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OLUSOGA, Peter <<http://orcid.org/0000-0001-8431-3853>> and YOUSUF, Shameema

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Acceptance and Commitment Therapy (ACT)

Dr Peter Olusoga & Shameema Yousuf

Introduction/Overview

Acceptance and Commitment Therapy (ACT), first conceptualised and developed by Steven Hayes in the 1980s (Hayes & Brownstein, 1986; Zettle & Hayes, 1986), is a psychotherapeutic approach based on Relational Frame Theory (RFT). ACT is based on the principle that attempting to remove, replace, or reduce unwanted thoughts and sensations is a root cause of human suffering. Rather than helping individuals to rid themselves of such unwanted internal experiences (e.g., distressing thoughts or the unwanted physical sensations associated with anxiety), ACT uses acceptance and mindfulness processes, and commitment and behavioural strategies to help clients change the relationship that they have with their internal experiences. Mindfulness-acceptance approaches in sport psychology have become more prevalent since Gardner and Moore (2001) discussed their application to performance contexts. In this chapter, the theoretical underpinning of ACT will be discussed in detail, and a review of the relevant sport psychology literature will be provided. The authors will also provide a hypothetical case-study of an athlete presenting with issues related to confidence and decision making. The case-study is used to explain how ACT can typically be applied in a one-to-one setting, using a hypothetical transcript. Typical exercises, activities, and metaphors that might be used during consultancy are also included.

Foundations of ACT

Acceptance and Commitment Therapy (ACT) is a ‘third-wave’ behavioural therapy, based on Relational Frame Theory (RFT: Hayes et al., 2004) and grounded in Functional Contextualism (Hayes et al., 1988). Zettle et al. (2016) provide detail on RFT and Functional

Contextualism that goes beyond the scope of this chapter, yet it *is* important to acknowledge here that ACT has emerged from previous traditions in behavioural psychology.

Traditionally, applied sport psychology has drawn mostly from cognitive-behavioural approaches to psychotherapy (Turner et al., 2020). Using psychological ‘skills’ such as self-talk, imagery, relaxation, and goal-setting, these CBT-based approaches seek to challenge unwanted ‘negative’ thoughts, emotions, and sensations. Sports performers are taught strategies to help them reduce or eliminate ‘faulty’ cognitions or undesirable internal experiences in pursuit of an ‘ideal’ performance state (i.e., no anxiety, high self-confidence, relaxed, and thinking ‘positively’).

ACT, rooted in Functional Contextualism, proposes a different approach in that it is a philosophical approach in which thoughts, feelings, memories, and sensations that we might perceive to be ‘negative’ are not actually problematic by definition. Instead, it is the way that they *function* in certain contexts that might be problematic. When an athlete can dispassionately observe a thought as nothing more than a mental event for example (i.e., cognitive defusion), rather than believe the thought within a particular context to be absolute truth (i.e., cognitive fusion), the particular thought is no longer a problem to be eradicated. The thought might still be unpleasant and unwanted, but it does not prevent the athlete from performing to their potential. More on cognitive fusion and defusion later.

In applying ACT to sport and performance contexts, the goal of the work is to change the relationship that performers have with internal experiences of human suffering and not remove, replace or lessen them. Changing the context in which the athlete experiences a thought or feeling, from one of labelling it as a problem and attempting to avoid it to one of acceptance of it as a normal part of the human experience, changes the *function* of the thought or feeling, rather than the experience or event itself.

Mindfulness-Acceptance-Commitment approaches (MAC: Gardner & Moore, 2004; 2006) are well established in sport and performance psychology research and practice. MAC models, derived from ACT, suggest that there is no 'ideal' performance state to be achieved. This makes sense, given that individuals have reported optimal performance in a variety of cognitive, affective, and physiological states (Gardner & Moore, 2012). Rather, mindfulness-acceptance approaches contend that optimal performance requires:

- a) a non-judgemental, moment to moment awareness and acceptance of one's internal state, whatever that may be;
- b) an attentional focus on task-relevant external stimuli instead of a focus on internal processes that includes judgement and direct efforts and control/modulation; and
- c) a consistent and effortful personal values-driven commitment to behaviour actions/choices that support one's athletic endeavour

(Gardner & Moore, 2012).

Psychological Flexibility

At the core of ACT lies the notion of *Psychological Flexibility*. This refers to an individual's ability to stay in contact with all present moment experiences (rather than seeking to pursue pleasant or avoid unpleasant ones), and to choose behaviours that move them in a direction dictated by personal values. Six *core processes* underpin psychological flexibility: *cognitive defusion, acceptance, flexible attention to the present moment, self-as-context, values, and committed action* (see Hayes et al., 2012).

Each of the six processes is linked with each other process as per the "Hexaflex" (Hayes et al., 2006) depicted in fig.1. The key to psychological flexibility therefore is to maintain an open, centred, and engaged response style where individuals can accept and make room for unpleasant thoughts, emotions, and sensations, by paying conscious attention to their present moment experiences, and staying connected to chosen values through daily life actions. Deficits in any of these six core processes can result in 'psychological rigidity'.

