confidence, coordination, commitment, composure, and control (Martin, Colmar, Davey, & Marsh, 2010). As the mindfulness, and CBT elements of BePART were specifically designed to help students manage academic setbacks, effective management of academic pressures, BePART should improve students' composure and control leading to greater academic buoyancy.

Adaptability refers to how persons respond to new or uncertain situation (VandenBos, 2007). Persons high in adaptability are able to change their thoughts, emotions, and behaviours, in response to the new or unchanging situation, in ways that result in positive outcomes (Martin, 2012; Martin, Nejad, Colmar, & Liem, 2012, 2013). In educational settings, students are routinely exposed to novel and changing situations in a number of ways such as transitioning from one stage of education to another, new teachers, peers, classmates, courses, curriculum demands, assessments, and so on. Adaptability was particularly germane

to our sample who had transitioned at the beginning of the school year to upper secondary education (colloquially referred to as 6th Form) and were taking higher level courses in preparation for university application. A high level of adaptability would be an asset in responding positively to this educational change. The flexible forms of cognitive and affective regulation, shown in the CBT, mindfulness, and gratitude exercises should result in enhanced adaptability.

Aim of the Present Study

School-related wellbeing, adaptability, and academic buoyancy, are positive and desirable outcomes in themselves and indicators of positive academic trajectories (Martin, 2013). Studies have yet to examine, however, if school-related wellbeing, adaptability, and academic buoyancy can be enhanced by intervention. The aim of the present study was to address this gap in the extant literature. We hypothesised that after completing BePART, students would show enhanced school-related wellbeing, adaptability, and academic buoyancy.

Method

Participants

All participants were in Year 12 (the first year of upper secondary education; colloquially referred to as 6^{th} Form). There were 668 students (male n = 280, female n = 388) in the Year 12 cohort. One hundred and thrity-four students declined to participate leaving 534 participants in the study (male n = 217, female n = 317) with a mean age of 16.71 years (SD = .54). Participants were largely from a white ethnic heritage (Asian n = 16, Black n = 2, White n = 508, other n = 4, mixed heritage n = 4) and a small number of participants (n = 37) were eligible for free lunch (indicative of low income family). In terms of academic achievement, on entry to the college the students had a mean grade of C on secondary school exit examinations taken at the end of Year 11 (GCSE: General Certificate of Secondary

Education). GCSEs were graded on an eight-point letter scale (A* to G; the minimum pass grade being C). The mean GCSE grade in England in 2016 (the year when participants took GCSEs was a grade C: Office of Qualifications and Exmination Regulation, 2016) suggesting the cohort from which our sample were drawn could be characterised as typically achieving.

Design

The study used a mixed factorial design. The between participants factor had two levels; participants were randomly allocated to either early intervention (gn = 263 participants) or wait-list control groups (n = 271 participants) henceforth referred to as the 'late' intervention group. A blind block randomisation procedure was used by a member of college staff to allocate participants to groups that were concealed from the research team. The within-participants factor had three levels; outcome measures were collected over three time points. These were baseline (T_1), after the early intervention groups had completed the intervention (T_2), and after the wait-list control groups had completed the intervention (T_3).

Measures

College-related Wellbeing. College-related wellbeing was measured using the sixitem scale recently developed by Loderer, Vogl, and Pekrun (2016). Participants responded to items (e.g., 'College is going well for me') on a five-point scale (5 = strongly agree, 3 = neither, 1 = strongly disagree) so that a higher score represented a greater sense of wellbeing. This scale has shown excellent internal consistency (Cronbach's α s = .86 – .93) and construct validity, namely the model fit of the single factor scale and relations with learning related emotions, and academic self-efficacy (Loderer et al., 2016, 2018). In the present study internal consistency was good (Cronbach's α T₁ = .88, T₂ = .89, and T₃ = .89).

Academic Buoyancy. Academic buoyancy was measured using the four-item scale developed by Martin and Marsh (2008). Participants respond to items (e.g., 'I'm good at dealing with setbacks at College, e.g., bad mark, negative feedback on my work') on a five-

point scale (5 = strongly agree, 3 = neither, 1 = strongly disagree) so that a higher score represented a greater sense of buoyancy. The reliability (Cronbach's $\alpha s = .73 - .82$), and construct validity (e.g., model fit of the single factor scale and relations with academic anxiety, self-handicapping, and engagement) of data collected using this scale demonstrated in several studies (e.g., Martin, 2013; Martin et al., 2010). In the present study, internal consistency was good (Cronbach's α T₁ = .79, T₂ = .81, and T₃ = .80).

