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Horne, G and Swettenham, L (2024) Toward a Comprehensive Professional Philosophy in Performance and Well-Being Psychology: Integrating Functional Contextualism and Relational Frame Theory for Esports and Other High-Performance Environments. Journal of Electronic Gaming and

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As accepted for publication in Journal of Electronic Gaming and Esports, ©Human Kinetics
https://doi.org/10.1123/jege.2024-0017

Towards a Comprehensive Professional Philosophy in Performance and Wellbeing Psychology: Integrating Functional Contextualism and Relational Frame Theory for Esports and other High-Performance Environments

Abstract

Performance psychology practitioners use a wide range of theories and interventions to improve performance and wellbeing. Often, however, practitioners do not integrate these theories into a model of practice underpinned by a theory of behaviour. Without this foundation, performance programs become patchwork approaches where it is often unclear whether different interventions within a performance program work together or contradict each other. To address this issue, we present a model of behaviour based on functional contextualism and relational frame theory. We then use this model as a framework to integrate mainstream performance psychology and psychophysiology theory in-line with acceptance-based cognitive behavioural approaches to improve performance alongside wellbeing, not at the expense of wellbeing. Specifically, this includes interventions which promote experiential acceptance, and excludes interventions which promote experiential avoidance. With this framework, we hope to support practitioners, students, and educators by illustrating how different theories can and cannot be integrated in their own practice. In line with our expertise, examples are predominantly taken from esports literature. However, the model and philosophy presented is applicable to all high-performance domains. We end this article by proposing questions to develop performance psychology philosophy inside and outside of esports.

Introduction

Chaos in the brickyard (Forscher, 1963) is a classic scientific metaphor wherein Forscher uses bricks and construction to argue for more systematic scientific practice. Bricks, even of fine quality, will build unstable, ineffective structures if assembled without a blueprint. Likewise, science becomes confusing, chaotic, and contorted without philosophy, theory and hypotheses. This concern has been carried into sport and exercise psychology early in its formation (Biddle, 1997), and is maintained today in fields of performance psychology (Mesagno, 2013; Fletcher, personal communication, October 11, 2022).

Despite this agreement and awareness, we believe performance psychology remains fragmented. Many theories look to improve performance and wellbeing by focusing on different areas that influence individual behaviour in a variety of high-performance domains (e.g., esport sport, business, medicine, music, and theatre). Some argue that individual traits and states, such as resilience, mental fortitude (Fletcher & Sarkar, 2012, 2016), psychological flexibility (Hayes et al., 1999), flow (Csikszentmihalyi, 2008), perceptions of pressure (Sharpe et al., 2024a; 2024b), self-regulation (Trotter et al., 2023), big five-personality traits and narcissism (Birch et al., 2023; Horne et al., 2023; Matuszewski et al., 2020) are important to success; others describe how social, environmental support (or lack thereof) can contribute to or detract from performance and wellbeing (e.g., Garrod & Rhind, 2024; Mageau & Vallerand, 2003).

Performance psychology also remains detached from performance psychophysiology. Psychophysiology is the “study of the reciprocal relationships between mind and body” (Cooke & Ring, 2019; p. 2), and links physiological interventions such as exercise and slow breathing to cognitive performance (e.g., Bellon et al., 2021; Ludyga et al., 2020; Yadav & Mutha, 2016), and thus competitive performance and wellbeing (e.g., Laborde et al., 2022; Pagaduan et al., 2020). However, psychophysiological interventions in research often lack underlying theory (Welsh et al., 2023); and if they do, they are predominantly neurological, biological or even mathematical in nature, and with limited understanding of psychology and behaviour (e.g., McEwen et al., 2017; Stanojević et al., 2018). The most integrated models, which we will discuss more below, are the neurovisceral integration model and its derivatives (e.g., Smith et al., 2017; Laborde et al., 2018), however, they cannot holistically explain how behaviour occurs and how to change it.

In practice this fragmentation and detachment is reflected by performance practitioners’ models of practice being a patchwork of overlapping theories that bridge the needs of the individual, team, coaches, and organisation without a clear indication of how they can or cannot be integrated to improve performance behaviour across different domains (e.g., Harwood, 2008; Katz et al., 2009). In a recent esports coaches conference with world-leading practitioners, no practitioner presented a theory of behaviour to underpin their model of practice (Andrews, 2023; Ashford, 2023; Cox, 2023; Hawkins, 2023; Parth, 2023; Pedraza-Ramirez, 2023; Robl, 2023);

and where intervention theories were presented (Andrews, 2023; Ashford, 2023; Pedraza-Ramirez, 2023), they were unintegrated.

While not presenting an underlying theory of behaviour does not mean that practitioners do not use one, we argue this is likely the case based on how practitioners have discussed their approaches to practice. In one of the most comprehensive presentations at the above esport coaches conference, one practitioner presented the theoretical foundations of their cognitive approach to practice across four different theories: Acceptance and Commitment Therapy (ACT; Hayes et al., 1999), pressure and resilience training (Fletcher & Sarkar, 2016), self-determination theory (e.g. Ryan & Deci, 2002), and the holistic approach to athletic talent development (Henriksen et al., 2010); and across three different perspectives: individual, team, coaching. We believe this is likely an approach without an underlying philosophy and theory of behaviour. Firstly, these theories are presented as the foundation of practice, instead of having a theory of behaviour or philosophy as a foundation. Secondly, ACT is presented as part of a cognitive perspective, which is contrary to its philosophical foundation of relational frame theory (Hayes et al., 2001). Thirdly, there is no integration between these different theories; values interventions within ACT have overlap with identified motivation in self-determination theory's organismic integration subtheory (Ryan & Deci, 2002), however, these theories are presented as separate and for different perspectives. As other presentations were less theoretically supported, it is likely that few psychology practitioners at the esports' elite levels use an underpinning theory of behaviour as a foundation of their practice.

Performance practitioners need an underlying theory of behaviour to fully integrate different theories within their models of practice. Many argue that an underlying theory of behaviour is needed to fully develop a professional philosophy within sport and performance (e.g., Poczwardowski et al., 2004; Tod & Eubank, 2020). In Poczwardowski et al. (2004)'s hierarchical model, a theory of behaviour is informed by a practitioner's core beliefs and values, and influences practitioner's models of practice, intervention choices and goals: an underlying theory of behaviour allows practitioners to flexibly use the fragmented theories and interventions above within a program, given they are in-line with the practitioner's beliefs, model of practice and intervention goals. An approach without an underlying theory of behaviour, may be detrimental to professional development (Poczwardowski et al., 2004; Tod & Eubank, 2020) and even intervention effectiveness (e.g., teaching clients to both control and accept their thoughts, Hayes, 2005), or, as in the model above, could lead to inefficiency and a lack of fluency through an arbitrary separation between different approaches.