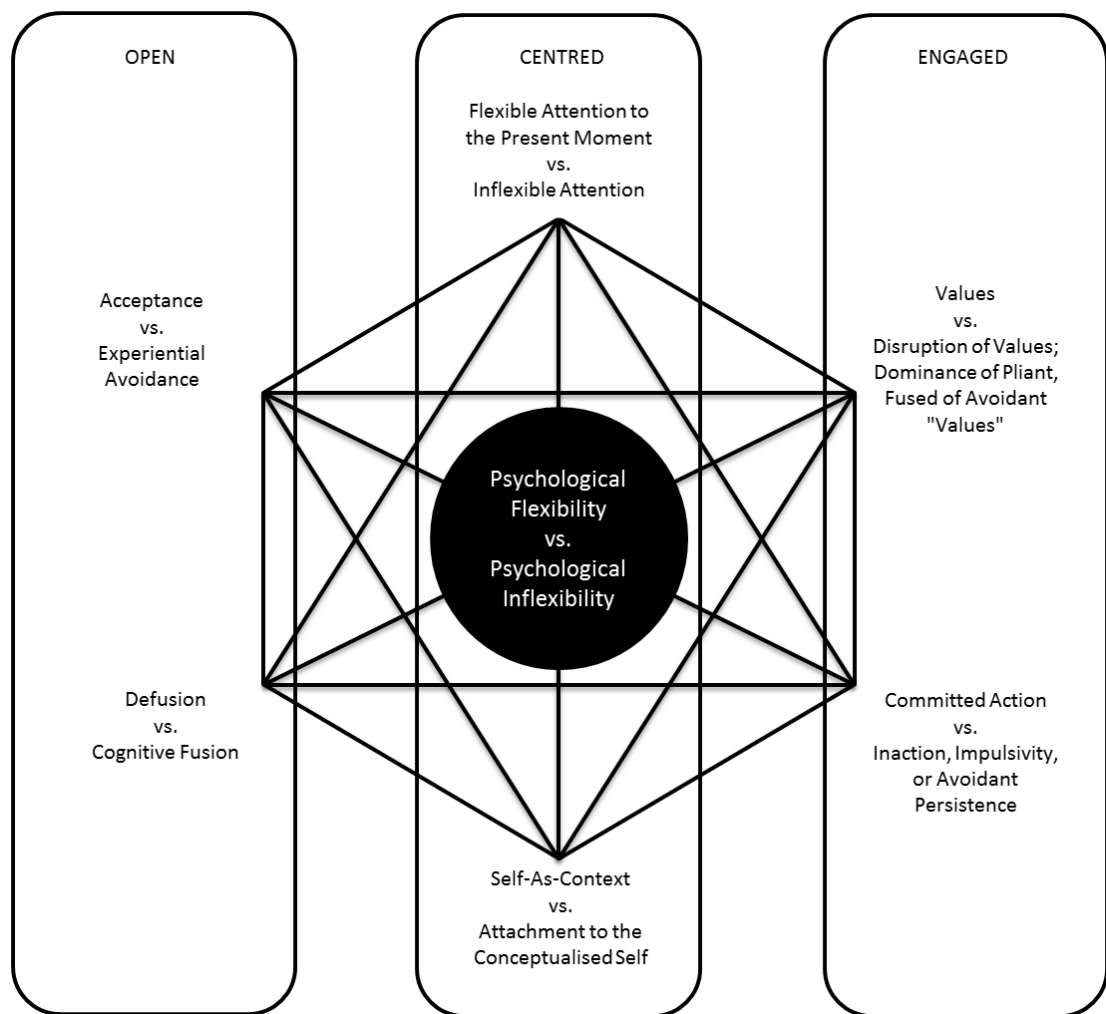


Fig 1. The Hexaflex model of ACT for psychological flexibility and inflexibility. Adapted from Luoma et al. (2017).

To take an example, an athlete might well believe that getting rid of her anxious thought (that she is not good enough to compete at this level) would allow her to be more successful on the field, and so her goal for consultancy might therefore be anxiety reduction. She is unwilling to make room for her anxious thoughts, is avoidant of them, and therefore seeks to avoid the situations that usually elicit them. For example, she might seek instant relief from the discomfort experienced by withdrawing effort. However, the long-term consequences of withdrawing might be unfulfilled goal achievement, performance detriment, and longer-term feelings of disillusionment. Psychological rigidity and, thus, experiential avoidance, means the athlete is putting herself in a position where she is no longer pursuing

chosen values that could potentially lead to a sense of happiness (Hayes, 2019), and is demonstrating poor decision making, lack of engagement, and poor execution of tasks, all of which might all impede performance.

- **Cognitive defusion** is the process by which an individual becomes aware of the automaticity of thoughts. They are able to let go of following and becoming entangled with their thoughts, and instead can merely observe them as mental events.
- **Acceptance** is the process of turning towards difficult thoughts, emotions, and sensations, and being open to experiencing them in a non-judgemental way, rather than seeking to escape from or avoid potential distressing content.
- **Flexible attention to the present moment** involves *mindful* focus to the here and now, as opposed to being pulled into the conceptualised past or worrying about what will happen in the future, thus allowing an individual to appreciate the full range of choices in front of them.
- **Self as concept** is unconcerned with ego and is instead about the individual focusing on what matters. It is viewed from the perspective of “I”, *the transcendent self*. One is able to experience anxious thoughts and simply observe them in the here and now with awareness. This alleviates the need to lie or hide to protect one’s self-esteem, or seek approval from others and one’s own self-evaluation, which only gives rise to constructing stories to defend one’s ego, *the conceptualised self*. While an individual’s self-esteem is important, their quest for it in an effort to belong, may render them more pressured, stressed, anxious and less resilient to facing challenges (Hayes, 2019). Focusing on the transcendent self, frees and pivots the individual to greater connection by building a sense of healthy belonging and self.
- **Values** direct individuals to pursue activities that align with providing true meaning. Hayes (2019) suggests that individuals yearn for meaning and that when they are free to pick their life direction, they are self-directed and motivated.
- **Committed action** refers to the specific steps taken in specific moments (i.e., specific moment-to-moment *behaviours*) that move individuals in valued-directions.

Fig 2. Brief description of the ACT core processes.

ACT-based intervention research.

Research evaluating the efficacy of traditional PST programmes is plentiful, but when scrutinised, there appears to be a lack of consistent, definitive evidence supporting the impact on performance outcomes (Birrer & Morgan, 2010; Gardner & Moore, 2004). Indeed, it has been posited that due to ironic processes of mental control (Wegner, 1994), suppression of ‘negative’ cognitions and emotions shifts focus away from the task at hand (Gardner &

Moore, 2012). Largely as a response to the limitations of PST, mindfulness and acceptance approaches in sport psychology have gained popularity since Gardner and Moore's (2001) application in performance contexts.

Mindfulness-based interventions (MBIs) in sport date as far back as 1985 when John Kabat-Zinn offered mindfulness practice to optimise the performance of collegiate rowers. Other MBIs are also based heavily on mindful meditation, such as Kaufman et al.'s (2009) Mindful Sport Performance Enhancement (MSPE) programme, and Baltzell and Akhtar's (2014) Mindfulness Meditation Training for Sport (MMTS) intervention. Mindfulness-Acceptance-Commitment (MAC) approaches combine mindfulness practices and ACT by incorporating acceptance and commitment, and values driven behaviour. For clarity, although both ACT and MAC approaches incorporate mindfulness exercises, ACT is largely focused on improving psychological flexibility through six core processes, whereas MAC incorporates ACT techniques with a goal of enhancing performance and improving psychological wellbeing.

Several reviews have summarised the findings from MBI research in sport and performance contexts. Sappington and Longshore (2015), for example, carried out a systematic review of 19 MBI studies, including interventions based upon MAC and MSPE protocols. They concluded that the evidence was supportive of the idea that MBI's might "be effective in improving performance and characteristics associated with well-being (e.g., psychological flexibility, anxiety, flow)" (p.256). Bühlmayer et al. (2017) conducted a meta-analysis exploring the effects of mindfulness practice, but only two of the studies included specifically examined MAC approaches. In another systematic review, Noetel et al. (2017) highlighted 66 studies that adopted mindfulness-acceptance approaches to sport performance, although again this review included studies that adopted mindfulness-only interventions, transcendental meditation, and self-compassion, with only a handful of the studies using ACT

specific approaches. Given limitations of space and the focus of this chapter, discussion is limited to literature on MAC and ACT as applied to sport performance, and the reader is directed to the reviews mentioned above for an overview of other MBI research in sport.

Only a handful of Randomised Control Trials (RCTs) have explored the effects of mindfulness-acceptance interventions with athlete populations. Ivarsson et al. (2015) explored the use of MAC protocols for injury prevention with 41 female soccer players. While no statistically significant differences were found between the MAC group and a group receiving sport psychology presentations, 67% of athletes in the MAC group remained injury free through the season, compared with 40% in the control group (a moderate effect size) and the MAC group also had 50% fewer injuries than controls. It is difficult to pinpoint the direct link between MAC and injury prevention, but the authors suggested that the mindfulness element of the programme might have improved athletes' ability to pay attention to relevant stimuli, thus reducing their risk of injury during competition.