Adaptability. Adaptability was measured using the nine-item scale developed by Martin et al. (2012). Six items corresponded to cognitive adaptability (e.g., 'I am able to adjust my thinking or expectations to assist me in a new situation') and three items to affective adaptability (e.g., 'I am able to reduce negative emotions, e.g. fear, to help me deal with uncertain situations'). Participants responded on a five-point scale (5 = strongly agree, 3 = neither, 1 = strongly disagree) so that a higher score represented a greater sense of adaptability. These scales have been shown to highly correlate and can be analysed separately or as an omnibus construct depending on one's research questions. The reliability (Cronbach's α s = .90 – .92), and construct validity (e.g., model fit of the single factor scale and relations with class participation, enjoyment of school, and self-esteem) of data using the omnibus adaptability scale has been demonstrated by Martin et al. (2012, 2013). The internal consistency of adaptability in the present study was good (Cronbach's α T₁ = .87, T₂ = .89, and T₃ = .90).

The Intervention

BePART was delivered to all participants as part of their personal, social, and health education, lessons (these are compulsory lessons taken alongside the academic programme of study). BePART was delivered over six weeks; one hour-long lesson per week. Lessons were delivered by college staff with a pastoral role who received training in the psychological principles underpinning the intervention as well as the delivery and use of materials. To

ensure fidelity, all staff received a common training pack consisting of a presentation slides and a manual. Students receive a workbook for reflective exercises.

Procedure

The early intervention groups were delivered in a six-week block in the autumn term, approximately six weeks after students had started at college. The wait-list intervention groups were delivered in a six-week block in the spring term, immediately following the Christmas break. Self-report data were collected by college pastoral staff with instructions that explained the purpose of the research (to evaluate BePART) and ethical considerations. Ethical approval was provided by the institutional ethics committee and written permission to undertake the study was provided by the College Principal. Students could not opt-in or out of the intervention as it was a compulsory part of their timetable, however, participation in the research element to evaluate BePART was voluntary. Students were provided with an information sheet that emphasised that participation was a voluntary activity and that nonparticipation had no bearing on their academic progress; students provided informed consent and could withdraw their data. Students may feel disempowered to exercise their right to nonparticipation when data are collected on college premises by college staff. However, the proportion of students choosing not to participate was relatively high (20.06% of the Year 12 cohort) and no spoilt questionnaires were returned (a possible indication of covert nonparticipation). This would suggest students felt able to exercise agency in their right to nonparticipation.

Results

Data were analysed in a series of 2x3 mixed ANOVAs with one between-participants factor (early intervention vs. wait-list control), and one within-participants factor (T_1 , T_2 , and T_3 , waves of measurement). School-related wellbeing, adaptability, and academic buoyancy, were treated as outcomes. Means are shown in Table 2 and interactions are graphed in Figure

1. The outcome measures in Figure 1 are presented on a scale of 2.5 to 4.5 (the original metric was 1 to 5) to allow for differentiation of the early and late intervention groups for the three outcomes that are clustered around similar points on the scale. Adjustments to Cohen's d effect size calculations were made for within-participant comparisons (Morris & DeShon, 2002). When interpreting sizes d > .2 was regarded as small, d > .5 moderate, and d > .8, large (Cohen, 1988).

School-related Wellbeing

There was a main effect of time, F(2, 1044) = 3741.67, p < .001, $\eta_p^2 = .878$ (from T₁ to T₃, school-related wellbeing declined), but not intervention, F > 1, that was qualified by a time × intervention interaction, F(2, 1044) = 13.06, p < .001, $\eta_p^2 = .024$. From T₁ to T₂, the rate of decline in school-related wellbeing declined was less for the early intervention group, t(262) = 37.70, p < .001, d = 1.111, compared to the late intervention group, t(260) = 54.19, p < .001, d = 1.661). From T₂ to T₃, rate of decline in school-related wellbeing declined was less for the late intervention group, t(270) = 13.35, p < .001, d = 0.308, compared to the early intervention group, t(262) = 17.09, p < .001, d = 2.285. In summary, participation in BePART slowed reductions in school-related wellbeing.