This paper aims to encourage more thorough professional philosophies within performance psychology practitioners. In line with Poczwardowski et al. (2004)'s guidelines, we provide a theory of behaviour, underpinned by beliefs about human behaviour and development in relational frame theory and functional contextualism (Hayes et al., 1999; Hayes et al., 2001). Next, we propose a mindfulness and acceptance-based model of practice which aims to improve performance and wellbeing through psychological flexibility. We then outline interventions which fit within this proposed model of practice, and outline areas for future research. To our knowledge, this is the first paper that applies such a systematic approach to the development of theory and philosophy within a performance practitioner's model of practice,

and the first to integrate acceptance- and mindfulness-based interventions with psychophysiological and attention regulation theory. Through this paper, we hope our framework will help to structure and provide coherence to future performance psychology and psychophysiology, in professional practice, education, and research. We aim to tidy up the brickyard, laying the foundations for architecture to come.

Our model of behaviour and its philosophical foundations

Our model is underpinned by relational frame theory and functional contextualism (Hayes et al., 1999; Hayes et al., 2001). These theories provide a philosophical underpinning to understand what influences behaviour, and how that can be manipulated to improve performance and wellbeing. In our model of practice, functional contextualism and relational frame theory are used over the second-wave cognitive-behavioural model of behaviour change. This is partly due to previous studies suggesting that, contrary to their philosophy, longitudinal behaviour change due to cognitive-behavioural therapy is not cognitively mediated (Quigley et al., 2019); and partly due to second-wave cognitive behavioural therapies being linked to more maladaptive, avoidance coping behaviours (Asl et al., 2020) which may lead to depression long-term (Hayes et al., 1999; Kashdan et al., 2010).

Relational frame theory is a language-based model of learning which describes how humans can make relations between different stimuli (Hayes et al., 1999). This occurs first through trained relations, such as learning the word “cat” is associated with the sound /kæt/, as well as the animal itself. Unique to humans, however, is the ability to make derived relations which build on the already trained relations, exponentially; this would allow humans to associate the sound /kæt/ with the animal without that specific relation being trained. These associations are difficult to break once derived, and even through direct training, and they may resurge if the new pattern no longer works (Hayes et al., 1999). Relational frames is the name given to webs of these relations within a particular context.

Relational frames contribute to rule-governed behaviour. According to relational frame theory, verbal knowledge is the product of many networks of derived stimulus relations, and these relations dominate our perceptions of different contexts as we develop (Hayes et al., 1999, 2001). Verbal knowledge can take the form of verbal rules, such as “I cannot play well in away games if I am anxious”, which serve to reduce the direct consequences of behaviour (an individual’s actual performance) in favour of the verbal rule. Rule governed-behaviour can be a double-edged sword; while it may help learning and skill development, it can also contribute to much of human psychopathology (Hayes et al., 1999).

Functional contextualism is a pragmatic philosophy that argues that what is true is what works within a context. Behaviour, whether observable actions, such as speaking and moving, or private experiences, such as thoughts, feelings, and emotions is reciprocally dependent on an individual’s context (Hayes et al., 1999). In our model, context is made up of both an individual’s

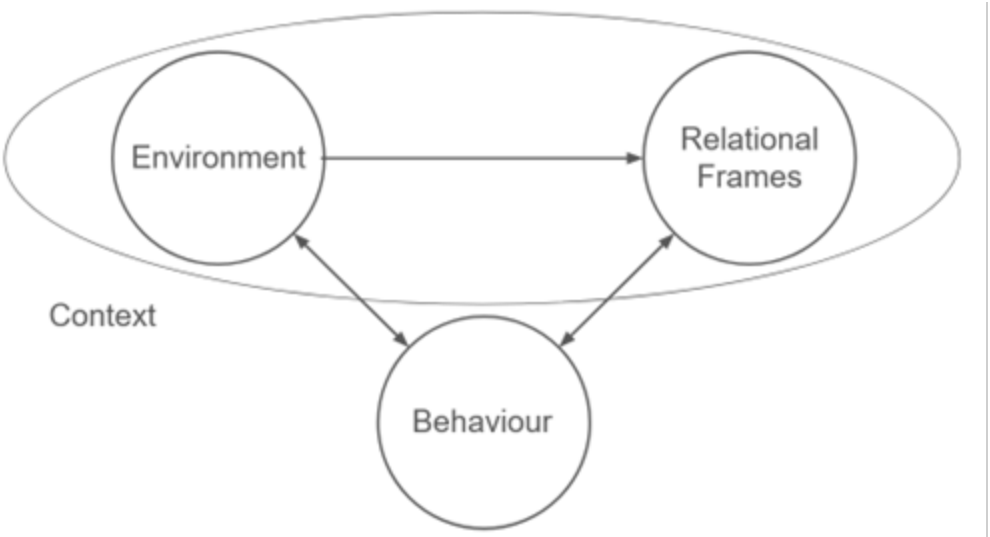
environment, and how they interpret it, based on their relational frames (Hayes et al., 2001). An individual's environment is biopsychosocial, with an individual's neurology and physiology integrated with psychology and behaviour (Smith et al., 2017).

Finally, the "functional" part of functional contextualism, refers to behaviour being assessed by the extent to which it meets an individual's pragmatic truth criterion, or idea of 'successful working' (Hayes et al., 1999). For the purpose of this model within this paper, our pragmatic truth criterion is the improvement of both individuals' performances and wellbeing simultaneously. We appreciate that other practitioners may instead prioritise performance at the expense of wellbeing; however, this would mean that the theory and interventions that make up their models of practice differ from what we present in this paper.

Figure 1 shows our model of behaviour informed by functional contextualism and relational frame theory (Hayes et al., 1999; Hayes et al., 2001). Here, in young infants, behaviour is entirely dependent on the environment before language structures begin and relational frames form. However, as language structures develop, verbal knowledge and rules within an individual's relational frames begin to dominate, mediating the relationship between an individual's environment and their private and observable behaviour. An individual's behaviour then not only influences their environment, but also further builds relational frames between different stimuli. Furthermore, in our model, internal, private experiences and external, observable actions are both considered behaviour, and influenced by the same mechanisms (Hayes et al., 1999). Thoughts, feelings, and emotions do not mediate the relationship between context and observable action (Quigley et al., 2019), instead, they occur simultaneously and bidirectionally influence each other (Hayes et al., 2001).

