

ACT-ing on Injury:

Increasing Psychological Flexibility and Adherence to Rehabilitation

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Abstract

This case study outlines the use of Acceptance and Commitment Therapy (ACT; Hayes et al., 1999) with a client struggling with uncomfortable thoughts and emotions concerning his injury, impacting adherence to his rehabilitation plan. The aims were to increase psychological flexibility and decrease cognitive fusion to allow for greater adherence to his rehabilitation plan and support wellbeing. The client engaged in a series of one-on-one sessions, discussing the tri-flex within ACT through the strategy of “recognise, release, refocus” (Hansen & Haberl, 2019). The intervention included practice engaging with the present moment, exploring defusion techniques, clarifying values, and committing to subsequent values-driven behaviours. The effectiveness of the intervention was assessed by monitoring psychological flexibility (Bond et al., 2011), cognitive fusion (Gillanders et al., 2014), and feedback from the client’s physiotherapists. The trainee sport and exercise psychologist then provides reflections on the case.

Keywords: football, injury, acceptance and commitment therapy, psychological flexibility

Context

Academy football within the UK is highly competitive and middle adolescents have reported experiencing salient stressors comprising of making errors, team performance, coaches, selection, contractual stressors, and playing at a higher level (Reeves et al., 2007). There is therefore potential for an injury to increase the impact of these stressors. One reason for increased stress could be due to time loss during an injury, with U18 players experiencing the worst injury burden of all age groups over four years (Materne et al., 2021).

The client, James, was a 17-year-old male and a first-year scholar at a category 1 football academy. James was away from home for the first time and living in academy lodging sharing a room with one of his teammates. He was training four times a week with league matches every Saturday. My consulting relationship with James had been developing for six months before the current case. Our work initially began as a result of coaches and support staff sharing concerns with me such as “he’s an overthinker”, “he asks too many questions”, “he takes too long to make decisions on the ball”. I then approached James to ask if he would be open to sitting down and having a chat one day, to which he agreed. This conversation led to an initial one-on-one with James, in which he confirmed he would like to have more psychology sessions. The one-on-one provided James a space to talk through his thoughts and concerns about life in and out of the academy in line with Acceptance and Commitment Therapy (ACT; Hayes et al., 1999).

The Practitioner

At the time of the current case, I was in the second year of my Professional Doctorate training and had been working at a category 1 football academy within the UK for six months. The aim of my work as a practitioner is to bring individuals closer to their true selves, in and out of their performance environments, allowing them to live and perform in

line with what is important to them. The values that guide my work are curiosity, self-awareness, acceptance, and collaboration. I believe the culture and environment I work within can shape and support psychological change, meaning I work closely with staff members to embed psychology. I use a holistic approach as I do not believe the person and performer can be separated. Therefore, I will support individuals across all aspects of their life if my competencies allow. Finally, I believe thoughts are mental events that should not be changed or removed. Instead, I take the perspective that it is part of the human condition to experience uncomfortable thoughts and feelings. Acceptance of uncomfortable mental events in pursuit of a fulfilling life, and engaging with values-driven behaviours, reflects the third wave approach ACT (Hayes et al., 1999). ACT takes me towards a certainist approach, meaning interventions are prescribed to support the presenting problem (Keegan, 2015) with an emphasis on theory and evidence-based practice (Eubank, 2016). However, I shift along the certainist and construalist continuum depending on the client's needs, believing that work should be collaborative.

The Case

As James was breaking into the starting line-up, he began to experience pain in his lower back. The pain would reduce with rest but remerge on return to sport. This fluctuation in pain meant the injury went undiagnosed for some time and James was in and out of training depending on his perceived level of pain. James believed the pain was problematic and he became increasingly frustrated with a lack of diagnosis. In time, James was able to get an MRI scan to diagnose a partial pars stress fracture in his lower back due to overuse. With this specific injury, pain is typically worse when active and subsides during rest, potentially slowing down the diagnosis process.

The Practitioner-Athlete Relationship

91 The work James and I had done previously supported this intervention and the
92 therapeutic relationship as we had built rapport and trust over six months. Research shows the
93 therapeutic relationship to be integral to the success of an intervention. Sharp et al. (2015)
94 indicated that rapport, respect, trust, partnership, and a positive impact on the client are key
95 ingredients to a successful consulting relationship. Due to our previous consultancy
96 relationship, James was open to continuing one-on-one support to focus on his injury
97 rehabilitation. James was keen to continue working with his thoughts and emotions using an
98 ACT approach. The academy and practitioner used an open confidentiality agreement in this
99 case. Meaning I always asked James whether there was anything he wanted to remain
100 confidential.

101 **Needs Analysis & Case Formulation**

102 The needs analysis for the current presenting problem utilised several means: formal
103 and informal conversations with James, informal conversations with physiotherapists and
104 coaches, drawing on past knowledge from my work with James in the previous months, and
105 psychometric assessments. After James' diagnosis, I had multiple informal conversations
106 with staff members. I asked questions such as "how has James seemed lately?" and "how has
107 he been managing?". Physiotherapists disclosed concerns that James had not experienced any
108 serious injuries before, only taking a few weeks out in the past due to an ankle injury. They
109 were highly cognisant of how James would respond to this injury and the potential for
110 prolonged time off the pitch. They knew, however, that James was very hardworking and
111 would buy in to the rehabilitation programme. Despite these characteristics, later
112 conversations highlighted James was struggling to adhere to his rehabilitation plan,
113 potentially due to his pain reducing with rest and meant he was overtraining in the gym.