Adaptability

There was a main effect of time, F(2, 1044) = 3.16, p = .04, $\eta_p^2 = .006$, and intervention, F(1, 522) = 25.91, p < .001, $\eta_p^2 = .047$, that was qualified by a time × intervention interaction, F(2, 1044) = 27.40, p < .001, $\eta_p^2 = .050$. From T_1 to T_2 , adaptability increased for the early intervention group, t(262) = -3.85, p < .001, d = -.074, and decreased for the late intervention group, t(260) = 6.20, p < .001, d = .115. From T_2 to T_3 , increased for the late intervention group, t(270) = -4.05, p < .001, d = -.077, and decreased for the early intervention group, t(262) = 5.24, p < .001, d = .109. In summary, participation in BePART temporarily increased adaptability.

Academic Buoyancy

There was a main effect of time, F(2, 1044) = 40.62, p < .001, $\eta_p^2 = .072$, and intervention, F(1, 522) = 29.54, p < .001, $\eta_p^2 = .054$, that was qualified by a time \times intervention interaction, F(2, 1044) = 27.40, p < .001, $\eta_p^2 = .050$. From T_1 to T_2 , buoyancy increased for the early intervention group, t(262) = -2.74, p = .007, d = -.062, and decreased for the late intervention group, t(260) = 9.41, p < .001, d = .058. From T_2 to T_3 , buoyancy decreased for the early, t(262) = 5.24, p < .001, d = .195, and late intervention groups, t(270) = 8.41, p < .001, d = .174. In summary, these results are equivocal.

Discussion

The aim of the study was to evaluate a wellbeing programme, BePART, in a sample of 16 to 17 year old students in their first year of upper secondary education. Students were randomly allocated to early or late intervention groups and assessed at baseline (T₁), after the early intervention group was complete (T₂) and again after the wait-list control group was complete (T₃). All students showed a decline in school-related wellbeing from T₁ to T₃. After participating in BePART, however, the reduction in school-related wellbeing was slowed, and there was an increase in adaptability. Early, but not late, intervention groups showed an increase in academic buoyancy. These findings build on previous studies showing how wellbeing can be positively influenced in school settings (e.g., (e.g., Durlack et al., 2011). Specifically, these findings show how a wellbeing programme (comprised of gratitude, CBT, and mindfulness) can impact on school-related wellbeing and cognate constructs (adaptability and buoyancy).

Previous studies have demonstrated how school programmes can enhance subjective wellbeing (e.g., Seligman, Ernst, Gillham, Reivich, & Linkins, 2009; Sin & Lyubomirsky, 2009; Shoshani, & Steinmetz, 2018; Waters, 2011), however the present study is the first to demonstrate how a school programmes can specifically impact positively on *school-related*

wellbeing. It was somewhat concerning that school-related wellbeing showed such a large reduction from T₁ to T₃ (and was most marked from T₁ to T₂). We suspect this is an artefact of the transition to 6th Form. At the beginning of the first term in 6th Form, it is typical for colleges to provide induction activities to help students adjust to their new environment and new courses. However, as the academic year progresses and students are exposed to a higher level of study and inevitably negative feedback on academic work for some (e.g., Prowse, 2015). The 'fun' beginning of year is soon replaced by the hard work of the academic study and a focus on making choices about university courses and destinations. BePART was able to slow this decline. It is notable, however, that while BePART slowed the decline from T₁ to T₂ in the early intervention group, the effect was not lasting and by T₃, the scores of the two groups were very similar. We would conclude that BePART played a short-term role in attenuating the rate of decline of school-related wellbeing.