Figure 1

Functional Contextualism Model of Behaviour



The model helps explain impulsive and deliberative, self-regulatory thoughts and actions. Dual-systems approaches to behaviour and decision-making (e.g., Hofman et al., 2009; Kahneman, 2012; Shulman et al., 2016; Strobach et al., 2020) argue that there are different types of human behaviour; one is impulsive, heuristic, and quick, and the other is deliberative, calculated, and self-regulatory. This can be explained through our model. For example, high performance esports players often exercise as part of their training (e.g., Red Bull Gaming, 2020; van Hulst, 2020). Scheduled exercise (environment) is understood through learned experiences of discomfort during exercise (related frames) and could lead to immediate feelings of lethargy and thoughts of “I don’t want to” or “I’m not going”. However, the slower self-regulatory system can be mindful of these impulsive thoughts and feelings, and interpret exercise in terms of esports players’ performance goals and values (Hayes et al., 1999), so that the athlete chooses to exercise despite not initially wanting to. Figure 2 illustrates this process.

Figure 2

Deliberative decisions within our model using exercise as an example

Additionally, future behaviour can be changed through manipulating one’s environment, relational frames, or behaviour within our model. As these areas are interlinked, changes aimed at any one of these areas should contribute to performance behaviour either directly or indirectly. A mindfulness meditation intervention, for example, would primarily look to change an individual’s current context to improve later performances, potentially through improving flow and motor performance (Bühlmayer et al., 2017). The mechanism of this change could be through improving the individual’s environment and physiological environment by increasing activation in the right dorsolateral prefrontal cortex (Tomasino & Fabbro, 2016) and reducing cortisol levels (Bühlmayer et al., 2017), as well as deriving new relations within relational frames where individuals appraise their thoughts and verbal rules differently (Hegarty & Huelsmann, 2020; Hayes et al., 1999).

We integrate physiological theory and function into our model through the hierarchical neurovisceral integration model (Smith et al., 2017). According to the model, parasympathetic nervous system activity through the vagus nerve integrates psychophysiological functions

across eight levels. Levels 1 to 3 coordinate organ and organ system activity and relate to the spinal cord and lower brain nuclei in the central nervous system. Levels 4-5 are related to the amygdala and basal forebrain and produce impulse behaviour (as shown in Figure 2) such as hunger, thirst and sleep in level 4; and immediate, automatic attentional, emotional and cognitive responses in level 5. Levels 6-8 involve the dynamic regulation of behaviour according to past experiences and perceptions (relational frames and deliberative behaviour in Figure 2), and are linked to the brain's cortex and the executive control network.

Performance AND Wellbeing within our model

As said above, our pragmatic truth criterion for this model is the improvement of both performance and wellbeing, rather than promoting performance at the expense of wellbeing. To do this, our framework and practical suggestions are informed by Acceptance and Commitment Therapy (ACT; Hayes et al., 1999) and its applications to performance domains (e.g., The Mindfulness-Acceptance-Commitment (MAC) Approach, Gardner & Moore, 2007; and The Flexible Mind; White et al., 2021).

ACT aims to promote both performance and wellbeing in individuals by reducing suffering. ACT, like this model, is built on both functional contextualism and relational frame theory (Hayes et al., 1999). ACT's model of human suffering derives directly from experiential avoidance (Hayes et al., 1999). Experiential avoidance occurs when people are unwilling to accept their private experiences (thoughts, feelings, and emotions), and thus change their behaviour in order to control these experiences, even if that new avoidant behaviour is harmful or opposed to their values. In esports performance, for example, this could mean a player is planning less creatively and playing more passively (e.g., Smith et al., 2019) to avoid feeling shame and sadness if they continue to make mistakes while still trying their best. ACT and ACT-based programs look to prevent experiential avoidance through improving psychological flexibility, the ability to contact the present moment and dynamically change or persist in a behaviour, according to ones' values within the current context (Hayes et al., 1999).

Experiential avoidance in the form of thought, emotion, and pain suppression may impair both wellbeing long-term through ironic rebound effects. Ironic rebounds are characterised by previously suppressed feelings, thoughts, and emotions returning, stronger than before, in the same contexts they were originally experienced (Wegner et al., 1991; Wenzlaff et al., 1991). This may lead to a gradual worsening of experiences of time. Ironic rebounds have been found within suppression of thoughts (Wang et al., 2020), pain (e.g., Cioffi & Holloway, 1993; Masedo & Esteve, 2007), and anger (Quartana et al., 2007). Indeed, while avoiding unpleasant thoughts and internal experiences could be immediately satisfying, this avoidance has been linked to increased anxiety and depression in following months (Kashdan et al., 2010).

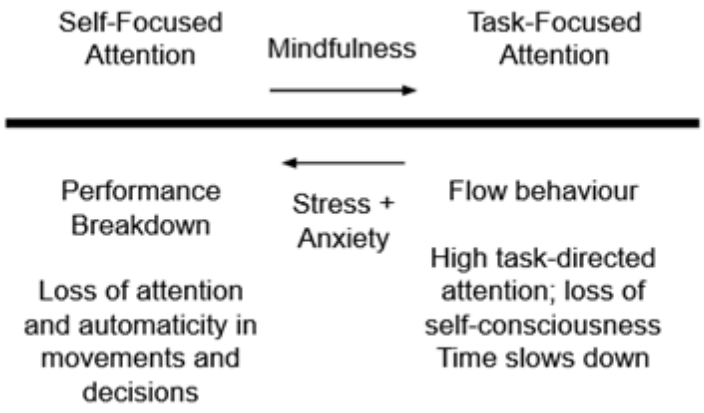
ACT and its applications within performance contexts, such as MAC (Gardner & Moore, 2007), look to promote performance and wellbeing through psychological flexibility. Acceptance and commitment interventions aim to increase how willing individuals are to experience negative

thoughts and emotions that accompany stressful, uncomfortable, or boring situations while moving towards their performance values and goals (Hayes et al., 1999; White et al., 2021).

Mindfulness-based interventions encourage present-moment and task-directed attention during performances, despite negative thoughts and feelings (Gardner & Moore, 2007); this is in line with flow and clutch theories (Csikszentmihalyi et al., 2008; Swann et al., 2017), and the flipside of theories of performance breakdown in sport and esport (e.g., Masters & Maxwell, 2008; Sharpe et al., 2024b; Sharpe et al., 2024a; Vine et al., 2016; see Figure 3). In practice, these interventions aim to help high-performers to be mindful of negative thoughts that may otherwise take their attention away from their performances, willingly accept them non-judgmentally, then focus their attention back to their performance environment to act in a way that is meaningful for them. Early evidence for these approaches within sport shows benefits to experiential acceptance (g = 0.36, 95% CI [0.00 – 0.92]), mindfulness (g = 0.64, 95% CI [0.00–0.91]), and sport performance (g = .37, 95% CI [0.00 – 0.79]; Ptáček et al., 2023). Furthermore, ACT-based interventions have also been shown to increase athletic mindfulness, emotional regulation, and perceived performance more than traditional psychological skills training (Josefsson et al., 2019). Together, these findings provide evidence for the efficacy of ACT and its applications to high-performance domains in improving both performance and wellbeing simultaneously.