114 The triangulation process was integral here, as James' support system had the most
 115 contact time with him, with my role at the academy being part-time. Moreover, this process
 116 helped me to gather multiple viewpoints and opinions from staff observations on the pitch, in
 117 the gym, and around the academy day-to-day. Arguably, providing a more complete picture
 118 of James' situation (Thelwell & Maynard, 2002). After triangulating with James' support
 119 system (such as his coaches, physiotherapists, and strength and conditioning coaches) and
 120 discussing the case with my supervisor, I arranged a one-on-one with James.

121 In this one-on-one, James expressed he was keen to engage with sport psychology
 122 support for his injury. Suggesting James was either at the contemplation or preparation stage
 123 in terms of his readiness to change (Prochaska, 1995). As our work changed from
 124 performance enhancement to injury management, a reanalysis of the consultancy work
 125 occurred. James said his initial reaction to the injury was difficult as he entered the unknown
 126 with no clear diagnosis. James was concerned that he only had two years to prove himself on
 127 his scholarship to gain a professional contract. A late diagnosis was losing him precious time
 128 as his peers progressed towards the hopes of a contract and he did not. Late diagnosis led to
 129 frustration for James and a lack of trust in the physiotherapy team as it took a month to
 130 diagnose the injury. This experience is common for athletes experiencing an injury, who
 131 report having thoughts that question the rehabilitation process and experience feelings of
 132 frustration as part of their reaction to rehabilitation (Clement et al., 2015). As rest meant the
 133 pain subsided, James would reengage with exercise without the physiotherapist's permission.
 134 James was therefore doing more than he was capable of at the time of the injury despite the
 135 reduction in pain (reported by the physiotherapy staff), jeopardising his rehabilitation
 136 programme. When I discussed potential overtraining with James in a one-on-one session, he
 137 said he would do more than stated in his rehabilitation programme due to "boredom" and not

wanting to fall behind his teammates. From my previous work with James, I was aware of his rigidity towards thoughts of wanting to be the best and working harder than everyone else.

As this case was my first time creating an intervention for an injured athlete, I took time to understand how my philosophy and experience would support James' needs. Here I explored research on the use of ACT and the impact of increased psychological flexibility on injury cases (e.g., DeGaetano et al., 2016; Mahoney et al., 2011) to understand how an ACT approach could support James' needs. Further, I reflected on how I could implement aspects from a client-led approach (e.g., exploring James' perspective, allowing James to have his say on the intervention) whilst applying techniques in a more practitioner-led manner (e.g., suggesting defusion techniques and approaches to mindfulness). After discussing the presenting problem with James and gaining views of those working closely with him (e.g., physiotherapist, coaches) to gather information for the needs analysis, I was able to build a hypothesis for the case (Bickley et al., 2016). In a similar manner to Bickley et al. (2016), I hypothesised that James was fused with a control agenda that he must "work the hardest to be the best." This causal relational frame may be leading to unworkable behaviours, such as doubling the number of repetitions indicated on the rehabilitation plan, making his injury worse. Deviation from his rehabilitation programme was amplified by his lack of trust towards the physiotherapy staff with thoughts of "what if they're not right?" and feelings of boredom due to not training.

Psychometric Assessments

To assess the appropriateness of ACT, psychological flexibility was measured using the Acceptance and Action Questionnaire-2 (AAQ-II; Bond et al., 2011) and the Cognitive Fusion Questionnaire (CFQ; Gillanders et al., 2014). Psychological flexibility can be defined as "the ability to contact the present moment more fully as a conscious human being, and to

change or persist in behaviour such that one continues to behave in a way that is consistent with their pre-established and identified values.” (Hayes et al., 1996). Both the AAQ-II (DeGaetano & McCarthy, 2014) and CFQ (Kowalski & Crocker, 2001) have been used within an injury context in sport, providing relevance for their use within this case. Further, the level of psychological flexibility as reported by the AAQ-II has significantly predicted engagement and adherence to a rehabilitation model (DeGaetano & McCarthy, 2014). Importantly, this approach was congruent with the practitioner’s philosophy of practice.

On the AAQ-II James scored 20 out of a possible 49, with a score of 0 indicating low experiential avoidance and high psychological flexibility, and a score of 49 indicating high experiential avoidance and low psychological flexibility. A statement James marked as frequently true on the questionnaire was “Worries get in the way of my success.” The AAQ-II was not developed as a tool to identify clinical disorders, however, cut off points associated with certain disorders have been identified, with scores around 24 and 28 associated with depression and anxiety (Bond et al., 2011). Though outside of the practitioner’s scope of competency, these scores may mean James was not experiencing ill mental health and was not a case for referral, but the score may be high enough for work on psychological flexibility to be beneficial.

James scored 27 out of a possible 49 on the CFQ, with a score of 0 indicating low cognitive fusion and a score of 49 indicating high cognitive fusion. When testing the CFQ, research showed a decrease in CFQ scoring from 28.10 to 24.98 after an ACT intervention (Gillanders et al., 2014). As the initial score was similar to James’, targeting defusion techniques could benefit his current struggles with thoughts and emotions relating to his injury. Additionally, Gillanders et al. (2014) reported a mean score of 22.28 on the CFQ for the work stress sample and a score of 34.31 for the mixed mental health sample. These scores

186 may suggest that James was not experiencing clinical issues but may have been experiencing
187 some struggles with cognitive fusion.

188 It is important to note, the trainee sport psychologist was mentored by the head sport
189 psychologist at the academy in question throughout the case. Based on our observations,
190 triangulation, and assessment measures the case was not deemed in need of referral. On
191 reflection, the input from a clinical psychologist could have been a valuable learning
192 experience for the trainee sport psychologist to explore the potential use of a clinical
193 psychologist where symptoms of a clinical case may be present (Brown & Cogan, 2006).