Zhang et al. (2016) demonstrated the use of an 8-week MAC protocol for skill development with 43 first-year college students on a dart throwing task. Not only did dart throwing performance improve more in the MAC group than in controls, but participants also reported improvements in mindfulness, experiential acceptance, and flow post-intervention and at follow up. Finally, lending further support to the idea that ACT-based interventions are beneficial for athletes, Josefsson et al. (2019) found that athletes from a multitude of sports assigned to a MAC group showed a greater level of improvement on dispositional, sport-specific mindfulness skills, emotion regulation abilities, and perceived performance than athletes allocated to a traditional PST group. Taken together, these studies provide encouraging evidence that mindfulness-acceptance approaches based on ACT, might be beneficial for performance enhancement, as well as the development of skills, abilities and qualities likely related to improved performance.

Although RCTs are rare, evidence from other experimental studies and non-RCT's demonstrates that mindfulness-acceptance approaches can have positive effects on performance. Elite golfers (e.g., Bernier et al., 2009) and chess players (Ruiz & Luciano, 2012) have improved their performances/national rankings following ACT-based interventions, while Wolanin and Schwanhausser (2010) demonstrated improved performance of field-hockey and volleyball athletes (compared to controls) after a 7-week MAC protocol.

A number of case studies also provide evidence for the efficacy of ACT and MAC interventions. Gardner and Moore (2004), for example, examined the impact of a MAC intervention with two individual sport athletes (swimming and powerlifting). Both athletes experienced improvements in their performance after 12 weeks of one-to-one sessions (extended to 16 weeks for the swimmer). The swimmer reported his best competitive season with two wins with personal best times, and the powerlifter reported her best ever performance, lifting 15% beyond her best previous masters efforts. Other case studies have highlighted performance improvements following interventions based on ACT (e.g., Bernier et al., 2014, Lutkenhouse, 2007, Schwanhausser, 2009), though it is difficult to say with certainty that any of these interventions specifically drove these changes.

As Gardner and Moore (2017) suggested, “athletes and other performers do not perform in a bubble...they are people first... sport psychologists can and need to strive beyond an impact on performance alone” (p.182). Taken together, evidence from a broad range of studies points to the positive impact of mindfulness-acceptance approaches for athletes across a range of issues that can be but are not necessarily performance related. Individual athletes have, for example, reported personal growth and self-improvement in a number of areas such as the ability to handle frustration, rejection, mistakes, and conflict, and a greater sense of personal wellbeing (Lutkenhouse, 2007), reduced distractibility, worry,

anxiety, and less experiential avoidance (Gardner & Moore, 2004), and increased mindful awareness, attention, acceptance, and flow (Schwanhausser, 2009). Track and field athletes have reported improvements in goal directed energy and perceived stress compared with controls following MAC interventions (Goodman et al., 2004), while other improved or enhanced performance related factors include increased mindfulness skills, non-reactivity to inner experience, increased experiential acceptance, increased ability to take action towards goals, reductions in believability and interference of general unpleasant private events during competitions, and improved goal-directed behaviour (Hasker, 2010, Kettunen & Välimäki, 2014, Ruiz & Luciano, 2012). Finally, athletes have also discussed improved awareness and acceptance of bodily sensations as being important for their performances (Bernier et al., 2009), and improved consistency of training, overall sense of enhanced wellbeing, focus, and values-driven effort (Yau et al., 2021).

Limitations of existing literature

While the literature certainly suggests that ACT-based interventions might have positive impacts on both performance and non-performance related outcomes, there are also some important considerations for future research and practice. For example, Si et al. (2016) noted that Chinese culture and the emphasis on collective interests in the Chinese sports system, can make it more difficult for Chinese athletes to connect with personal values. Consequently, integrating conceptualisations of values and commitments in line with the cultural values and beliefs of the participants would increase the effectiveness of MAC training (Si et al., 2016). Roychowdhury and colleagues (2021), conducted a narrative review of articles in sport and exercise psychology published between 2008-2020, and contended that Eurocentric assumptions have pervaded spiritual and eastern philosophical practices, requiring greater need for culturally sensitive and competent research and practices. Indeed,

the authors acknowledge that they may need to exercise cultural reflexivity given that their own practices and applications slant towards eurocentric research. Additionally, they contend that before applying such interventions, practitioners must examine whether the interventions are culturally appropriate for the clients they support. Finally, Noetel et al.'s (2017) systematic review concluded that while many studies found positive effects for mindfulness and acceptance interventions, it is difficult to make strong causal claims about the performance benefits for athletes, and that further well-designed RCTs are needed in order to strengthen the research base.

In the next section, we consider a case study and provide a scripted intervention of how we might work with a client in consultation about their performance detriments, by working through the six core processes of the hexaflex model.

Case Study

Amelia is a 20-year-old professional soccer player who has just been offered a full-time contract with the club she has been with since the age of 10. She is also halfway through her degree in sport psychology at university and is keen to implement what she is learning. However, now that she is training and competing full time, Amelia finds the demands of the game challenging and far greater than she imagined. She has been in the starting line-up on a few occasions, but the coaches notice her getting flustered in the moment when pressed by an opponent, and she therefore loses possession of the ball or mistimes her pass. Recently, coaches have noticed that Amelia is cutting corners in her gym work and seems to lose focus in training. At training one day while warming up she shares that she feels like she's just there to make up the numbers and says "how can I improve and gain confidence if I get benched for making one mistake?" She books in for a session to discuss her concerns, in which she expresses that her goal is to start and finish matches.

Initial intake and identifying problems

During the initial stages of consultancy, the goal is to formulate the client's issue in ACT terms. We might start by getting the client to explain in their own words, some of the challenges they are facing (e.g., "I wonder if we might start with you just telling me a little bit about what you're struggling with at the moment?"). We already know from the case study information that Amelia is struggling to make decisions under pressure and would like to be more confident. We might explore a little bit more about what that is actually like for her:

Consultant: So Amelia, I'd like to try and understand a little more about what's going on for you when you feel under pressure. Can you think of an example of when that's happened recently?

Amelia: I just feel a little lost when I'm out there. I've only been playing at this level for a few months really, and I'm still getting used to the pace of everything. It's a real step up, and you just have to think so much more quickly. I have less time to make a pass as everything is quicker and so I get flustered and I don't have time to look where I want to pass the ball and I think I'm going to make a mess of it anyway. I feel like I'm letting my team down.

Consultant: So when you're out there playing, it sounds like there are some other unhelpful thoughts when you get the ball...

Amelia: Yeah, there's some self-doubts, I guess... just about my ability to make the right pass. I'm questioning everything and I lose concentration and tighten up. It's like sometimes when the ball is coming to me, I'm thinking "don't mess up again! Coaches won't be happy, the team will get frustrated," and sometimes I don't even want the ball because I know I'll just lose it. I need to appear perfect to them and I know I'm not that good. I was always good at reading the game, but I'm mostly just trying to *not* mess up at the minute. I feel like if I could just get the confidence back I'd be alright, but it's just not there, and I'm not really sure what to do about it.