Figure 3

Attention - Performance spectrum in our model



ACT-based approaches focus on attention regulation under pressure through mindfulness and acceptance interventions also link to performance within the hierarchical neurovisceral integration model (Smith et al., 2017). Smith et al. (2017) argue that level 5 of their hierarchical model, which is associated with impulse attention control and stimuli detection, is most influential for performance. Organ systems below this level have bottom-up influences in this attention mechanism, while self-regulatory processes above this level (as shown in Figure 2) have top-down influences on it. Mindfulness and acceptance interventions that look to improve willingness and task-directed attention will, according to our model, improve performance through a top-down regulation of attention. As HRV variability is seen as a barometer of vagal

activity and self-regulation (Laborde et al., 2018; Smith et al., 2017), it is also a psychophysiological indicator of attention-regulation and performance under pressure in this model.

Our position is opposed to second-wave cognitive behavioural therapy approaches, which try to change and control thoughts in order to improve behavioural outcomes (Tod & Eubank, 2020). For example, motivational self-talk or mantras, which aim to improve effort, mood, and confidence, moderately improve performance outcomes (Hatzigeorgiadis et al., 2011). However, according to our model, motivation self-talk would be seen as short-term experiential avoidance of feelings of low confidence, self-esteem, and lethargy. And in fact, teaching avoidance of these experiences may lead to worse wellbeing long-term (Hagan et al., 2017). Even more systematic approaches, such as rational emotive behavioural therapy (reBT), which try to rationalise negative thoughts and beliefs that individuals have and try to control the thinking and behaviour and promote acceptance (e.g., Sille et al., 2020), would fall under this criticism; reBT promotes struggling to rationalise thoughts thus still relies on the double-edged verbal rules, instead of defusing their meaning (as in ACT). A final example is relaxation techniques such as somatic relaxation (Pelka et al., 2016), which try to control tension and anxiety. These techniques would also be classed as avoidance behaviour and fall under the same criticism. Ultimately, however, many other interventions can be done to avoid feelings of stress, grief or anxiety, such as exercise, or other training. Important to our approach however, is not using these interventions to run from negative experiences, but rather accepting those experiences, maintaining present moment attention, and continuing with training.

Our position is not opposed to environment-based interventions. ACT theories of suffering are focused on the avoidance of private experiences: an individual's thoughts, feelings, and emotions at an individual level (Hayes et al., 1999). Ultimately, it is the avoidance of these negative private experiences when they arise that worsens wellbeing. Changing an individual's environment for the better, either physiologically, geographically or socially, may reduce how often negative private experiences arise. Indeed, this is the primary purpose of needs-supportive coaching and other coach-athlete relationship approaches which aim to make the coaching environment more enjoyable, engaging, and intrinsically motivating (e.g., Davis & Jowett, 2010; Mageau & Vallerand, 2003). However, these techniques are compatible with our model and approach as they reduce negative experiences at their source, and involve no suppression or control of negative experiences by an individual.

A framework for performance and wellbeing psychology practice

Now we will use our model as a framework to integrate the various different theories and interventions within performance psychology into a coherent model of practice. As shown in Figure 1, our model has three main areas which reciprocally interact with each other: environment; relational frames; and behaviour. For clarity, however, we further sort environmental theories and interventions by whether they concern internal (physiological,

neurocognitive) or external (social, geographical, economical) environments.We use these areas to structure and classify the different performance theories and interventions below.

Performance interventions primarily look to change future behaviour through changing an individual's context, whether that be through their environment or relational frames. However, some performance theories are more concerned with describing and understanding good and bad performance behaviours themselves, and are labeled as such. While we acknowledge that, due to the bidirectional, reciprocal links within our model, different interventions and trainings could arguably fit into multiple different areas at once (e.g., mental imagery can be used to simulate a new environment for skill development and/or develop new relational frames in adaptive responses to stress), we hope that these distinctions within our model provide more clarity than confusion.

While some of the theory we cite below includes philosophy we have above argued is incompatible with our model's philosophy, we do not want to neglect the practical merits of these works. For example, Fletcher & Sarkar's (2016) model of fortitude training implicitly suggests using experiential avoidance techniques to develop performers under stress. However, if these avoidance techniques are instead exchanged for mindfulness and acceptance techniques, their pressure training program then becomes a useful guide for practitioners to use to train present moment attention and acceptance over time; in fact, it becomes more akin to the experiential therapy used within clinical ACT work (Hayes et al., 1999).

We appreciate that this list of theories is not comprehensive, but we hope to provide enough examples to create an overview of the theories used in common practice and discourse (e.g., Ashford, 2023; Harwood, 2008; Pedraza-Ramirez, 2023). We encourage our readers to further explore other theories and use them, alongside our model, to inform your own practice within performance and wellbeing psychology. Table 1 shows a summary of the sections below.

Table 1

A summary of the theories suggested within our model's framework

Model Section	Theory/ Method Name	Theory/ Method Author	Review/ Intervention / Discussion Examples
Behaviour	Reinvestment Theory	Masters & Maxwell (2008)	Cabral et al. (2022); Tang et al. (2023)

Behaviour	Flow Theory	Czikszentmihalyi (2008)	Harris et al. (2021); McQueen et al. (2021)
Relational Frames	Acceptance; Acceptance Commitment Therapy	Hayes et al. (1999)	Gardner & Moore (2007); Hegarty & Huelsmann (2020); Josefsson et al. (2019); Ptáček et al. (2023); White et al. (2021);
Relational Frames	Mindfulness;	N/A	Gardner & Moore (2007); Hegarty & Huelsmann (2020); Ptáček et al. (2023); (Lochbaum et al., 2022).
Relational Frames	Goal Setting Theory	Locke & Latham (2019)	Jeong et al., 2021; Williamson et al., 2022
Relational Frames	Values Clarification	Hayes et al. (1999)	Gardner & Moore (2007); Josefsson et al. 2019); Hegarty & Huelsmann (2020); Chase et al., 2013
Relational Frames	The Think Aloud Protocol	Ericsson & Simon (1980)	Whitehead et al. (2015); Whitehead & Jackman (2021); Swettenham et al. (2020); McGreary et al. (2021)
Environment (External)	Constraints-led Coaching	Davids et al. (2003)	Bubna et al. (2023); Clark et al. (2019); Dehghansai et al. (2020)