194 ***Case Formulation***

195 From the findings throughout my needs analysis, I planned to increase psychological
196 flexibility through an ACT approach due to James' unworkable behaviours (i.e., lack of
197 adherence to his rehabilitation plan) and cognitive fusion. James also stated he was keen to
198 continue using ACT, which we had used in previous consultations.

199 ACT is a heavily behavioural approach but is based on the analysis of human cognition
200 using Relational Frame Theory (Hayes et al., 2001). Simplistically, Relational Frame Theory
201 posits that human language and cognition are dependent on relational frames. For example, a
202 child may have a relational frame for a bird (i.e., flying animals with feathers, wings, and
203 beaks) and may see a bird they have never seen before but still be able to identify it as a bird
204 due to their relational frame. Humans can create abstract relational frames by relating various
205 objects or events in arbitrary ways which do not necessarily relate formally (Hayes, 2004).
206 The language that we use, based on our relational frames, can at times become unworkable.
207 For example, an athlete who has grown up with a coach that shouts at them when they make a
208 mistake may lead to the athlete feeling they are to blame for the shouting and then believe
209 they are "bad" or "not good enough". Patterns of thoughts and behaviours can then develop

based on the relational frames we build (e.g., “I’m never going to get a contract, I’m not good enough”). As we develop these relational frames, we begin to see the world through them and can struggle to see thoughts as separate to our self. ACT and RFT and not trying to find objective truth, but instead to recognise that we are not our thoughts and beliefs.

To help people see past their relational frames and increase psychological flexibility, ACT moves through six key processes in any given order. These include contact the present moment, acceptance of difficult cognitive events, cognitive defusion, self as context, committed action, and values identification (Hayes et al., 2004). James’ belief that he has to “work the hardest to be the best” and that “everyone will get better” than him meaning he “might miss out on a contract” may indicate that he is seeing the world through certain relational frames which are becoming unworkable in the current context (i.e., adhering to his rehabilitation programme). An increase in psychological flexibility could create an acceptance of the injury and uncomfortable thoughts and emotions. Acceptance of these mental events could help James engage in workable, values-driven behaviours to support his recovery and wellbeing and suggests an ACT approach could be viable for this intervention.

As mentioned previously, research shows higher levels of psychological flexibility to improve adherence and engagement to rehabilitation (DeGaetano et al., 2016). Further, research shows ACT-based interventions have the potential to educate injured athletes about how to face challenges during recovery and commit to their rehabilitation programmes (Mahoney et al., 2011), both of which are integral to the current case. Finally, research shows the use of mindfulness and acceptance approaches to reduce experiential avoidance of difficult states (Gallagher & Gardner, 2007). Another indicator that ACT could be suited for the intervention was James showing signs of experiential avoidance through overtraining, paradoxically hindering his rehabilitation.

Therefore, the goal that James and I identified was to find an acceptance of his injury and the rehabilitation process to allow him to struggle less with difficult thoughts and feelings (e.g., frustration, boredom, lack of trust), engage in other activities to enhance his wellbeing and performance, and adhere to his rehabilitation programme. At the end of the intervention, when the trainee sport psychologist, the client, and the physiotherapists saw signs of improvement, the CFQ and AAQ-II measurements were repeated. Additionally, progress throughout the intervention was monitored through adherence to values-driven behaviours and in-depth one-on-one discussions with the client and staff.

Intervention Planning

The intervention was planned to be flexible for James' schedule, meaning we decided at the start of each week whether we would have a formal one-on-one or just an informal catch up in the treatment room or gym. At the beginning of James' injury, we were meeting for a one-on-one once a week, with informal check-ins in between. As James became more confident in using the intervention activities formal one-on-ones became less frequent, and were arranged every two or three weeks based on how he was progressing. The decisions of when to meet were dictated by James, though I would provide suggestions from my experience about what would be likely to have the most impact (e.g., meeting regularly at the beginning of the intervention).

The therapeutic relationship was collaborative and was outlined to James when we began working together six months prior. The collaborative nature meant that James was able to have the final say on aspects such as activities, the intervention direction, and when we met. I would provide suggestions about what might work if he did not know where to begin, but this was not the final say.