Consultant: Tell me if I'm getting this wrong, but it sounds like when you're out there trying to play in the moment and read the game, your mind is actually giving you all these thoughts... "don't let your team down, don't waste time on the ball, the coaches are watching you, maybe it's best if you just stay out of the way so you don't look bad?"

Amelia: To be fair, it's got to the point where I stay out of the way on the pitch. Even though I get told off because I'm out of position, it's a relief not to feel the anxiety anymore. But then it's like I'm just losing interest and can't seem

to do anything right. I know I'm going to keep messing up and keep getting benched, so what's the point? Maybe I should just focus on Uni.

This interaction between Amelia and the consultant requires an open poise, utilising helping / counselling skills, which include open ended questions such as asking her to think of an experience, active listening that enables paraphrasing, and confirmation to establish whether the consultant has understood Amelia correctly. These skills allow Amelia to feel empowered to correct the consultant if needed, and feel that she is being heard, which all builds relational trust.

By referring to Amelia's mind as a separate entity that is giving her thoughts, we have already begun the process of defusion. We might also find out whether there are any other physical sensations, emotions, or feelings that Amelia is avoiding (e.g., "when you're experiencing these thoughts, what shows up in your body?"), but we should also explore what the client really wants from the consultancy. She has already described wanting to be more confident, but drawing out the perhaps complex combination of goals and values that is driving the client to seek help is important for the next stage of the consultancy.

Consultant: Let's say I had a magic pill that you could take, and tomorrow morning you could be the most confident athlete in the world... what would that enable you to do differently?

Amelia: Well, I suppose I'd just be able to focus on playing and not have to worry about what everyone else was thinking.

Consultant: And if you could be free of that worry, if you could be free of those unhelpful thoughts... how would things be different?

Amelia: I'd be able to focus on my job on the pitch. I'd see the game more clearly. I'd probably play a lot better and not be worried about being benched again. I'd feel more free.....right now I feel constantly tense.

Consultant: Okay. And let's say that happened. What would be different then?

Amelia: Uh... I suppose I'd be enjoying football again... looking forward to matches, enjoying training, having a laugh with the girls, but at the minute, I just don't really want to be there.

There are two things to note here. Amelia is describing several things that are important to her (*values*), but that seem out of reach to her right now: staying present and her role (“focus on my job”), improving her performance, enjoying training, and socialising (“having a laugh”). Amelia also explains that she doesn’t really want to be there at the minute, which might shed some light on the behaviours her coaches have observed (cutting corners in the gym). If we explore the function of the behaviour rather than the form, her cutting corners could be a way for her to avoid being in a situation which produces all of the unwanted sensations and thoughts that she has described (*experiential avoidance*).

In ACT Terms we have learnt, via this relatively short exchange, that Amelia is finding it difficult to stay present (*mindful awareness*) and is instead being hooked by unhelpful thoughts about her and other’s expectations and judgements. Her *conceptualised self* is reliant on external validation and acceptance. Furthermore, rather than experiencing thoughts as fleeting and passing cognitive events (*acceptance*), Amelia believes the literal truth of her thoughts, that she isn’t good enough (*cognitive fusion*). Her self-descriptive language (e.g., she “was” good at reading the game and “knows” she’s going to mess up) is in absolute terms (*attachment to conceptualised self*). And she is “not sure what the point of playing is anymore” (*lack of contact with values*). Instead, she avoids getting involved when on the pitch (*inaction*), is beginning to lose motivation to continue in football altogether, and questions herself as to why she is playing (*lack of values clarity*).

Creative hopelessness

The next step is to expose the fallibility of the ‘system’ of thinking within which the client is working. That is, highlighting the ultimate unworkability of control-reduce-eliminate strategies when it comes to unwanted thoughts, feelings and sensations, while remaining non-judgemental in exploring *with* the client whether their strategies have worked. Indeed, her

strategies may have helped in the short term, but the long-term workability of control attempts can be questioned given some of her observed avoidance behaviours.

Consultant: Let's run through some of the things that you've tried already. What sort of things have you tried to help the situation?

Amelia: Well... I suppose I've tried just thinking positively. Like when I get those thoughts, trying to block them out and think about something more positive, like my positioning.

Consultant: Okay, so one strategy is to block unhelpful thoughts to get rid of them so that you can play much better. That seems like a perfectly reasonable strategy for your mind to come up with. How has that worked when you've tried to do that?

Amelia: It works sometimes. But sometimes the negative thoughts either won't go away, or keep coming back a few minutes later, and then I'm annoyed at myself for not being able to concentrate. So then I'm having that thought, and it just kind of spirals and I can't get out of my own head!

The consultant is doing two important things here. First, reinforcing the idea that the client's strategies are perfectly reasonable, logical things to try. Second, referring again to the client's mind as if it is separate from the client. This is *defusion* in practice and is useful when we contrast the solutions that the client's mind is telling them will work, with their direct experience of whether or not they are actually working.

Consultant: So we should add getting mad at yourself to the list too?

Amelia: (laughs) I suppose so.

Consultant: And I think it's pretty clear from what you've just said, that that isn't really working out for you. Even though you listen to your own mind, which seems to work for a bit, you just end up in a worse place stuck in your own head.

Amelia: Yup.

The idea is to continue in this vein (and this may take some time), exploring all of the strategies that the client has used to try and solve the problem and then presenting the contrast between what their mind is telling them will work, and their direct experiences. Ultimately,

we are trying to establish the unworkability of logical, analytical, problem solving strategies for dealing with internal experiences. The client has tried to remove, reduce, or otherwise get rid of unwanted thoughts and sensations, but with little success. In Amelia's case, the more she has tried, the more of these unwanted experiences she has. The client is 'stuck'.

Consultant: We've covered a lot of ground here, Amelia, and we've got a pretty long list of things that you've tried to do to help with this situation. And they are all pretty logical things. You've clearly put a lot of effort into this and I can see that working on this is something that's really important to you. I want you to take a moment though, to just look at the difference between what your mind is telling you to do, and what your experience is telling you. If one of your lecturers was giving you ideas about how to revise, and none of them ever worked, you might, at some point, stop going to them for advice. But your mind seems to keep giving you these ideas about how to deal with the issue, and because it's your own mind, you want to trust it. It's really tempting to keep on trying your mind's ideas, even though your own experience is showing you that they aren't really helping. So I guess the question really becomes what is more reliable here, your mind or your experience?

Amelia: So, what am I supposed to do then?

Consultant: At this point, I think it might be important for us to really notice that you're feeling a bit stuck in all of this. Have you ever seen a Chinese finger trap?

As Hayes et al. (1999) assert, a state of hopelessness is not what we might ordinarily strive towards. However, the goal of *creative hopelessness* is not to make the client feel as though there is no hope. It is to help the client shift their stance, notice that their agenda of trying to change their internal experiences is what is hopeless, and potentially give up unworkable strategies in the service of moving towards their values.