Environment (External)	Pressure / Mental Fortitude Training	Fletcher & Sarkar (2016)	Low et al. (2021); Kegelaers et al. (2021)
Environment (External)	Needs/Autonomy Supportive Coaching	Mageau & Vallerand, 2003	Raabe et al. (2019); Reynders et al. (2019)
Environment (External)	Personal-disclosure mutual-sharing	olt & Dunn (2004)	Evans et al. (2013); Windsor et al. (2011)
Environment (External)	Mastery Climates	Harwood et al. (2008)	Braithwaite et al. (2011); Harwood et al. (2015)
Environment (External)	Parent-athlete relationships	Various	Burke et al., 2021; Lafferty & Triggs, 2014; Vincent & Christensen, 2015
Environment (External)	Safeguarding	Mountjoy et al. (2015); Owusu-Sekyere et al. (2022)	Firmin (2017); Mackay (2017)

Environment (External + Internal)	Mental Imagery	Hecker & Kaczor (1988)	Lindsay et al. (2023); Pile et al. (2021)
Environment (Internal)	Super Strengths	Ludlam et al. (2016)	Swettenham & Whitehead (2022)
Environment (Internal)	Exercise	N/A	Bellon et al. (2021); Ludyga et al. (2020)
Environment (Internal)	Voluntary Slow Breathing	Smith et al. (2017)	Migliaccio et al. (2023); Pagaduan et al. (2020); Yadav & Mutha (2016)
Environment (Internal)	Cold Exposure	Smith et al. (2017)	Hintsala et al., 2014; Jungmann et al., 2018; Mäkinen et al., 2008; Yankouskaya et al., 2023
Environment (Internal)	Nutrition	N/A	Ali et al. (2022); Rochel et al. (2021)

Relational Frames Theory and Interventions

Mindfulness interventions, such as the Mindfulness Acceptance Commitment (MAC) Approach (Gardner & Moore, 2007), and other ACT-inspired interventions change the relationships individuals have with their private experiences; they aim to promote mindfulness and acceptance and discourage suppression and avoidance (see Gardner & Moore, 2007; Hegarty & Huelsmann, 2020; White et al., 2021). These interventions help to promote psychological flexibility, helping individuals dynamically pursue their values and goals while also being open to experiencing negative thoughts, feelings, and emotions as they do so (Hayes et al., 1999). In their review, Lochbaum et al. (2022) found mindfulness interventions to be the best intervention for improving sport performance (*d* = 1.35), and the MAC approach has shown moderate to

large improvements in acceptance, mindfulness, and sports performance (Ptáček et al., 2023).

Values clarification interventions are another application of ACT within performance and wellbeing psychology. Values interventions look to explicitly define what people stand for in specific areas of their life (Hayes et al., 1999), giving them a behavioural compass to guide their choices when they have caught impulsive thoughts and brought their attention back to the present (Hayes et al., 1999). Within sport too, interventions can be both individual and team-based (see Hegarty & Huelsmann, 2020 for examples). Theoretically, values clarification work improves performance through increasing motivation (Birrer et al., 2012). In practice, values clarity has been linked to better wellbeing behaviour (Bayly & Bumpus, 2020) and academic performance (Chase et al., 2013), but fewer articles show the sole effect of values clarification in sports performance domains outside of mindfulness-acceptance-commitment programs (e.g., Josefsson et al., 2019).

Goal setting theory (Locke & Latham, 2019) involves consciously setting specific, challenging goals to improve performance. Goal-setting is one of the most popular skills and interventions within sport performance psychology (Bird et al., 2024; Jeong et al., 2021), and like imagery, they are considered part of the traditional performance psychology canon (Andersen, 2009). Recent reviews of goal setting theory have shown strong positive performance benefits (Williamson et al., 2022), but also argued that a more individualised approach to goal setting depending on populations, skill levels, and engagement levels may be most appropriate for performance increases (Jeong et al., 2021). Where possible, mastery goals regarding skill development should be encouraged within our model, as performance goals are more at risk to encouraging avoidance (Brophy, 2005): during discomfort, people may pursue performance goals mindlessly to attempt to make themselves feel better, rather than accepting the uncomfortable thought or feeling and playing mindfully.

Within our model, goals set and values defined by the individual for themselves update an individual's relational frames. They provide a lens from which individuals can interpret both their environment and own behaviour, and assess the extent to which it is facilitative of their performance and wellbeing. Combined together, these interventions may be more effective Hayes et al., 1999): goals provide a structure for individuals to move in their valued directions, while values provide the personal meaning behind goals. For example, within Counter-Strike 2, a player may have a value of playing with creativity, and use goals regarding strategising and analysing to pursue this value. Here, the goals help structure a way for the athlete to develop their creativity, and the value of creativity gives meaning to their practice in drills. Values AND goals training has been shown to improve academic performance, whereas goals-only training had no effect (Chase et al., 2013).

For developing practitioners, the MAC approach (Gardner & Moore, 2007) provides a strong, evidence-based, practitioner-led intervention program which covers mindfulness, acceptance, goals, and values. It provides a way of teaching and reinforcing skills of psychological flexibility without the need for clients to disclose personal information to the practitioner. Utilising this format may help reinforce the fundamentals of this psychological flexibility-based approach for more complex, individualised sessions later on.

Behavioural Theory and Interventions

Reinvestment theory (Masters & Maxwell, 2008) explains how mindfulness and acceptance methods could be related to performance under pressure. According to reinvestment theory, the anxiety and stress of pressurised situations can trigger attention towards oneself and a regression to 'task-relevant declarative knowledge', verbal rule-governed behaviour (see Hayes et al., 2001) learnt in early skill development which interrupts automaticity in motor movements and decision-making. Studies have shown individual differences in reinvestment behaviour lead to worse performances under speed and pressure conditions (Tang et al., 2023), and people that have learned skills implicitly, with less task-relevant declarative knowledge, perform much better under pressure than not (average $g = -1.17$), whereas control participants showed no changes between the conditions (Cabral et al., 2022).This reinvestment behaviour is opposite to ACT's psychological flexibility (Hayes et al., 1999) and helps explain why a lack of attention to the present moment, and a dependence on verbal rules, leads to worse performances.

Flow theory (Csikszentmihalyi et al., 2008) can also help to explain how mindfulness and acceptance methods may improve performance. Flow is described as a state of intrinsic enjoyment while doing a particular task (Csikszentmihalyi et al., 2008). During flow, attention is solely focused on the task, the concern of a sense of self disappears; behaviour seems effortless, and one's sense of time is altered so that afterwards, people feel like it has sped up. Flow is also dependent on immediate feedback, a person's goals, and a sense of achievable challenge. Flow experiences correlate moderately and positively with sports performance ($r = 0.31$; Harris et al., 2021), while also improving enjoyment and wellbeing, and reducing depression and burnout (McQueen et al., 2021). Flow theory is also in-line with ACT's psychological flexibility (Hayes et al., 1999) and opposite to reinvestment theory (Masters & Maxwell, 2008), with all arguing how task-specific attention and a lack of reinvestment behaviour due to anxiety is essential for performance and wellbeing.