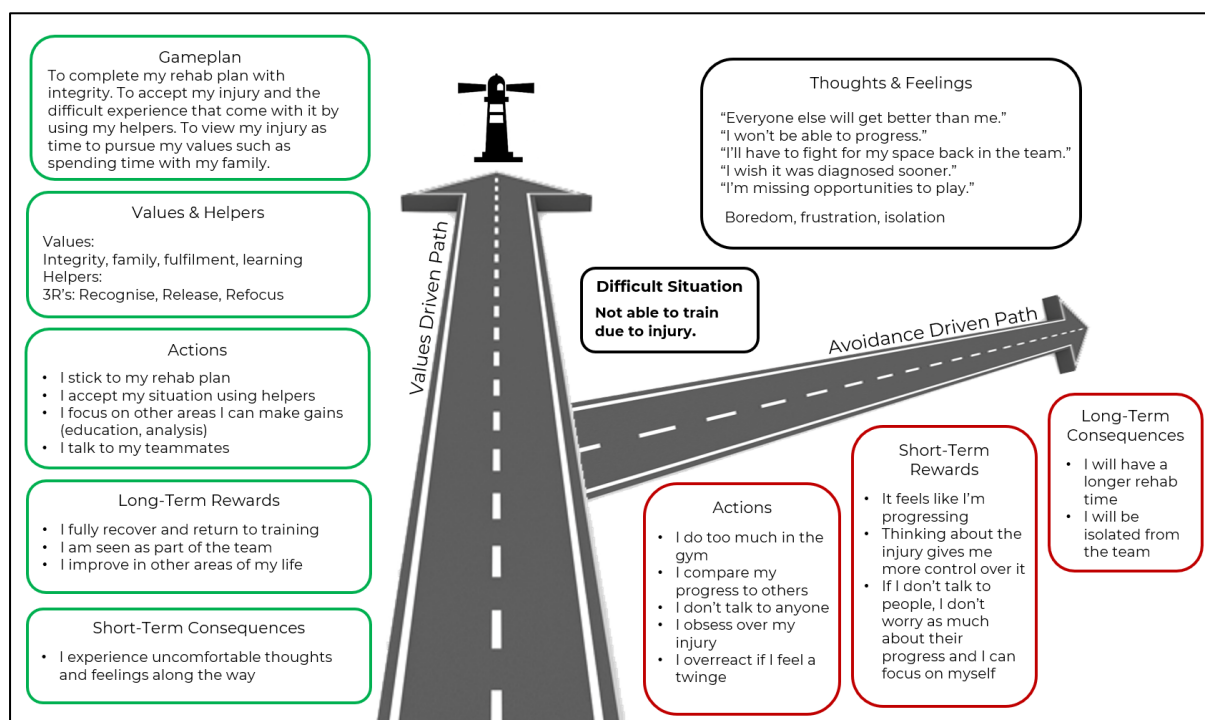
Intervention Delivery

258 *Functional Analysis*

259 An adaptation of the ACT Matrix (Polk & Schoendorff, 2014) called The Sport Lifeline
 260 (Dahl et al., 2009) was used as a conceptual framework to guide both James and me through
 261 the rehabilitation process and support psychological flexibility (Figure 1). We completed the
 262 Sport Lifeline collaboratively to bring awareness and understanding to behavioural responses
 263 in specific situations, which has been suggested to facilitate behaviour change (Polk &
 264 Schoendorff, 2014). Values-driven behaviours are developed through values identification
 265 and committed action. Here, behavioural goals were set in line with the client's values and
 266 the acceptance that, in the pursuit of personal values, uncomfortable thoughts and feelings

267 *Figure 1*

268 The Sport Lifeline



269 *Note: Green boxes on the left relate to the values-driven path; red boxes on the bottom right relate to the*
 270 *avoidance driven path; black boxes in the top right provide context for the difficult situation, which is located at*
 271 *a "crossroads" where the client chooses what actions to engage with (values-driven or avoidance-driven).*
 272

273 may arise. Prior to James' injury, we identified his values using a values card sort. Here, he
 274 sorted his values into three piles: not important, somewhat important, and very important. His

core values were identified as integrity, learning, family, and fulfillment. These values were used within the Sport Lifeline and acted as his purpose for committed action throughout the consultancy and were drawn on for the creation of his gameplan. James' gameplan was to: "To complete my rehab plan with integrity. To accept my injury and the difficult experience that comes with it by using my helpers. To view my injury as time to pursue my values such as spending time with my family.". The gameplan was then aligned with specific actions for the client to commit to. Including learning to use helpers to defuse difficult thoughts and feelings, adherence to the rehabilitation programme, and finding other areas to develop in (e.g., nutrition, analysis, education). These elements were to encourage the client to change their agenda from avoidance to one of defusion and acceptance. Additionally, understanding behavioural goals is integral for ACT as it is a behavioural therapy (Harris, 2018) and often clients can set emotional goals, focusing on the thoughts and feelings they want to avoid.

The Sport Lifeline also outlined the thoughts and feelings James was experiencing as a result of being injured and entering the rehabilitation process. For example "I'm missing opportunities to play", and "Everyone else will get better than me", with feelings of boredom, frustration, and isolation. Values-driven and avoidance-driven paths were then explored further with James, which identified the short-term and long-term consequences associated with both. This process allowed him to see that, by engaging with values-driven behaviours, he could experience more beneficial long-term rewards such as a quicker rehabilitation process and connection with teammates.

Creative Hopelessness

ACT increases awareness of the emotional control agenda through creative hopelessness where the individual opens up to the reality that avoiding or controlling difficult, painful, or unpleasant internal events get in the way of living a fulfilling life (Hayes

et al., 2001). Experiential avoidance is the attempt to escape or avoid, suppress, or replace private events (thoughts, feelings, physical sensations), even when doing so reduces psychological harm (Hayes et al., 1996). Experiential avoidance can lead to various psychopathologies, increased stress, and arousal, which can lead to more self-focused avoidance strategies (Hayes et al., 2004). Exploring experiential avoidance was necessary for James' case as he was fused with his control agenda, that the harder he worked and the more rehab he did the quicker he would recover and thoughts of not progressing would lessen. I wanted to help him recognise that his attempts to escape difficult thoughts and feelings through experiential avoidance do not lead to better outcomes, but instead short-term rewards and long-term consequences as shown in the Sport Lifeline.

To begin, I helped James to understand that trying to control his unwanted thoughts and emotions through experiential avoidance can lead to unworkable behaviours and poor long-term consequences as indicated through the Sport Lifeline. I explained the control agenda to James using the quicksand metaphor. If we stop struggling against the quicksand, we set ourselves free. The more we struggle in the quicksand, the further we sink. The same can be said for our thoughts and feelings. If we stop the struggle, we gain more space to act in line with what is important to us. Discussing this metaphor allowed James to see he is doing something (e.g., overtraining) and it is not working (e.g., not recovering as quickly as intended, isolated from the team), increasing the client's need for an alternative solution and to help their engagement with the consultancy process. To support James with the acceptance that avoiding difficult experiences can take him further away from his values and behavioural goals, we explored what technique would suit him best.