It has been suggested that academic buoyancy and adaptability are malleable constructs, and therefore amendable to intervention (e.g., Martin, 2013). Adaptability improved following BePART in both early and late intervention groups. The effect for the early intervention group, however, was short term and did not last until T₃. Academic buoyancy improved for the early intervention group but, like adaptability, the effect was short term and did not last until T₃. It is not clear why the late intervention group did not show the same short-term improvement. This finding is possibly related to academic demands increasing at the academic year progressed and in the second term (when BePART was delivered for the late intervention group students would have been starting to focus on examination preparation). BePART may have to be delivered in advance of this pressure to be effective. We would conclude that BePART played a short-term role in improving adaptability. The result of the early intervention group showed that while academic buoyancy can respond to intervention, the result of the late intervention group showed that it will not

always do so. Thus, we can only cautiously conclude at this stage that while BePART shows promise for improving academic buoyancy ultimately findings are equivocal.

Limitations and Suggests for Future Research

The outcomes in the present study were limited to self-reported school-related wellbeing, academic buoyancy, and adaptability. We did not examine the impact of BePART on behavioural data, such as teacher-reported grades, examination performance, or attendance. Given the links from school-related wellbeing, academic buoyancy, and adaptability, to academic achievement, it would be useful for subsequent research to extend an evaluation of BePART to behavioural data, and to establish if school-related wellbeing, academic buoyancy, and adaptability mediate the impact of BePART (and other PPIs) on behavioural outcomes. Furthermore, we did not implement a strategy to assess the fidelity or quality of intervention delivery. It is likely that fidelity and quality differed across the different intervention groups in such a way that would have influenced outcomes (e.g., Forman et al., 2013; Owens et al., 2014). It would be beneficial for future evaluations of BePART, as well as for school-based wellbeing programmes in general, to include methods to establishing fidelity and quality, and to establish their impact.

Results showed that the positive impact of BePART on school-related wellbeing did not appear to last to T₃. This is possibly as students were due to take high-stakes standardised, externally set and assessed examinations (General Certtificate of Advanced Level: Advanced Subsidiary Level) near the end of the school year. The results of these examinations contribute to students' university applications and the likelihood of being offered a place on a university course. The pressure of preparing for these examinations may have negatively impacted on students' wellbeing. It would be beneficial, therefore, for future research should examine if a booster session, or sessions, would help to maintain the positive effect. Finally,

we examined the impact of a wellbeing programme in an environment where students had transitioned to a 6th Form College from their previous secondary school. Some secondary schools in England have their own 6th Form provision. In that environment students will move from Year 11 to 12 within the same school without the novelty, uncertainty, of transitioning to a new college. It would be beneficial to evaluate BePART within this context too where potentially, initial levels of wellbeing, buoyancy, and adaptability, could be different.

Conclusion

The findings presented in this study show how school-related wellbeing and adaptability, and possibly academic buoyancy, can be positively impacted by a six-week programme. Declines in school-related wellbeing were not as severe following BePART, and adaptability was boosted. Our caution for academic buoyancy resulted from it only being boosted for the early intervention group, not the late intervention group. Initial benefits for school-related wellbeing and adaptability shown in the early intervention group did not last to the final point of measurement suggesting that booster sessions might be required. Schoolrelated wellbeing, adaptability, and academic buoyancy, are valued outcomes in their own right; attempts to develop them through positive education initiatives are to be commended. In many educational systems such as England, where the present study was conducted, the happiness and emotional welfare of students is often secondary to that of academic achievement (Cowburn & Blow, 2017). It is therefore notable that BePART impacted positively on constructs associated with academic gains. Such links may be useful in convincing funders, policy makers, and education providers, of the benefits of attending to wellbeing programmes; ultimately they may not only benefit 'soft outcomes' but facilitate academic achievement too.