External Environments Theory and Interventions

External environments can be manipulated to either improve their support or increase their demands. Ideally, both the environmental support and challenge an individual receives must be both high and balanced to achieve optimal performance (Csikszentmihalyi, 2008; Fletcher & Sarkar, 2016). Given the support does not promote experiential avoidance, and the individual is accepting of the increased demand, these environmental interventions could promote wellbeing too.

Demand-focused environmental interventions involve coaches and psychologists working to manipulate the performer's working or training environment. For example, constraints-led coaching (Davids et al., 2003) modifies the training environment to preferentially develop particular skills, and has shown promising findings across traditional sport, parasport, and esport (Bubna et al., 2023; Clark et al., 2019; Dehghansai et al., 2020). Pressure and Mental

Fortitude Training are other examples of demand-focused interventions which argue that increasing psychological demands of the performance environment, alongside appropriate support, can improve resilience (Fletcher & Sarkar, 2016; Low et al., 2021). Pressured training environments such as these have had quantitative (Low et al., 2021) and qualitative (Kegelaers et al., 2021) benefits to performance and team functioning.

Support-focused interventions aimed at the performance environment can help to build supportive relationships between players, coaches, and organisation. For example, autonomy/needs supportive-coaching theory (Mageau & Vallerand, 2003) outlines how the performance environment can promote individual performance and wellbeing by prioritising athlete relationships and autonomy in decision-making. And indeed, interventions based on this theory within youth sport have increased engagement and motivation among young athletes (Raabe et al., 2019; Reynders et al., 2019). Similarly, applications of motivational climates within sport (Harwood et al., 2008) look to promote mastery climates, which emphasise improvements and effort, which has been associated with a number of wellbeing and engagement variables (Harwood et al., 2015) compared to performance- or ego-climates which emphasise winning and comparison with others. Interventions within physical education have been successful in creating these positive effects for the children involved (Braithwaite et al., 2011). Another example is personal-disclosure mutual-sharing interventions (Holt & Dunn, 2006), originating in counselling psychology, this intervention uses public disclosure of personal stories to build team cohesion. Many interventions have shown its effectiveness in building closeness, communication, and social identity within teams (e.g., Evans et al., 2013; Windsor et al., 2011).

Furthermore, a performer's environment outside of a particular performance domain may either provide support or be demanding on a performer. Factors within their micro-environment, such as their relationships with friends, family, colleagues, and peers, or within their macro-environment, such as the sport's governing body, the support and funding of sport generally within a culture, and sociocultural norms and the media (Henriksen et al., 2010), could either support their performance and wellbeing, or add additional demands. Many of these areas, such as the parent-athlete relationship within youth sport have received research attention (see Knight et al., 2017). Models of parental behaviour (Lafferty & Triggs, 2014), and programs for improving it have been suggested (e.g., Vincent & Christensen, 2015), with interventions showing initial positive results in terms of parent-child relationships and parental behaviour (Burke et al., 2021). Additionally, on an organisational level, safeguarding of children (Mountjoy et al., 2015), and adults (Garrod & Rhind, 2023) is another means of supporting performers by preventing abuse. Recently, safeguarding cultures have been presented as an integrated, multilevel, and relationships-led approach to preventing child maltreatment (Owusu-Sekyere et al., 2022) and measures have been created for its assessment (Moustakas et al., 2023).

Finally, an individual's physical and economic environment may also affect their performance and wellbeing by either facilitating or adding increased demands to an individual. Economic and physical (geographic) environments may add barriers to performance through increased transport costs and times, and especially in domains like para-sport, accessibility may be a limiting factor (e.g., Kean et al., 2017), and in esports, the quality of internet connection, the computer hardware and peripheral devices can affect performances. While a performance and

wellbeing psychology practitioner may not themselves to directly improve these conditions, like other forms of environments, these areas can alter the support or demand an individual's performance lifestyle has. With this in mind, a practitioner may be able to support individuals with greater economic or physical environmental demands in other, more workable areas to improve their overall performance and wellbeing, despite the potential setbacks in this area.

Mental imagery interventions (Hecker & Kaczor, 1988) can be used to manage these barriers to training time by simulating performance environments. Through imagery, individuals can simulate performance environments outside of their normal performance schedule, without having to worry about the logistics and musculoskeletal fatigue. Not only can imagery be used to successfully train motor skills when combined with physical practice ($g = 0.579$; Lindsay et al., 2023), but emotional mental imagery can also be used to experience and reduce negative emotional responses (e.g., Pile et al., 2021). In line with an ACT-centred approach (Hayes et al., 1999; Gardner & Moore, 2007), mental imagery could be used to build psychological flexibility through exposure, progressively improving experiential acceptance of stressful, high-pressure performance environments.

Internal Environment Theory and Interventions

According to our model, physiological interventions that empirically improve heart rate variability should improve performance and wellbeing by improving parasympathetic, vagal nerve activity and attention self-regulation (Smith et al., 2017); physiology focused interventions will have a bottom-up effect, whereas neurocognitive factors will have a top-down influence. However, as vagal nerve activity integrates many different organs, organ systems, and bodily functions, these interventions have wider wellbeing applications too. Again, we give examples of the main interventions in the area below.

Exercise interventions are a common way that performance practitioners in esports improve performance and wellbeing (Red Bull Gaming, 2020; van Hulst, 2020), although it is also inherent to many traditional sports. Generally, exercise has been shown to benefit multiple areas of both cognitive function (e.g., Ludyga et al., 2020), and wellbeing (e.g., Bellon et al., 2021), and linked to increased learning and neuroplasticity (Gómez-Pinilla et al., 2002; Walsh & Tchaikovsky, 2018). Crucially, in line with the neurovisceral integration model (Smith et al., 2017), cardiovascular exercise has been linked to increased HRV and parasympathetic control (Grässler et al., 2021). In performance domains that are sedentary (e.g., esports), or do not require much cardiovascular activity (e.g., golf), prior exercise may then provide a competitive edge to performance while improving wellbeing (Andrews, 2023; Dykstra et al., 2021; Monteiro Pereira et al., 2022; Zimmer et al., 2022).

Voluntary slow breathing (VSB) is another psychophysiological technique used in performance coaching (Pedraza-Ramirez, 2023). VSB involves breathing voluntarily at any rate below 10 breaths per minute and increases vagal activity as measured through HRV (Migliaccio et al., 2023). On a physiological level, VSB has been shown to improve cardiopulmonary and neuroendocrine health, and reduce stress (Migliaccio et al., 2023). Psychologically, VSB has

also been shown to improve executive function, motor skill learning (Yadav & Mutha, 2016), as well as athletic performance (Laborde et al., 2022; Pagaduan et al., 2020). Recent research has even suggested that deep breathing improves mental toughness (Ismail et al., 2022); assuming VSB is used in a mindful and accepting context, this result suggests that the increased vagal activity is also related to adaptive, psychologically flexible behaviour. From our own experience, exercise and VSB have had better initial buy-in on average than psychological interventions in esports athletes. Therefore, they could be good early interventions to gain buy-in from players before starting the psychological interventions above.