Exploration of Techniques

There were a few weeks of back and forth with the client as we worked together to find a technique that worked for him. For example, we initially explored mindful meditation at the request of the client, however, he quickly found meditation was difficult to engage with whilst sharing a room with a teammate and requested to change the exercise. After discussions with James, we decided to replace mindful meditation with the 3R's process (recognise, release, refocus; Hansen & Haberl, 2019). The 3R's were instead a quick process he could use without drawing attention to himself in the academy lodging as the 3R's do not require formally sitting down and practicing a guided meditation but can be done by going through the three steps internally. Moreover, he could utilise the 3R's in his rehab sessions and in the gym to allow for better integration into his day-to-day life and when difficult situations may be most likely to arise (e.g., urges to deviate from his rehabilitation plan, concerns about not training like his teammates).

Recognise, Release, Refocus

The 3R's process (Hansen & Haberl, 2019) was used with James throughout the intervention in various ways whilst linking back to the work of the Sport Lifeline. James had been introduced to ACT in our previous work together which was done using the paper exercise. Here the client is asked to write their uncomfortable thoughts down on a piece of paper and to hold that piece of paper close to their face. The client is then asked questions such as "what can you see?", "could you play your best football like this?", "could you hug your friend?". The client realises all they can see is their unwanted thoughts and they are not able to engage with life as they wish to. The client is then asked to slowly lower the paper and place it on their knee before being asked the same questions. The client can then see the world more clearly and engage with their valued behaviours. It is important to recognise the thoughts and feelings are still there, they have not gone away, but now there is more space to

engage with life and values-driven behaviours. The paper exercise introduces the notion of acceptance, which crucially replaces experiential avoidance (Hayes & Wilson, 1994).

Various metaphors were also used during this time to generate discussion about the ACT approach. For example, the blue sky metaphor was used. Here, the clouds in the sky are the thoughts and emotions and the blue sky is our mind. Clouds may be white and fluffy or black and stormy (e.g., “What if I don’t get a contract?”, “I’m not good enough”), but they will all come and go in their own time. Crucially, when there are lots of black clouds around, which represent unwanted thoughts and emotions, the blue sky is still there unchanging in the background. This metaphor lay the foundation for how thoughts and emotions can be viewed from a radically different point of view and simplified the concept of self-as-context, in that we are the surface on which thoughts and emotions arise.

What was new for James here, was exploring the ACT model in an applicable, concise way using the 3R’s: ‘Recognise’, recognise any thoughts, feelings, and sensations accept these and observe them as they arise; ‘Release’ take a deep breath and name the thought or feeling, when you exhale release the thought and feeling with it; and ‘Refocus’, create contact with your values and gameplan, make a decision to move towards your values and accept the short term discomfort of the situation for the long-term rewards. This process is reflective of the ACT Triflex (be present, open up, do what matters; Harris, 2009) and allows the client to anchor themselves in the present moment, recognise any uncomfortable thoughts or emotions, and defuse from them before committing to their values-driven path.

James decided to practice this process during his rehab in the gym and at home, recognising any uncomfortable thoughts that may arise. For example, in the gym when thoughts such as “I need to do more”, or “I’m not tired yet, I can keep going” arise, instead of pushing himself further he would engage with his values-driven actions such as adhering to

370 the rehabilitation plan or going to talk to a teammate. Outside of the gym, when James had a
371 lot of free time he would recognise when he felt bored and commit to a values-driven
372 behaviour such as going to the nutritionist for extra support or spending more time on
373 education to support his values of learning and fulfillment.

374 ***Reinforcing the Techniques***

375 I reinforced the 3R's process and commitment to values-driven behaviours throughout
376 the consultancy through various issues that arose for the client. Including feelings of
377 uncertainty and lack of trust regarding the rehabilitation process, trouble sleeping, and issues
378 with teammates.

379 As the diagnosis of James' injury took longer than expected, he experienced fusion
380 with thoughts concerning the physiotherapists and his time off the pitch. To explore James'
381 fusion, he wrote his thoughts on separate post-it notes and laid them out on a table. Some of
382 these thoughts included "everyone else will get better than me," "what if I don't fully
383 recover?" "what if the rehab doesn't work?", "I was just starting to get picked for the team".
384 He also experienced feelings such as "loneliness" due to not being able to train and having a
385 separate gym programme to his teammates, "boredom" due to the repetitiveness of his
386 rehabilitation programme and having few other activities to engage with, and "frustration" as
387 he was not able to engage with what he loves (e.g., football, working out in the gym). I then
388 reinforced the 3R's process in relation to James' current situation, by bringing an awareness
389 and acceptance to these thoughts and feelings.

390 James was experiencing issues falling asleep due to nighttime tension caused by
391 ruminating thoughts. James' rumination was often related to his family members and a
392 concern for their health during the initial outbreak of COVID-19. Due to the holistic nature of
393 ACT, the 3R's process transferred to James' struggle detaching from uncomfortable thoughts

394 and feelings relating to his family members. With time, James reported that he found the
395 process beneficial and it helped him create space from his thoughts, allowing him to fall
396 asleep more easily. Suggesting that nighttime tension was decreased for James after using the
397 techniques provided.