There are several popular ACT metaphors that are useful here (e.g., person in the hole, tug-of-war with the Monster; see Strosahl et al., 2004, for explanations of many other ACT exercises/metaphors), but we suggest using an actual Chinese finger trap because it allows the client to directly experience the feeling of 'stuckness' and how 'pulling away' actually makes the situation worse. The use of metaphor is prevalent in ACT. Once we begin

to describe or explain the core processes to clients, or engage in logical, analytical discussions about the problem, we are no longer ‘doing ACT’. Appropriately considered metaphors and physical exercises allow the client to directly experience and connect with the principles of ACT ‘in-the moment’ and help to avoid the problem of over-intellectualising.

Consultant: So this is a Chinese finger trap. It’s a child’s toy really. You put one finger in each end (demonstrates and passes to client). Are your fingers in good and tight? Okay, what do you notice?

Amelia: Uh... yeah my fingers are stuck.

Consultant: Oh, well can you pull them out?

Amelia: (tries to pull her fingers out). Nope. Stuck.

Consultant: This feels a bit like the situation you’re in. You’re having a bunch of unhelpful thoughts and your mind is telling you to get rid of them, to pull away from them, and that’s a reasonable and logical response. What happens if you try to pull your fingers out of the trap?

Amelia: (tries harder). Ugh. It’s getting tighter.

Consultant: And isn’t that just like what you described earlier? The more you try to pull away from your unhelpful thoughts and situations, the more of them you end up having and you just end up feeling even more stuck? Your mind is telling you that you need to pull away, to get out, and look at all of the efforts you’ve put into doing that. But what’s happened is that it makes the trap tighter. What if it wasn’t the strategies that were the problem?

Amelia: What do you mean?

Consultant: Well, what if your situation was a trap too? What if it’s not that the strategies aren’t working? What if it’s that the strategies *can’t* work? Just like the finger trap. What if it was the struggle that was the problem?

Amelia: So what can I do now?

Consultant: Let’s see what happens if you push your fingers further into the trap.

At this stage, the client might wonder what the alternative is, and it might be necessary to elucidate somewhat, while also reinforcing the idea of letting go of the struggle. Together we notice that the trap loosens if Ameilia pushes her fingers further into it. If the

client is insistent on having some tangible strategy, the consultant can gently point out that this is their mind telling them that there must be something they can *do* to help, and again reinforce the idea that just noticing the struggle is what's important right now. Having engaged with the client and explored her willingness to try something new, we would continue to work more deliberately on the six ACT core-processes that might be a cause of psychological inflexibility. The number of experiential exercises and metaphors that can be used is vast, so we provide an example or two in each of the following sections:

Mindful breathing and noticing (*acceptance, defusion, and flexible attention*)

To help Amelia notice thoughts without judgement or the impulse of the mind wanting to solve the problem, several methods might be used (Hayes, 2019). Here the consultant asks Amelia to consider the thoughts she had during a recent performance and notes them down on a piece of paper.

Consultant (holding the paper right in front of Amelia's face): What do you see?

Amelia: Absolutely nothing. I can't see anything up that close!

The consultant moves the paper back, until Amelia can read what it says. Moving the paper to the side means Amelia now has vision out in front too.

Consultant: But you can still see the paper, right? It hasn't gone anywhere. Your thoughts are still there, written on it, but if we just draw it back a little, we can notice and recognise the thoughts, but our vision is no longer dominated by them. You can see what's really in front of you and decide on a course of action.

This is the pivot towards *cognitive defusion* and it is a process where Amelia begins to release herself from believing her thoughts. The 'Leaves on a Stream' exercise (or similar) might also be introduced, along with the practice of labelling thoughts as they are noticed

(i.e., worrying, concerned). The exercise is a technique used in ACT to help clients cope with uncomfortable thoughts and feelings. Just as leaves float by on a stream, in this exercise the client lets thoughts float on. In addition, breath awareness exercises would help to strengthen Amelia's attentional focus (on the physical sensations of breathing), while still being aware and accepting of thoughts, feelings or any other physical sensations experienced. Unlike rhythmic breathing this exercise does not involve counting breaths, but emphasises attending to the sensations of breathing without any attempt at conscious control. Amelia would be encouraged to continue a daily 10-minute practice before her next session. At the start of each subsequent session the consultant would recap on the session before, enquire how the practices assigned are going, and explore any challenges and struggles.

Accessing the transcendent self (*self as context, defusion*)

While it has been noted that psychological flexibility processes are connected and do not necessarily follow a fixed approach, the next step in the consultation may be about helping Amelia to raise awareness to access the *transcendent self* and strengthen the connection to her authentic self and others.

Consultant: I'd like to explore some of the difficult feelings you've been experiencing and some of the statements you've made. I know it isn't always easy for you, but I'm hoping it will help you access a part of yourself you may not have realised is there. Would you be willing to give this a try?

Amelia: Sure, but I normally just try to shut out feelings. I am so anxious, the only way out is when I avoid the situation and don't have the eyes of everyone watching to see whether I am any good.

The consultant asks Amelia to write down 'I am' statements as noted above (e.g., I am anxious, I am rubbish, I am the problem). The consultant then asks Amelia to add the words "or not" to the end of each statement and to read them out loud slowly and deliberately. This

helps her notice her fusion with the statement and when the client repeats the statement with ‘or not’, she can take note of any unhelpful thoughts that arise.

Consultant: Let’s try something here. If we cross out everything before ‘or not,’ are you still you?

Amelia (frustrated): Uh that doesn’t make sense, it just says “or not”.

Consultant: “I notice you had a reaction to my question...”

Amelia: Well yeah because I am somebody, I am something, I’m me!

Consultant: Okay. Well let’s try something else then. Circle the I am in your statements. Now let’s see if we can simply rest on “I am.”

This process helps to bring her closer to just being, rather than rely on the distorted story that she tells herself; rubbish, not good.

Consultant: I’d like us to try something else here too. Instead of “I am anxious” could we try, “I am having the thought that...”

Amelia: Like... I am having the thought that my teammates think I’m no good?

Consultant: Exactly. And I wonder if whenever we’re talking about your thoughts whether we can try to use that language. “I am having the thought that... I am experiencing the sensation of...”

This change in language allows Amelia to describe the situation, her behaviour and how she is thinking and feeling without being drawn into self-judgments and her conceptualised self. The idea is to help Amelia pivot away from becoming the story of her ego and help her to move in the direction of greater awareness and perspective.

Mindful noticing, body scanning and labelling emotions (flexible attention, defusion, acceptance)

As Amelia continues to work on raising awareness, it is also important that she becomes aware of physical sensations of feelings held in her body that are stimulated by

activating events and inferred by certain cognitions that had become fused. Still using breath technique between sessions and at the start of a new session, she is now introduced to body scanning and the Plutchik's (1980) emotion wheel to explore a range of feelings and accurately label them to provide understanding around her survival behaviours and explore the range of emotions accessible to her. The idea is to not suppress her feelings or judge them but to gain more understanding around her suffering.