Cold exposure is another potential intervention to improve performance and wellbeing. Cold exposure, specifically cold acclimatisation, has been linked to increased parasympathetic, vagal nerve activity through increases in heart rate variability across different studies and populations (e.g., Hintsala et al., 2014; Jungmann et al., 2018; Mäkinen et al., 2008). While working under cold conditions has been linked to worse cognitive performance (Falla et al., 2021; Pilcher et al., 2002), short term cold-water exposure, such as in a cold shower, has been shown to increase feelings of alertness and attentiveness and increased connectivity in brain areas associated with attention and self-regulation (Yankouskaya et al., 2023). While research in this area is still in its infancy (Jones et al., 2017), theoretically, this attention regulation could increase performances, especially under pressure, in line with the theories cited in this model (e.g. Masters & Maxwell, 2008; Smith et al., 2017; Vine et al., 2016).

Additionally, diet and nutrition are other areas that could influence performance and wellbeing. Often and understandably, nutrition is related to physiological athletic performance through improving recovery, strength, and endurance (e.g., Thielecke & Blannin, 2020). However, the potential benefits (and pitfalls) of nutrition for both performance and wellbeing psychology are not to be overlooked. For example, omega-3 supplementation has been shown to increase and maintain high heart rate variability (Baumann et al., 2018; Christensen, 2011), as well as being recommended for people with pathologically poor attention regulation and self control from attention-deficit hyperactivity disorder (Hawkey & Nigg, 2014; Horne & Sharpe, 2024). Omega-3 fatty acids may also moderate the relationship between improved exercise and cognitive function (Leckie et al., 2014) and therefore could be an alternative where exercise is not practical or possible. Other dietary interventions such as probiotic and creatine monohydrate supplementation may benefit performance and wellbeing through different mechanisms (Ali et al., 2022; Rochel et al., 2021). Again, however, research is still needed to understand their impact, if any, within performance contexts.

Generally, an individual's neurocognitive environment is far less malleable than other areas within this framework. Sadly, neurodevelopmental factors such as genetic ADHD risk factors (Horne & Sharpe, 2024) will have far more permanent effects on attention regulation and cognitive performance than a sedentary lifestyle or poor diet. However, instead of trying to change these factors, practitioners could also try to highlight an individual's strengths and weaknesses (e.g., Super Strengths; Ludlam et al., 2016). Then, with the aid of teammates, coaching and/or teaching staff, a performer may be best used within different contexts, and their weakness may be minimised. Strengths-based work has been used previously alongside ACT workshops as part of a program to improve esports team cohesion (Swettenham & Whitehead,

2022). Otherwise, practitioner time and attention may be better spent on other areas and performance and wellbeing psychology interventions.

Authors' Notes

We present this model, framework, and professional philosophy as guidelines for applied performance and wellbeing psychology practice. However, this article is but a snapshot of our own professional philosophies at the time of writing. While this article will remain, we have no doubt our philosophies will continue to evolve as our practical experience grows, and we and others publish more research, especially within esports. In this section, we look to outline limitations of our model and the literature it is based on and propose four research questions below to inspire future development within research and practice. While all of these questions we are looking to address ourselves, it would be fantastic to have more company. Alternatively, if you wish to critique our theories and claims we make in this article, we look forward to reading your responses and perhaps even responding in kind.

What is your philosophy?

The most prevalent issue that led to the conceptualisation of the paper was a lack of explicit philosophy behind practice and research within performance psychology. Qualitative research often acknowledges that research is intimately interlinked with the researcher's perspective, in some cases this subjectivity and reflexiveness are celebrated (Braun & Clarke, 2019). However, quantitative studies and the theories that predominantly rely on them almost never do this, implicitly presenting their work as objective and unaffected by their own positionality. As practitioners writing this paper, this has often led to us inferring implicit assumptions of the cognitive behavioural paradigm present in studies based on their citations.

Echoing our introduction, the models of practice we have already critiqued would also benefit from a deeper philosophical understanding. For example, if your model of practice as a psychologist revolves primarily around improving autonomous motivation (Ryan & Deci, 2002), as some cited in this article do, please define what motivation is and how that fits within your understanding of performance behaviour. Some questions to consider are: How (through what processes) does motivation affect performance (and wellbeing)? How do changes in motivation (e.g., under pressure, after a mistake) affect performance? And how does this fit within your core beliefs (e.g., theories of behaviour) and values as a practitioner (e.g., promoting performance and wellbeing, or only prioritising performance)?

We encourage practitioners and quantitative researchers to develop and present your own philosophy and theory of behaviour in your publications, whatever that may be. If you are looking to change behaviour for the better through your work, please tell your readers what you

think behaviour is, how you think behaviour changes, and what your definition of better is. Through developing a clearer philosophy and understanding of behaviour, your research and your practice should become far more directed, efficient, and cohesive, as well as help develop your readers' understanding and competence.

How is attention related to performance and wellbeing?

Speaking of philosophy, a more in-depth, process-based investigation of how attention relates to performance and wellbeing is needed to further develop our own. In our model, we present a rudimentary summary of current literature, arguing that more attention leads to better performances. This is by no means wrong, but it is simplistic.

We do not discuss or evaluate cognitive theories of attention and the processes that contribute to it (such as motivation). While we introduce attention as automatic and impulse behaviour in line with Smith et al. (2017)'s hierarchical neurovisceral integration model, we neglect the theory of cognitive psychology which theorise how attention is allocated in contexts with different demands, and how attention may be related to thoughts and feelings (Drigas & Karyotaki, 2019). Above we have grouped together different states of heightened task-directed attention, however it may be that these states are the results of different underlying processes and mechanisms: while clutch states (Swann et al., 2017) may be effortful and dependent on sympathetic nervous system activity, flow states (Csikszentmihalyi et al., 2008) may be effortless and dependent on parasympathetic nervous activity (Bruya et al., 2018). Further investigation is needed to clarify how contextual factors introduced in this article can have both bottom-up and top-down effects on performance and wellbeing through potentially different attention systems.

We also do not discuss how attention may change over time between different tasks in different contexts (e.g. under pressure). Process-based understandings of attention and goal-directed behaviour generally have modeled it as a wave of shifting priorities over time (e.g., Inzlicht et al., 2014). In clinical psychology theory, severities of Attention-Deficit Hyperactivity Disorder (ADHD) and Cognitive Engagement Syndrome (CES; previously Sluggish Cognitive Tempo) have been linked to changes in these waves of goal-directed behaviour and attention: by speeding up changes and reducing overall goal-directed behaviour, respectively (Becker et al., 2023; Horne & Sharpe, 2024). These different processes could be linked to definitions of resilience in performance psychology which define it both as robustness to adversity and the ability to rebound from setbacks (Fletcher & Sarkar, 2016), with overall levels of goal-directed behaviour (CES) as robustness, and rebounding as faster changes in goal-directed behaviour (ADHD). This research suggests that any model suggested in the above paragraph needs to be dynamic and account for real-time contextual changes in the performance (or any other) environment.