398 Another wellbeing issue arose, with James discussing feelings of loneliness and
399 isolation from not being able to train alongside his teammates. We explored James'
400 experience using the 3R's and discussed actions he could take that were in line with his
401 values to help him feel more connected with his teammates (e.g., attending training sessions,
402 socialising with his teammates in the academy lodging). Furthermore, James felt he was
403 being treated differently by some of his teammates, and felt because of his goodhearted
404 nature he was being taken advantage of by some of his teammates who were making him do
405 extra jobs. We carried out a control circle exercise to explore what James had control over
406 and what were uncontrollable external events. In this exercise, I drew one central circle
407 labelled "within my control" and another larger circle surrounding it labelled "outside of my
408 control". James then categorised the issues above into these circles. For example, the way
409 others treated him was largely outside of his control, whereas his engagement with his friends
410 at the academy and attendance of training sessions was within his control. Clarifying it is not
411 within his control to change the behaviours of others, but he does have full control of how he
412 behaves and responds to difficult situations. James had some annoyances when confronting
413 his lack of control, as he saw being treated poorly by others as "unfair". Since integrity was
414 one of his core values, this was particularly pertinent for James. We discussed the acceptance
415 of these difficult situations in pursuit of his values, which allowed him to let go of struggling
416 against what he could not change. We then outlined actions he could take that did not
417 contradict his values rather than fighting back against his teammates.

These experiences may suggest that teachings from ACT can support athletes in and out of their performance environment for a variety of wellbeing issues (e.g., sleep, injury rehabilitation, relationships). Additionally, if this process is repeated with the athlete they may start to understand how to apply it independently, an important indicator of success in sport psychology practice (Sharp et al., 2014).

On reflection, potential depressive symptoms (i.e., loneliness, trouble sleeping) were present. I discussed these situations with the head of sport psychology at the academy and was supported in the decision that a referral was not necessary, however, it would have been beneficial to discuss the case further with a clinical psychologist. This is a critical reflection and learning, as further evaluation should occur if symptoms are present (Brown & Cogan, 2006). Moving forward, this has been an integral learning that I have taken into my practice.

Recognising Progress

James began to find a place of acceptance with the diagnosis and was able to create space using the 3R's which allowed him to engage with what was important to him. When he reported he was feeling a change in his thinking, supported by informal corridor discussions with the physiotherapists about his adherence to the rehabilitation plan, I decided to revisit the psychometric assessments completed at the beginning of the consultancy.

Monitoring of Work

Psychometrics

For the AAIQ (Bond et al., 2011), James saw a reduction from 20 to 12 out of 49, suggesting a positive increase in psychological flexibility. Furthermore, James' CFQ reduced from 26 to 18 suggesting a successful reduction in cognitive fusion. As stated previously, when assessing the CFQ, research showed a decrease in CFQ scoring from 28.10 to 24.98

441 after an ACT intervention (Gillanders et al., 2014), providing support for the success of the
442 current intervention.

443 *Values-Driven Behaviours*

444 Values-driven behaviours were tracked informally through updates from the client,
445 physiotherapists, and other support staff at the academy. The client indicated he was
446 engaging with extra work from education. For example, reading, which I often saw him doing
447 in the rehab room, and engaging with a refined nutrition plan. The physiotherapists indicated
448 James adherence to his rehabilitation plan had improved, particularly during the four-week
449 shutdown from exercise. Furthermore, James' coaches said he had been to see them more
450 regularly to discuss clips and individual learning objectives.

451 **Evaluation & Reflections**

452 **Impact of Intervention**

453 The goal of this intervention was to increase the client's adherence to his rehabilitation
454 plan by reducing cognitive fusion and increasing psychological flexibility. An increase in
455 psychological flexibility was evident through psychometric assessments to measure cognitive
456 fusion and psychological flexibility, as well as feedback from the client and academy staff
457 about James' adherence to rehabilitation and other values-driven behaviours. The
458 intervention indicated transference of the 3R's applied for rehabilitation adherence to other
459 holistic and wellbeing issues in and out of sport.

460 **End of Work During COVID-19**

461 After James' first six weeks of the injury and minimal exercise, he got rescanned.
462 Unfortunately, a full fracture was identified in his back which may never heal. Due to this,
463 James was instructed to do no exercise and to allow it to rest for another six weeks. James

was given the option to stay home during this time, which he agreed to for one week to see how he progressed. With James staying at home, it was difficult for us to have contact time, but we agreed to meet up when he was next in the academy. More difficulty arose as the COVID-19 outbreak saw the academy close. As a furlough scheme was implemented I was not allowed any contact with James. I found this lack of contact very frustrating as the decision was not within my control. I was concerned about letting my clients at the academy down and leaving them with no support. With a regular meditation practice myself and engaging personally with teachings from ACT, I took time to sit with my uncomfortable thoughts and feelings before redirecting energy into what I could control in line with my values (e.g., kindness, flexibility, acceptance).

Preparing for Furlough

When I had accepted this situation, I explored how I could be flexible around the unknowns of COVID-19 and still support James without any contact. Before being placed on furlough, I provided James with his own values-driven behaviours worksheet to allow him to keep on track of his behaviours as it would be easy for him to revert to overworking himself, especially since he previously struggled with feelings of “boredom” and “frustration.” I did not refer James to another psychologist, though I ensured he knew he could gain support from the head of sport science who was one of the three staff members not placed on furlough. Additionally, all academy players received a document outlining how to manage their mental wellbeing during the lockdown. This document included strategies for managing mental and emotional wellbeing (e.g., avoid news that increases stress and anxiety, stay connected, establish a routine but with some variety, exercise when you can) and were pointed towards support available outside of the academy (e.g., mind mental health charity) and wellbeing apps (e.g., Headspace).