Mindful breathing. attention refocusing, concentration (acceptance, commitment)

It is important to recap on Amelia's breathing and noticing 'homework', reinforcing that breathing can be difficult and that simply noticing distractions takes practice. This is a good opportunity to reinforce and encourage Ameila to take a non-judgmental stance and to simply notice and label any feelings of frustration during these exercises. She is now also introduced to another 10-minute breathing exercise that introduces acceptance and attention refocusing with a comparative, sport-specific example. On a football pitch her mind may wander during training, but being able to refocus her attention back on the ball and her power stance is what she begins to train for through her breathing. In breathing ladders, the count is now introduced as the attention 'refocuser' as we demonstrate to Amelia that she can choose to refocus her attention.

Consultant: Amelia, I want you to recognise where we place our attention is a choice, and while we do become distracted by noises, thoughts, and any number of different things, I wonder if you would try a breathing exercise that helps you to focus your attention, just as you would need to when in a match. You mentioned that you often say to yourself "Don't mess up, I don't want the ball" which results in you being distracted by thoughts that lead you to be out of position to receive the ball. What would it help you to think about so that you are in position?

Amelia: I want to think about where the ball is and be able to follow it into position and then I need to open up and scan the pitch, hold a strong body stance to hold off any opponent. Yeah, I can think about that.

The athlete comes to a realisation that she has been placing her attention elsewhere, which has not been helping. By exploring what it takes to be in position, her technique and body posture in receiving the ball, she is led to specific points that she can choose to intentionally focus on in training, and the cues that intentionally bring her attention back to the task.

Consultant: How about if we help you practice placing your attention in a place of choice and holding it there with a breathing exercise. Think of it as a training exercise that helps you place your mind on what you choose to attend to.

Amelia: Ha! If you can help me do that would be ace!

Consultant: Okay let's try a breathing exercise. It's called a ladder because our aim is to help you count up like a ladder and place your attention on the count just like you would the contact with the ball you are receiving. Remember before you were simply breathing in whatever way that came to you. Now we want to help you place attention on your breathing and count as you exhale after taking a breath in. But before we start, let's try to make sure we have a quiet place.

Let's begin... (slowly and deliberately)... Breathe in, and breathe out, and as you exhale silently say one. Remember to place your attention on your breath and the count as you exhale. Breathe in, and breathe out, and silently say two. Don't worry if you lose your count, just come back, and begin again.

The consultant continues to lead by reminding Amelia to lean into self-compassion and kindness towards self. We might remind her to say something as simple as "you're ok" to herself when she loses her focus while breathing, and to exercise this same compassion towards 'self' when on the pitch too.

Amelia is also introduced to another breathing technique called pyramid breathing. This technique may incorporate placing attention on other parts of the body as she breathes, moving from the belly upwards to the chest, and through her mouth, thereby incorporating other factors to pay attention to. This is similar to when she needs to pay attention to

receiving a ball **and** then shifting it to hold her body position while she holds off an opponent. Amelia is asked to continue practising these techniques, committing to 10 minutes of breathing meditation daily before her next session. She is also reminded to choose to place her attention on receiving the ball and her body positioning in training and we would ask her to write this down on a card as a reminder of her week's focus. When Amelia returns the following week for her session, we would, as usual, recap on the week's practices and how she has fared on refocusing her attention on the task at hand.

Value-driven actions and value-driven goal behaviours for practice and competition
(values, committed action)

In the initial consultation, Amelia had highlighted values of presence (“staying present”) her role (“focus on my job”), improving her performance, enjoying training, and socialising (“having a laugh”). We might now explore more deeply what matters to Amelia and what motivates her to play football. Amelia explains that she has always loved competing and what it means to her is that she likes to prove herself and fight; she has never been one to give up and has always loved being challenged to learn. However, of late she has been finding it hard. She acknowledges that external obstacles to her living her inspired values include the coach not playing her, and internal obstacles of fear, and self-criticism. She also explains that she is a team player which matters to her and the reason for playing the sport. This provides the basis for then working to establish how she wishes to demonstrate those behaviours through her actions in practice and competition.

If helpful to the client, these behaviours and actions may be written down in a worksheet to provide a visual representation for the client.

Value	Practice Behaviour & Action	Competition Behaviour & Action
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Focus on my job/ Improving performance - Learn, Challenge, fight	<p>Following my gym program and complete each repetition</p> <p>Study past games and learn from mistakes - watch video clips and analyse the tactical aspects</p> <p>Sit down with the coaches to discuss my video observations and training difficulties to gain better understanding of the game</p> <p>Study set plays and understand my role in those set plays</p> <p>..... (and any others)</p>	<p>Prepare for the game by studying the game plan and watch video clips in performance analysis</p> <p>Whether on the bench or not, study the set plays book for the game</p> <p>Constantly scan the play and my position on pitch</p> <p>Focus my attention on the ball and my body shape/power stance as I receive the ball and fight off opposition</p> <p>.....(and any others)</p>
Enjoyment and socialising	<p>Laughing and joking at training during warm up while staying focused on the warm up exercises</p> <p>.....</p> <p>.....</p>	<p>Getting into the spirit with my teammates on the coach</p> <p>Supporting and cheering my teammates if on the bench</p> <p>.....</p>

Fig 3. Example value-driven actions and goal behaviours.

It is important here to spend time working on a shared plan to monitor Amelia's commitment to these actions with a scale that measures how well she has managed during the week and going forward. This can be discussed with Amelia so that she is able to monitor her own progress, although it is important to emphasise that it is simply a tool to help her raise awareness and to not think of it as a constraint.

Drawing together values commitment and avoidance, feelings, goal directed committed actions in service of long-term goals.

The Lighthouse analogy (Larsen et al., 2017) depicts a road journey towards a lighthouse as the ultimate goal. On this journey the client can find themselves taking a different path at a fork in the road that is referred to as the 'Emotion Driven Way'. The athlete might take this action in response to difficult thoughts and emotions when faced by a difficult situation, which might provide short term relief and reward, but long term consequences of being further away from the lighthouse. Instead, by connecting values back to their game plan of actions and behaviours, with awareness and acceptance of their emotions and processes of cognitive defusion, the athlete continues on 'The Values Driven Way' and their journey towards the lighthouse. The Lighthouse analogy specifically allows joint exploration of the client's path along the road towards a lighthouse (outcome). Discussing what Amelia wants her outcome to be (a consistent starter on the team), and, using the values and action driven behaviours from the previous session, we might discuss how Amelia has managed any difficulties, thoughts and feelings faced.

Examining her avoidance and inactions she is able to recognise that they have been taking her down a different road (the 'Emotion Driven Way'). Amelia begins to understand that the behaviours and past inactions provided more instant relief and release from suffering, though resulted in consequences of being benched, not developing power and strength as a result of cutting out of the gym early, all the while moving further away from the lighthouse (i.e., the starting line-up).