We will look to integrate cognitive and clinical theories of attention regulation within our professional philosophy in a follow-up article. In doing so, we will better describe our intervention goals of attention regulation coherent with our model of practice and philosophy of mindfulness and acceptance (Poczwardowski et al., 2004).

How generalisable is past theory to esports?

While the above points discuss how philosophy can and should be used and developed in all performance environments, we also have some esports-specific points. Firstly, more research is needed to assess whether conclusions from traditional sport and other high performance domains are generalisable not only to esports players, but also esports players competing within different esports and their contexts.

Broadly, we advocate for a contextual understanding of behaviour which gives more emphasis to rich, unique, human experiences. However, as esports research is still young, many of this article's cited theories are from traditional sport, a very different context. While we agree with Poulus et al. (2020) that sport psychology techniques can and should be used in esports, we advise caution when generalising across different contexts, demographics, and even different philosophical approaches.

Quantitative research has already begun to explain how esports players may differ between genres, competitive levels, and other populations. For example, psychological differences have been shown across esports participation, genres, and rankings (Griffith & Sharpe, 2024; Trotter et al., 2021, 2023). Generally these early results suggest that first-person shooter players may have the worst psychological wellbeing, on average compared to the general population and players of different genres. However, none of these quantitative investigations use the key variables in our professional philosophy: psychological flexibility, acceptance, and mindfulness.

We strongly encourage researchers to investigate demographic differences alongside the philosophy presented in this model: do not just measure the negative thoughts and feelings that esports players experience, but also how they relate to these experiences, either through avoidance or acceptance, and how well present moment attention is maintained despite these negative experiences showing up. While some research has measured stress and coping (Poulus et al., 2020), by also measuring mental toughness and its emotional control, this design is more aligned with avoidance-based philosophies in sport psychology which may promote performance at the expense of wellbeing (Hayes et al., 1997). Investigation of mindfulness, psychological flexibility, and esports participation measures in line with Figure 2 will not only look to validate the theory we present, but also assess whether current sport psychology research can, in fact, be generalised to demographics of esports players.

Researchers may also wish to investigate levels of neurodiversity in esports players compared to general populations. Higher levels of ADHD in esports players have recently been noted by psychologists working within esports (e.g., Booth, 2024). This is in line with ADHD theory (e.g., Barkley, 1997), which suggests esports players have worse self-regulation compared to the general population and traditional sport players (Trotter et al., 2021, 2023). Video games can help neurodiverse people socialise and build friendships with fewer restrictive social norms (Santhanam, 2023); while neurodiverse people may be uncomfortable, bored and restless in normal life, they may be consistently engaged in video games as they look to level up in a safe environment (Silver, 2024).

If there are demographic differences between esports players and the general population, further research can then explore why that is. Perhaps people with worse self regulation, whether related to neurodiversity or not (Barkley, 1997), feel more threatened by challenges in their real lives (Trotter et al., 2021, 2023). Thus they may spend more time playing esports to avoid these negative thoughts and emotions, and instead seek to feel better short-term through playing their favourite esports title. While participation in physical activity and exercise has been positively linked to psychological flexibility, mindfulness and acceptance of discomfort (Kangasniemi et al., 2014; Jenkins et al., 2019), esports participation may have the opposite relationships, with players perhaps engaging with games due to a mindless avoidance of discomfort.

Then, research should investigate how these demographic and participation differences relate to esports performance. If, according to our model, psychological flexibility, acceptance, and mindfulness are all beneficial to performance and wellbeing, professional players could be more likely to engage with esports in a healthier, mindful, accepting way. Some evidence supports this, such as esports professionals exercising more than recreational players (Trotter et al., 2020). However, research shows the majority (54.9%) of elite counter-strike athletes in a sample reported psychological distress and 72.5% reported low mental wellbeing (Birch et al., 2024). This may instead suggest that many elite esports players are sacrificing their wellbeing to maintain high performances, engaging with esports and exercise to avoid their negative emotions and thoughts rather than mindfully accepting them. In line with the philosophy of our model (Gardner & Moore, 2007; Hayes et al., 1999), these athletes may be suffering and impairing their long-term performances unnecessarily. Further research is needed to investigate how psychological flexibility affects performance across esports titles and genres; as long as the relationship is not negative, the results would support our model's philosophy in promoting wellbeing while either maintaining or improving athlete performance.

How can we develop competent esports psychologists within esports?

Finally, more research is needed to support emerging and developing psychologists within esports. We voiced our dissatisfaction with current esport psychology practice, believing that the industry's standard is significantly below more established, well-structured sport. However, if we wish to change this, and have practitioners to implement research that is published, esports needs to become an environment where psychologists can develop their skills and competencies.

We should spotlight developing practitioners' voices, experiences, and case studies to authentically communicate their innovations, experiences, and reflections. Free from the constraints of statistics and a need for generalisation, case studies and reflections highlight and celebrate individual contexts and experiences, and showcase flexible, individualised approaches to applied practice in ways randomised control-trials never can. Case studies also include practitioner feedback and reflections far beyond that of a p-value and an effect size. Some existing case studies in esports describe needs analyses and interventions on team skill development (Bubna et al., 2024), team cohesion (Agarwal et al., 2024; Swettenham &

Whitehead, 2022). However, 1-on-1 case studies with different types of players (recreational, competitive, content creators), and general reflections of practitioner skill development within esports and its financial feasibility are urgently needed.

Conclusion

Within this article, we present a philosophy of behaviour based on functional contextualism and relational frame theory. We then use it to provide a framework for performance practitioners to integrate theories and interventions to improve performance and wellbeing in their own model of practice. Specifically, we promote mindfulness and acceptance-based interventions on an individual level, while discouraging methods that would instead promote the avoidance of negative private experiences and serve short-term performance at the expense of long-term performance and wellbeing. To our knowledge, this is the first publication that integrates acceptance-based performance practice with a philosophy and theory of behaviour, and with other attention-based and self-regulation theories in performance and positive psychology, and the only publication which also integrates these theories and their focus on attention regulation with psychophysiological theory. Using this framework, we hope to inspire researchers and practitioners alike to adopt and integrate a professional philosophy for better cohesion, direction, and fluency. We hope to provide the foundations of performance and wellbeing psychology for a paradigm shift in esports and to help develop a new wave of qualified, ethical psychologists within the industry.

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