488 ***COVID-19's Impact on Consultancy Termination***

489 Due to the previous success in reducing cognitive fusion and increasing psychological
 490 flexibility, I hope James will be able to continue to use the techniques we discussed
 491 independently away from the academy. If future work is necessary when returning after the
 492 pandemic, a focus may be on supporting James in his return to training and transferring the
 493 teachings of ACT onto the pitch. For example, discussing performance values and what
 494 behaviours James would like to commit to on the pitch. However, it is important to note that
 495 the pause caused by the pandemic may lead to changes in the case, such as lack of progress in
 496 rehabilitation and ACT skills. It will be important to review James' case on return to the
 497 academy.

498 **Conclusions and Future Work**

499 Lessons learned during this process include the importance of collaboration with the
 500 physiotherapy staff. Within a multidisciplinary team, this allows for better information
 501 sharing to support the athlete during the consultancy process (Bickley et al., 2016). One
 502 weakness of the case is the disconnect between intervention and functional analysis
 503 movement changes. For example, regularly scoring James on his engagement with the values-
 504 driven path, avoidance driven path, and use of helpers alongside his perceived level of
 505 adherence to his rehabilitation plan. A greater focus on functional change could have
 506 provided a stronger connection between the psychological intervention and the rehabilitation
 507 process and should be considered in future cases.

508 Another lesson within my practice is to not be afraid to test a technique and change it if
 509 it does not suit the client. Careful monitoring and collaboration with the client could help to
 510 dictate the direction that the consultancy moves in and is a vital part of my philosophy.
 511 Highlighting that applied practice is not always linear. For example, changes in pre-existing

interventions due to a shift in context or an unsuccessful technique (e.g., mindfulness in action instead of meditation). The lack of a linear path may be due to me being a neophyte practitioner at the time of the case. However, some of these factors, such as a shift in context, will always be outside of the practitioner's control. This lesson reinforces the importance of being a flexible practitioner (Fifer et al., 2008).

Though I formulated using ACT, other approaches may have been impactful as there was resistance to the application of ACT at times. For example, when James expressed the challenge of accepting certain uncomfortable experiences an approach that changes thoughts and beliefs, such as rational emotive behaviour therapy (Morris et al., 2017), may have been impactful. If this was deemed suitable, the client would have required referral to a practitioner with such approaches in alignment with their philosophy. A person-centred humanistic approach (Szabo & Kennedy, 2021) may have also been suitable. In some of my one-to-ones with James, he said he "just wanted to talk". I would create the space for James to talk, however a purer person-centred approach may have been effective in supporting James.

References

- Bickley, J., Rogers, A., Bell, J., & Thombs, M. (2016). Elephant spotting': The importance of developing a shared understanding to work more effectively with talented but challenging athletes. *Sport & Exercise Psychology Review*, 12(1), 43-53.
- Bond, F. W., Hayes, S. C., Baer, R. A., Carpenter, K. M., Guenole, N., Orcutt, H. K., Waltz, T., & Zettle, R. D. (2011). Preliminary psychometric properties of the Acceptance and Action Questionnaire – II: A revised measure of psychological inflexibility and experiential avoidance. *Behavior Therapy*, 42(4), 676–688.
- <https://doi.org/10.1016/j.beth.2011.03.007>

- 536 Brown, J. L., & Cogan, K. D. (2006). Ethical clinical practice and sport psychology: When
537 two worlds collide. *Ethics & behavior*, 16(1), 15-23.
538 https://doi.org/10.1207/s15327019eb1601_3
- 539 Clement, D., Arvinen-Barrow, M., & Fetty, T. (2015). Psychosocial responses during
540 different phases of sport-injury rehabilitation: A qualitative study. *Journal of athletic*
541 *training*, 50(1), 95-104. <https://doi.org/10.4085/1062-6050-49.3.52>
- 542 Dahl, J., Plumb-Villardaga, J., Stewart, I., & Lundgren, T. (2009). *The art & science of*
543 *valuing in psychotherapy: Helping clients discover, explore, and commit to valued*
544 *action using acceptance and commitment therapy*. New Harbinger.
- 545 DeGaetano, J. J., Wolanin, A. T., Marks, D. R., & Eastin, S. M. (2016). The role of
546 psychological flexibility in injury rehabilitation. *Journal of Clinical Sport*
547 *Psychology*, 10(3), 192-205. <https://doi.org/10.1123/jcsp.2014-0023>
- 548 Eubank, M. R. (2016). Trainee learning experiences for the demonstration of practitioner
549 competence: A commentary on the commentary. *Sport and Exercise Psychology*
550 *Review*, 12(2).
- 551 Fifer, A., Henschen, K., Gould, D., & Ravizza, K. (2008). What works when working with
552 athletes. *The Sport Psychologist*, 22(3), 356-377. <https://doi.org/10.1123/tsp.22.3.356>
- 553 Gallagher, B. V., & Gardner, F. L. (2007). An examination of the relationship between early
554 maladaptive schemas, coping, and emotional response to athletic injury. *Journal of*
555 *Clinical Sport Psychology*, 1(1), 47-67. <https://doi.org/10.1123/jcsp.1.1.47>
- 556 Gillanders, D. T., Bolderston, H., Bond, F. W., Dempster, M., Flaxman, P. E., Campbell, L.,
557 Kerr, S., Tansey, L., Noel, P., Ferenbach, C., Masley, S., Roach, L., Lloyd, J., May,
558 L., Clarke, S., Remington, B. (2014). The development and initial validation of the