References

- Beck, A.T., & Haigh, E.A.P. (2014). Advances in cognitive theory and therapy: The generic cognitive model. *Annual Review of Clinical Psychology*, 10, 1-24.doi: 10.1146/annurev-clinpsy-032813-153734
- Ben-Arieh, A., Casas, F., Frønes, I., & Korbin, J.E. (2014). Multifaceted concept of child well-being. In A. Ben-Arieh, F. Casas, I. Frønes, & J.E. Korbin, (Eds.), *Handbook of child well-being: Theories, methods and policies in global perspective* (pp.1-27). Dortmund, Netherlands: Springer.
- Carmona–Halty, M., Salanova, M., Llorens, S., & Schaufeli, W.R. (2018). How psychological capital mediates between study–related positive emotions and academic performance. *Journal of Happiness Studies*. Advance online publication, doi: 10.1007/s10902-018-9963-5
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Earlbaum Associates.
- Cowburn A., & Blow, M. (2017). Wise up to wellbeing in schools. London: Young Minds.
- Durlack, J.A., Weissberg, R.P., Dymnicki, A.B., Taylor, R.D., & Schellinger, K.C. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school based universal interventions. *Child Development*, 82, 405-432.doi: 10.1111/j.1467-8624.2010.01564.x
- Ehde, D.M., Dillworth, T.M., & Turner, J.A. (2014). Cognitive-behavioral therapy for individuals with chronic pain: Efficacy, innovations, and directions for research.
 American Psychologist, 69, 152-166.doi: 10.1037/a0035747Ford, T., Mitofran, O., & Wolpert, M. (2013). Life course: Children and young people's mental health. In S. Davies (Ed.). Annual report of the Chief Medical Officer 2013, Public Mental Health: Investing in the evidence (pp. 99 114). London: HMSO.

- Forman, S.G., Shapiro, E.S., Codding, R.S., Gonzales, J.E., Reddy, L.A., Rosenfield, S.A., Sanetti, L.M., & Stoiber, K.C. (2013). Implemtation science and school psychology. *School Psychology Quarterly*, 28, 77-100.doi: 10.1037/spq0000019
- Froh, J. J., Sefick, W. J., & Emmons, R. A. (2008). Counting blessings in early adolescents:

 An experimental study of gratitude and subjective well-being. *Journal of School Psychology*, 46, 213-233.doi: 10.1016/j.jsp.2007.03.005
- Gable, S. L., & Haidt, J. (2005). What (and why) is positive psychology? *Review of General Psychology*, *9*, 103-110.doi: 10.1037/1089-2680.9.2.103
- Gu, J., Strauss, C., Bond, R., & Cavanagh, K. (2015). How do mindfulness-based cognitive therapy and mindfulness-based stress reduction improvemental health and wellbeing? A systematic review and meta-analysis of mediation studies. *Clinical Psychology Review*, 37,1–12.doi: 10.1016/j.cpr.2015.01.006
- Hascher, T. (2003). Well-being in school: Why students need social support. In P. Mayring & C. von Rhöneck (Eds.), Learning emotions –The influence of affective factors on classroom learning (pp. 127-142). Bern, Switzerland: Lang.
- Hascher, T. (2008). Quantitative and qualitative research approaches to assess student well-being. *International Journal of Education Research*, 47,84-96.doi: 10.1016/j.ijer.2007.11.016
- Hofmann, S.G., Asnaani, A., Vonk, I.J.J., Sawyer, A.T., & Fang A. (2012). The efficacy of cognitive behavioral therapy: a review of meta-analyses. *Cognitive Therapy Research*, 36, 427–440.doi: 10.1007/s10608-012-9476-1
- Jacka, F. N., Kremer, P. J., Berk, M., de Silva-Sanigorski, A. M., Moodie, M., Leslie, E. R., ... & Swinburn, B. A. (2011). A prospective study of diet quality and mental health in adolescents. *PloS One*, 6(9), e24805.doi: 10.1371/journal.pone.0024805
- Office of Qualifications and Exmination Regulation (2016). Detailed analysis of summer

- 2016 GCSE results. Coventry: Ofqual.
- Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice*, 10, 144–156. doi:10.1093/clipsy.bpg016
- Khoury, B., Sharma, M., Rush, S. E., & Fournier, C. (2015). Mindfulness-based stress reduction for healthy individuals: A meta-analysis. *Journal of Psychosomatic Research*, 78, 519–528.doi:10.1016/j.jpsychores.2015.03.009
- Leahy, R. L. (2003). *Cognitive therapy techniques: A practitioner's guide*. New York: Guilford Press.
- Levin, K.A., Currie, C., & Muldoon, J. (2009). Mental well-being and subjective health of 11- to 15-year-old boys and girls in Scotland, 1994–2006. *European Journal of Public Health*, 19, 605–610.doi: 10.1093/eurpub/ckp046
- Loderer, K., Murayama, K., Putwain, D.W., Pekrun, R., Tanaka, A., Vogl, E., & Loeffler-Gutmann, A. (2018). Does students' well-being at school measure up across cultures? Validating the school-related well-being scale (SWBS) with German, English, and Japanese students. Paper presented at the International Conference on Motivation (ICM), Aarhus, Denmark.
- Loderer, K., Vogl, E., & Pekrun, R. (2016). Students' well-being at school revisited:

 Development and initial validation of a unidimensional self-report scale. Paper

 presented at the International Conference on Motivation (ICM), Thessaloniki, Greece.
- Lyubomirsky, S., & Layous, K. (2013). How do simple positive activities increase well-being?. *Current Directions in Psychological Science*, 22, 57-62.doi: 10.1177/0963721412469809
- Martin, A.J. (2013). The Personal Proficiency Network: Key self-system factors and processes to optimize academic development. In D.M. McInerney, H.W. Marsh., R.G. Craven, & F. Guay (Eds). *Theory driving research: New wave perspectives on self-*

- processes and human development (pp. 251-286). Charlotte, NC: Information Age Publishing.
- Martin, A. J., Colmar, S. H., Davey, L. A., & Marsh, H. W. (2010). Longitudinal modelling of academic buoyancy and motivation: Do the '5Cs' hold up over time? *British Journal of Educational Psychology*, 80, 473–496. doi:10.1348./000709910X486376
- Martin, A. J., & Marsh, H. W. (2006). Academic buoyancy and its psychological and educational correlates: A construct validity approach. *Psychology in the Schools*, 43, 267–282. doi:10.1002/pits.20149
- Martin, A. J., & Marsh, H. W. (2009). Academic resilience and academic buoyancy:

 Multidimensional and hierarchical conceptual framing of causes, correlates and cognate constructs. *Oxford Review of Education*, *35*, 353–370. doi:10.1080/03054980902934639
- Martin, A. J., Nejad, H., Colmar, S., & Liem, G. A. D. (2012). Adaptability: Conceptual and empirical perspectives on responses to change, novelty and uncertainty. *Australian Journal of Guidance and Counselling*, 22, 58–81. doi:10.1017/jgc.2012.8
- Martin, A. J., Nejad, H., Colmar, S., & Liem, G. A. D. (2013). Adaptability: How students' responses to uncertainty and novelty predict their academic and non-academic outcomes. *Journal of Educational Psychology*, 105, 728-746.doi: 10.1037/a0032794
- Maynard, B. R., Heyne, D., Brendel, K. E., Bulanda, J. J., Thompson, A. M., & Pigott, T. D. (2018). Treatments for school refusal amongchildren and adolescents: A systematic review and meta-analysis. *Research on Social Work Practice*, 28, 56-67. doi: 10.1177/1049731515598619
- Meiklejohn, J., Philips, C., Freedman, M. L., Griffin, M. L., Biegel, G., Roach, A., Frank, J., ... Saltzman, A. (2012). Integrating mindfulness training into K-12 education:

- Fostering the resilience of teachers and students. *Mindfulness*, *3*, 291-307. doi: 10.1007/s12671-012-0094-5.
- Miller, S., Connolly, P., & Maguire, L. K. (2013). Wellbeing, academic buoyancy and educational achievement in primary school students. *International Journal of Educational Research*, 62, 239–248. doi:10.1016/j.ijer.2013.05.004
- Morris, S. B., & DeShon, R. P. (2002). Combining effect size estimates in meta-analysis with repeated measures and independent-groups designs. *Psychological Methods*, 7, 105-125.doi: 10.1037/1082-989X.7.1.105
- Oades, L. G., Robinson, P., Green, S. & Spence, G. B. (2011). Towards a positive university. *Journal of Positive Psychology*, 6, 432-439.doi: 10.1080/17439760.2011.634828
- OECD (2017). PISA 2015 Results (Volume III): Students' Well-Being. OECD Publishing, Paris. http://dx.doi.org/10.1787/9789264273856-en
- Ortega, F. B., Ruiz, J. R., Castillo, M. J., & Sjöström, M. (2008). Physical fitness in childhood and adolescence: a powerful marker of health. *International Journal of Obesity*, 32, 1-11.doi: 10.1038/sj.ijo.0803774
- Owens, J.S., Lyon, A.R., Brandt, N.E., Warner, C.M., Nadeem, E., Spiel, C., & Wagner, M. (2014). Implementation science in school mental health: key constructs in developing a research agenda. *School Mental Health*, 6, 99-111.doi: 10.1007/s12310-013-9115-3
- Pluskota, A. (2014). The application of positive psychology in the practice of education. SpringerPlus, 3, 147.doi: 10.1186/2193-1801-3-147
- Prowse, A. (2015). *Student induction and transition: Reciprocal journeys*. Gloucester: Quality Assurance Agency for Higher Education.
- Putwain, D.W., Loderer, K., Gallard, D., & Beaumont, J. (2018). School-related subjective wellbeing promotes subsequent adaptability, achievement and positive behavioural