Remembering that ACT processes require that the individual lean into the suffering and difficulty, Amelia is then able to explore what that might look like. Short term consequences of her struggle may indeed feel uncomfortable, be extremely challenging, and might require several hours reviewing difficult video content of her performance struggles. While initially difficult and requiring a lot of effort, the long-term rewards are growth in confidence, better team relationships with players and staff, and more enjoyment, as she

becomes more able to maintain her attention on improvement and development in her performance.

We would also discuss how she can commit to her actions in training by working with the coaches on some extra drills that draw out her technique, physical stance and positioning. Amelia agrees that having this approach will help her refocus on what matters in service of her longer-term goal and thereby allow her to still be on the path towards the lighthouse.

Modes of working

As with many forms of consultancy it is difficult to give a precise or even an imprecise indication of how long an ACT intervention might take, or how many sessions might be appropriate. For some clients, it might be necessary to spend weeks just working on loosening their grip over control strategies with creative hopelessness exercises, while others might reach that willingness to abandon control in favour of acceptance much more quickly. It is important to go at the client's pace here and to remember that we are not trying to convince the client of anything, only afford them opportunities to access their direct experience and contrast that to what their mind is telling them. Once the client is open to trying what might seem like a counterintuitive strategy (leaning into rather than away from their discomfort), we can begin working on developing psychological flexibility, but again this is not a linear process and we might revisit the notion of control many times over the course of the consultancy as we notice the client falling back on logical, problem solving thinking (e.g., "yes, but I wish I could be less anxious!").

We can though, as we have seen in the case study, begin the work of ACT immediately, through our early interactions with the client by discussing what is important to them (values), talking about the mind as a separate entity (defusion), pausing to ask what they are experiencing right now (mindfulness, acceptance), and so on. There is also no set

structure through which to progress an ACT consultancy, or any order that core processes might be approached in. Indeed, each core process is linked with each other process, so experiential exercises or metaphors often tap into pairs of, or multiple processes at once (e.g., flexible attention to the present moment *and* acceptance, or defusion *and* self-as context). However case-formulation might result in the consultant and client agreeing upon a set of treatment goals, and the consultant deciding course of action or set of interventions that target relevant areas of psychological flexibility (see Hayes et al., 2004).

When the client is consistently engaging in committed action based on chosen values, and demonstrating the open, centred, and engaged response style discussed at the start of this chapter, we might well have reached a point where we can think about bringing the consultancy to a close.

There is evidence to suggest that due to its experiential nature, ACT can work well if delivered in a group format. Hearing how other people have experienced exercises or interpreted metaphors might be useful, and client generated metaphors can also be shared in group formats. Being amongst others who are displaying willingness, expressing their openness to experience, and publicly committing to action based on personal values can create a powerful social context for change (see Walser & Pistorello, 2004, for an extended discussion).

The therapeutic relationship itself is at the heart of the ACT intervention. It is accepting and focused on values, with the therapist modelling and reinforcing the psychological flexibility being taught. While a detailed discussion about the therapeutic relationship in ACT is beyond the scope of this chapter, Hayes et al., (2012) provide a useful chapter that examines the powerful nature and challenges of this relationship in ACT.

References

- Baltzell, A. & Akhtar, V. L. (2014). Mindfulness Meditation Training for Sport (MMTS) intervention: Impact of MMTS with Division I female athletes. *The Journal of Happiness and Well-being*, 2(2), 160-173.
- Bernier, M., Thienot, E., Codron, R., & Fournier, J. F. (2009). Mindfulness and acceptance approaches in sport performance. *Journal of Clinical Sport Psychology*, 3, 320–333. <https://doi.org/10.1123/jcsp.3.4.320>
- Bernier, M., Thienot, E., Pelosse, E., & Fournier, J. F. (2014). Effects and underlying processes of a mindfulness-based intervention with young elite figure skaters: Two case studies. *The Sport Psychologist*, 28, 302–315. <https://doi.org/10.1123/tsp.2013-0006>
- Birrer D., & Morgan G. (2010). Psychological skills training as a way to enhance an athlete's performance in high-intensity sports. *Scandinavian Journal of Medicine and Science in Sports*, 20, 78-87. <https://doi.org/10.1111/j.1600-0838.2010.01188.x>
- Bühlmayer, L., Birrer, D., Röthlin, P., Faude, O., & Donath, L. (2017). Effects of mindfulness practice on performance-relevant parameters and performance outcomes in sports: a meta-analytical review. *Sports Medicine*. <https://doi.org/10.1007/s40279-017-0752-9>
- Gardner, F.L., & Moore, Z. E. (2001). The Multi-level Classification System for Sport Psychology (MCS-SP): Toward a structured assessment and conceptualization of athlete-clients. Workshop presented at the annual conference of the Association for the Advancement of Applied Sport Psychology, Orlando, FL.
- Gardner, F. L., & Moore, Z. E. (2004). A mindfulness-acceptance-commitment-based approach to athletic performance enhancement: Theoretical considerations. *Behavior Therapy*, 35, 707–723. [https://doi.org/10.1016/S0005-7894\(04\)80016-9](https://doi.org/10.1016/S0005-7894(04)80016-9)

- Gardner, F. L., & Moore, Z. E. (2006). *Clinical sport psychology*. Human Kinetics.
- Gardner, F. L., & Moore, Z. E. (2012). Mindfulness and acceptance models in sport psychology: A decade of basic and applied scientific advancements. *Canadian Psychology*, 53(4), 309-318. <https://doi.org/10.1037/a0030220>
- Gardner, F.L., & Moore, Z. E. (2017). Mindfulness-based and acceptance-based interventions in sport and performance contexts. *Current Opinion in Psychology*, 16, 180-184. <https://doi.org/10.1016/j.copsyc.2017.06.001>
- Goodman, F. R., Kashdan, T. B., Mallard, T. T., & Schumann, M. (2014). A brief mindfulness and yoga intervention with an entire NCAA division I athletic team: An initial investigation. *Psychology of Consciousness: Theory, Research, and Practice*, 1, 339–356. <https://doi.org/10.1037/cns0000022>
- Hasker, S. M. (2010). Evaluation of the Mindfulness-Acceptance-Commitment (MAC) approach for enhancing athletic performance. *Dissertation Abstracts International*, 71(9-B), pp. 57-90.
- Hayes, S. C (2019). *A liberated mind: How to pivot toward what matters*. New York: Avery.
- Hayes, S. C. (2004). Acceptance and commitment therapy, relational frame theory, and the third wave of behavioral and cognitive therapies. *Behaviour Therapy*, 35(4), 639-665. [https://doi.org/10.1016/S0005-7894\(04\)80013-3](https://doi.org/10.1016/S0005-7894(04)80013-3)
- Hayes, S. C., & Brownstein, A. J. (1986). Mentalism, behavior-behavior relations and a behavior analytic view of the purposes of science. *The Behavior Analyst*, 9, 175- 190. <https://doi.org/10.1007/BF03391944>
- Hayes S. C., Hayes L. J., Reese H. W. (1988). Finding the philosophical core: A review of Stephen C. Pepper's World Hypotheses. *Journal of the Experimental Analysis of Behavior*, 50, 97-111. <https://doi.org/10.1901/jeab.1988.50-97>