- 559 cognitive fusion questionnaire. *Behavior therapy*, 45(1), 83-101.
 560 <https://doi.org/10.1016/j.beth.2013.09.001>
- 561 Hansen, J., & Haberl, P. (2019). Helping Athletes be Present when Performing Under
 562 Pressure. In K. Henriksen et al. (Eds), *Mindfulness and acceptance in sport: How to*
 563 *help athletes perform and thrive under pressure*. Routledge. (pp. 47-58)
- 564 Harris, R. (2009). *ACT made simple: A quick-start guide to ACT basics and beyond*. New
 565 Harbinger.
- 566 Harris, R. (2018). *ACT questions and answers: A practitioner's guide to 150 common sticking*
 567 *points in acceptance and commitment therapy*. New Harbinger.
- 568 Hayes, S. C. (2004). Acceptance and commitment therapy, relational frame theory, and the
 569 third wave of behavioral and cognitive therapies. *Behavior Therapy*, 35(4), 639-665.
 570 [https://doi.org/10.1016/S0005-7894\(04\)80013-3](https://doi.org/10.1016/S0005-7894(04)80013-3)
- 571 Hayes, S. C., Follette, V. M., & Linehan, M. (Eds.). (2004). *Mindfulness and acceptance:*
 572 *Expanding the cognitive-behavioral tradition*. Guilford Press.
- 573 Hayes, S. C., Strosahl, K., & Wilson, K. G. (1999). *Acceptance and commitment therapy: An*
 574 *experiential approach to behavior change*. Guilford Press.
- 575 Hayes, S. C., Wilson, K. G., Gifford, E. V., Follette, V. M., & Strosahl, K. (1996).
 576 Experiential avoidance and behavioral disorders: A functional dimensional approach
 577 to diagnosis and treatment. *Journal of consulting and clinical psychology*, 64(6),
 578 1152. <https://doi.org/10.1037/0022-006X.64.6.1152>
- 579 Hayes, S.C, Barnes-Holmes, S. C. H. D., & Roche, B. (2001). *Relational frame theory: A*
 580 *post-Skinnerian account of human language and cognition*. Springer Science &
 581 Business Media.

- 582 Hayes, S.C. & Wilson, K.G. (1994). Acceptance and commitment therapy: Altering the
583 verbal support for experiential avoidance. *The Behavior Analyst*, 17(2), 289.
584 <https://doi.org/10.1007/BF03392677>
- 585 Keegan, R. (2015). *Being a sport psychologist*. Macmillan International Higher Education.
- 586 Kowalski, K. C., & Crocker, P. R. (2001). Development and validation of the Coping
587 Function Questionnaire for adolescents in sport. *Journal of Sport and Exercise*
588 *Psychology*, 23(2), 136-155. <https://doi.org/10.1123/jsep.23.2.136>
- 589 Mahoney, J., & Hanrahan, S. J. (2011). A brief educational intervention using acceptance and
590 commitment therapy: Four injured athletes' experiences. *Journal of Clinical Sport*
591 *Psychology*, 5(3), 252-273. <https://doi.org/10.1123/jcsp.5.3.252>
- 592 Materne, O., Chamari, K., Farooq, A., Weir, A., Hölmich, P., Bahr, R., Greig, M., &
593 McNaughton, L. R. (2021). Injury Incidence and Burden in a Youth Elite football
594 (Soccer) Academy: A 4-Season Prospective Study of 551 players aged from under 9
595 to under 19 years.: Injury and burden in elite young footballers. *British Journal of*
596 *Sports Medicine* 55(9), 493-500. <https://doi.org/10.1136/bjsports-2020-102859>
- 597 Morris, R, Tod, D and Eubank, MR (2017) "It's the end of the world as we know it (and I
598 feel fine)" - The use of Rational Emotive Behavior Therapy (REBT) to increase
599 function and reduce irrational beliefs of an injured athlete. In: Turner, M and Bennett,
600 R, (eds.) *Rational Emotive Behavioural Therapy in Sport and Exercise*. Routledge.
- 601 Prochaska, J. O., Norcross, J. C., & DiClemente, C. C. (1995). *Changing for good: A*
602 *revolutionary six-stage program for overcoming bad habits and moving your life*
603 *positively forward*. William Morrow Paperbacks.

- 604 Reeves, C. W., Nicholls, A. R., & McKenna, J. (2009). Stressors and coping strategies among
 605 early and middle adolescent premier league academy soccer players: Differences
 606 according to age. *Journal of Applied Sport Psychology*, 21(1), 31-48.
 607 <https://doi.org/10.1080/10413200802443768>
- 608 Schoendorff, B., Webster, M., & Polk, K. (2014). Under the hood: Basic processes
 609 underlying the matrix. In K. L. Polk & B. Schoendorff (Eds) *The ACT matrix: A new*
 610 *approach to building psychological flexibility across settings and populations*, (pp.15-
 611 40).
- 612 Sharp, L. A., Hodge, K., & Danish, S. (2014). Sport psychology consulting at elite sport
 613 competitions. *Sport, Exercise and Performance Psychology*, 3(2), 75.
 614 <https://doi.org/10.1037/spy0000011>
- 615 Sharp, L. A., Hodge, K., & Danish, S. (2015). Ultimately it comes down to the relationship:
 616 Experienced consultants' views of effective sport psychology consulting. *The Sport*
 617 *Psychologist*, 29(4), 358-370. <https://doi.org/10.1123/tsp.2014-0130>
- 618 Szabo, S. W., & Kennedy, M. D. (2021). Practitioner perspectives of athlete recovery in
 619 paralympic sport. *International Journal of Sports Science & Coaching*, 17(2) 274–
 620 284. <https://doi.org/10.1177/17479541211022706>
- 621 Thelwell, R. C., & Maynard, I. W. (2002). A triangulation of findings of three studies
 622 investigating repeatable good performance in professional cricketers. *International*
 623 *Journal of Sport Psychology*, 33(3), 247-268.