- conduct. Manuscript under review.
- Saab, H., & Klinger, D. (2010). School differences in adolescent health and wellbeing: findings from the Canadian Health Behaviour in School-aged children Study. *Social Science and Medicine* 70, 850–858.doi: 10.1016/j.socscimed.2009.11.012
- Seligman, M. E., P. & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5-14.doi: 10.1037/0003-066X.55.1.5
- Seligman, M. E., Ernst, R. M., Gillham, J., Reivich, K., & Linkins, M. (2009). Positive education: Positive psychology and classroom interventions. *Oxford Review of Education*, *35*, 293-311.doi: 10.1080/03054980902934563
- Sin, N. L., & Lyubomirsky, S. (2009). Enhancing well-being and alleviating depressive symptoms with positive psychology interventions: A practice-friendly meta-analysis.

 *Journal of Clinical Psychology, 65, 467-487.doi: 10.1002/jclp.20593
- Shoshani, A. & Steinmetz, S. J. (2018). Positive psychology at school: A school-based intervention to promote adolescents' mental health and well-being. *Journal of Happiness Studies*, *15*, 1289-1311.doi:10.1007/s10902-013-9476-1
- Toepfer, S. M., Cichy, K., & Peters, P. (2012). Letters of gratitude: Further evidence for author benefits. *Journal of Happiness Studies*, *13*, 187-201.doi: 10.1007/s10902-011-9257-7
- VandenBos, G. R. (Ed.). (2007). American Psychological Association dictionary of psychology. Washington, DC: American Psychological Association.
- Waters, L. (2011). A review of school-based positive psychology interventions. *The Educational and Developmental Psychologist*, 28, 75-90.doi: 10.1375/aedp.28.2.75
- Watkins, P. C., Woodward, K., Stone, T., & Kolts, R. L. (2003). Gratitude and happiness:

 Development of a measure of gratitude, and relationships with subjective well-being.

 Social Behavior and Personality: An International Journal, 3, 431-451.doi:

- 10.2224/sbp.2003.31.5.431
- Weber, M., Wagner, L. & Ruch, W. (2016). Positive feelings at school: On the relationships between students' character strengths, school-related affect, and school functioning.

 *Journal of Happiness Studies, 17, 341-355.doi: 10.1007/s10902-014-9597-1
- Zenner, C., Herrnleben-Kurz, S., & Walach, H. (2013). Mindfulness-based interventions in schools—a systematic review and meta-analysis. *Frontiers in Psychology*, *5*, 603.doi:10.3389/fpsyg.2014.00603.
- Zoogman, S., Goldberg, S. B., Hoyt, W. T., & Miller, L. (2015). Mindfulness interventions with youth: A meta-analysis. *Mindfulness*, 6, 290-302.doi: 10.1007/s12671-013-0260-4