- Hayes, S. C., Luoma, J. B., Bond, F. W., Masuda, A., & Lillis, J. (2006). Acceptance and Commitment Therapy: Model, processes and outcomes. *Behaviour Research and Therapy*, 44, 1-25. <http://dx.doi.org/10.1016/j.brat.2005.06.006>
- Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (1999). Acceptance and Commitment Therapy: An experiential approach to behaviour change (2nd Ed). The Guilford Press.
- Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (2012). Acceptance and Commitment Therapy: The process and practice of mindful change (2nd Ed). The Guilford Press.
- Hayes, C., Strosahl, K. D., Luoma, J., Smith, A. A., & Wilson, K.G. (2004). ACT Case Formulation. In S. Hayes & K. D. Strosahl (Eds.), *A Practical Guide to Acceptance and Commitment Therapy* (pp. 59-73). Springer.
- Ivarsson, A., Johnson, U., Andersen, M. B., Fallby, J., & Altemyr, M. (2015). It pays to pay attention: A mindfulness-based program for injury prevention with soccer players. *Journal of Applied Sport Psychology*, 27, 319-334. <https://doi.org/10.1080/10413200.2015.1008072>
- Josefsson, T., Ivarsson, A., Gustafsson, H., Stenling, A., Lindwall, M, Tornberg, R., & Böröy, J. (2019). Effects of Mindfulness-Acceptance-Commitment (MAC) on sport-specific dispositional mindfulness, emotion regulation, and self-rated athletic performance in a multiple-sport population: an RCT study. *Mindfulness*, 10, 1518-1529. <https://doi.org/10.1007/s12671-019-01098-7>
- Kabat-Zinn, J., Beall, B., & Rippe, J. (1985, June). A systematic mental training program based on mindfulness meditation to optimize performance in collegiate and Olympic rowers. Poster session presented at the World Congress in Sport Psychology, Copenhagen.
- Kaufman, K. A., Glass, C. R., & Arnkoff, D. B. (2009). Evaluation of Mindful Sport Performance Enhancement (MSPE): A new approach to promote flow in athletes.

Journal of Clinical Sport Psychology, 25, 334-356.

<https://doi.org/10.1123/jcsp.3.4.334>

Kettunen, A., & Välimäki, V. (2014). Acceptance and value-based psychological coaching intervention for elite female floorball players. Jyväskylä: (Unpublished master's thesis), University of Jyväskylä.

Larsen, C.H., Diment, G., Hansen, J. & Henrikson, K. (2017, April, 26). *Daring to ACT at the Olympic Games: Why and how we integrate mindfulness in high pressure competitions* [Workshop]. Mindfulness and Acceptance Summit, Copenhagen, Denmark.

Luoma, J. B., Hayes, S. C., & Walser, R. D. (2017). *Learning ACT: An Acceptance and Commitment Therapy skills training manual for therapists* (2nd Ed.). New Harbinger Publications Inc.

Lutkenhouse, J. M. (2007). The case of Jenny: A freshman collegiate athlete experiencing performance dysfunction. *Journal of Clinical Sport Psychology*, 1, 166-180.

<https://doi.org/10.1123/jcsp.1.2.166>

Noetel, M., Ciarrochi, J., Van Zanden, B., & Lonsdale, C. (2017). Mindfulness and acceptance approaches to sporting performance enhancement: a systematic review.

International Review of Sport and Exercise Psychology.

<https://doi.org/10.1080/1750984X.2017.1387803>

Plutchik, R.K.H. (1980). Theories of emotion. Academic Press.

Roychowdhury, D., Ronkainen, N., Guinto, M.L. (2021). The transnational migration of mindfulness: A call for reflective pause in sport and exercise psychology. *Psychology of Sport and Exercise*, 56. DOI: <https://doi.org/10.1016/j.psychsport.2021.101958>

- Ruiz, F. J., & Luciano, C. (2012). Improving international-level chess players' performance with an acceptance-based protocol: Preliminary findings. *The Psychological Record*, 62, 447–462. <https://doi.org/10.1007/BF03395813>
- Sappington, R., & Longshore, K. (2015). Systematically reviewing the efficacy of mindfulness-based interventions for enhanced athletic performance. *Journal of Clinical Sport Psychology*, 9(3), 232–262. <https://doi.org/10.1123/jcsp.2014-0017>
- Schwanhausser, L. (2009). Application of the Mindfulness–Acceptance–Commitment (MAC) Protocol with an adolescent springboard diver: the case of Steve. *Journal of Clinical Sports Psychology*, 3, 377–396. <https://doi.org/10.1123/jcsp.3.4.377>
- Si, G., Lo, C., & Zhang, C. (2016). Mindfulness training program for Chinese athletes and its effectiveness. In A. L. Baltzell (Ed.), *Mindfulness and performance* (pp. 235–267). Cambridge University Press. <https://doi.org/10.1017/CBO9781139871310.012>
- Strosahl, K.D., Hayes, S.C., Wilson, K.G., & Gifford, E.V. (2004). An ACT primer: Core therapy processes, intervention strategies, and therapist competencies. In: Hayes S.C. and Strosahl K.D. (Ed's), *A practical guide to Acceptance and Commitment Therapy* (pp. 31–58). Springer Science and Business Media.
- Turner, M. J., Aspin, G., Didymus, F. F., Mack, R., Olusoga, P., Wood, A. G., and Bennett, R. (2020). One case, five approaches: The application of psychotherapeutic approaches in sport psychology. *The Sport Psychologist*, 34(1), 71-83. <https://doi.org/10.1123/tsp.2019-0079>
- Walser, R. D., & Pistorello, J. (2004). ACT in group format. In S. Hayes & K. D. Strosahl (Eds.), *A Practical Guide to Acceptance and Commitment Therapy* (pp. 347-372). Springer.
- Wegner, D. M. (1994). Ironic processes of mental control. *Psychological Review*, 101(1), 34–52. <https://doi.org/10.1037/0033-295X.101.1.34>

- Wolanin, A.T., & Schwanhausser, L.A. (2010). Psychological functioning as a moderator of the MAC approach to performance enhancement. *Journal of Clinical Sport Psychology*, 4, 312-322. <https://doi.org/10.1123/jcsp.4.4.312>
- Zettle, R. D., & Hayes, S. C. (1986). Dysfunctional control by client verbal behavior: The context of reason giving. *The Analysis of Verbal Behavior*, 4, 30-38. <https://doi.org/10.1007/BF03392813>
- Zettle, R. D., Hayes, S. C., Barnes-Holmes, P. M. D., & Biglan, A. (2016). *The Wiley handbook of contextual behavioral science*. Wiley-Blackwell.
- Yau, E. K. B., Ping, N. P. T., & Kuan, G. (2021). The Use of Mindfulness Acceptance Commitment (MAC) approach for Malaysian elite triathletes. *Journal of Sport Psychology in Action*, 1-9. <https://doi.org/10.1080/21520704.2021.1920522>