Table 1
An Overview of the BePART Programme

	Session 1	Session 2	Session 3	Session 4	Session 5	Session 6
Aim	Recognise negative thoughts; prompt more positive ways of thinking	Understand and recognise the triggers and signs of stress; learn a mindfulness-based technique to reduce stress	Identify if current thought patterns are ones of gratitude; learn how to up- regulate positive emotions through reflecting on gratitude	Understand the impacts of diet and exercise on maintaining physical and psychological health	Recognise the repetitive thought patterns that can prevent sleep; learn a mindfulness-based technique to improve sleep quality	Review previous learning; set goals to maintain and improve wellbeing in the future
Content	 Recognising whether thoughts in the first few weeks of college have been positive or negative Identifying situations in which negative thoughts arise How to replace negative thoughts with positive thoughts 	 Relationship between feelings and behaviours Identifying physical symptoms of stress Relaxation strategies including anchoring 	 Recognising gratitude Why gratitude build resilience How to express gratitude 	 Recognising healthy lifestyle choices How diet and exercise impact on wellbeing How to maintain a healthy lifestyle 	 How thoughts effect sleep and behaviours Identifying negative repetitive thoughts and their consequences Relaxation strategies including a 'Beditation' to improve sleep 	 Summary of earlier sessions How to use techniques covered in BePART to maintain health and wellbeing in the future
Theoretical basis	Based on the principles of cognitive-behaviour therapy. Techniques adapted from those presented in Leahy (2003)	Based on principles and techniques of mindfulness based stress reduction (e.g., Kabat-Zinn, 2003)	Based on the principles of positive psychology (e.g., Seligman & Csikszentmihalyi, 2000), and writing gratitude based letters to increase positive affect (e.g., Watkins, Woodward, Stone & Kolts, 2003; Toepfer, Cichy, & Peters, 2012)	Based on evidence demonstrating that exercise has physical and mental health benefits for children and adolescents (e.g., Oretaga, Ruiz, Castillo, & Sjöström, 2008) and the importance of diet in adolescence for improving mental health (e.g., Jacka et al., 2011)	Based on evidence that mindfulness impacts on wellbeing through improved sleep quality (e.g., Howell, Digdon, & Sheptycki, 2008)	Based on the principles of goal-setting theory (e.g., Locke, Shaw, Saari, & Latham, 1981)
Homework task	Record negative thoughts and challenge them to	Practise anchoring	Each day record something to be	Keep a food and exercise diary	Practise 'Beditation'	

	become more positive in		grateful for and			
	nature.		consider the reasons			
			to be grateful			
Reflection	Use a reflection table to	Complete a reflection table to	Think about	Reflect upon how food	Consider if the	Write a letter to future self
task	record three examples of	understand situations which	things/people to be	and exercise affects	'Beditation' improves	which offers useful advice
	negative thoughts and	cause stress and the impact on	grateful for and	levels of positivity,	relaxation and	for wellbeing by reflecting
	consider how these can be	feelings and behaviours, and	practise expressing	clarity of thought,	the quality of sleep	on the techniques learnt in
	challenged to be more	consider the effect that	gratitude by writing a	energy levels and		the BePART programme
	positive in nature	anchoring has on real life	letter	happiness.		
		stressful situations				

Table 2

Means and Standard Deviations in School-related Wellbeing, Academic Buoyancy, and Adaptability, for early and late intervention groups across three time points.

	T ₁		T ₂		Т3	
	M	SD	М	SD	M	SD
School-related Wellbeing						
Early	3.75	.52	3.06	.39	2.94	.48
Late	3.80	.60	3.02	.45	2.91	.49
Academic Buoyancy						
Early	3.34	.81	3.41	.83	3.28	.79
Late	3.34	.82	3.28	.70	3.17	.83
Adaptability						
Early	3.56	.62	3.62	.56	3.57	.52
Late	3.57	.68	3.47	.59	3.51	.64

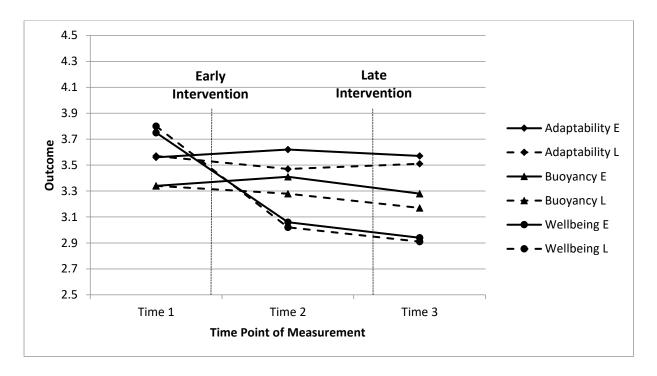


Figure 1. The interaction between time and intervention for school-related wellbeing, academic buoyancy, and adaptability (E = Early Intervention Group, L = Late Intervention Group).