

Is there an upside of vulnerability in sport? A mindfulness approach applied in the pursuit of psychological strength

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Abstract

The present article proposes a strength-based approach to vulnerability. Moreover, a mindfulness-based self-reflection intervention designed to enhance well-being and sustainability in high performance coaches is described. The intervention organically uncovered the potential value and upside of vulnerability. Furthermore, in this article we highlight some of the recent criticisms and progress within the area of psychological strengths, before encouraging the reader to consider the value of self-awareness for exploring a more comprehensive understanding of vulnerability beyond its traditional association with weakness. We conclude with a suggested definition of the upside of vulnerability and invite practitioners and researchers alike to consider this within their work.

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7 16 Stress and demands are ubiquitous in high performance sport. Unsurprisingly, research shows that
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10 17 coaches' and athletes' experiences of such demands makes them vulnerable to burnout and mental
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12 18 health problems (Moesch et al., 2018). Nevertheless, the culture of high performance sport has
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14 19 been described as one in which vulnerability and support-seeking are often perceived as
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16 20 weaknesses, with individuals in such environments masking stress, burnout and psychological ill-
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18 21 being. To continue to push performance limits, athletes, coaches and applied sport psychologists
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20 22 have predominately advocated the pursuit of psychological strengths and attributes. Typically, this
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22 23 has been done with sparse attention to psychological ill-being, resulting in some criticism that the
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24 24 divide between undesirable (i.e., “mentally weak”) and desirable (i.e., “mentally tough”)
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26 25 characteristics further increase stigma and the threshold for help-seeking (Bauman, 2016). It is
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28 26 therefore somewhat ironic that the more recent mindfulness and acceptance approaches that
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30 27 originated from treatment in clinical psychotherapy have been applied to high performance sports
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32 28 to enhance performance and build resilience (Baltzell, 2016; Noetel, Ciarrochi, Van Zanden, &
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34 29 Lonsdale, 2017; Schinke, Stambulova, Si, & Moore, 2017). Mindfulness is typically defined by
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36 30 Kabat-Zinn (1990) as paying attention, on purpose, in the present moment, and doing it non-
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38 31 judgmentally. Noticing and paying attention to the “inner world” allows us to enhance self-
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40 32 awareness and to “be” with painful feelings just as they are, and importantly to experience
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42 33 vulnerability non-judgmentally.
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49 34 In contrast, Gucciardi, Hanton, and Fleming (2017) argued that it is too premature to
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51 35 determine whether mental toughness and mental health are contradictory terms. However, there is
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53 36 still reason to believe that the context of high performance sport may foster conditions in which
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55 37 personal resources such as those encompassed by psychological strengths (e.g., overcoming
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3 38 obstacles, perseverance) are valued so highly that individuals may be less likely or unwilling to
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5 39 show vulnerability or seek help for mental health issues because of the anticipation of being
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7 40 perceived as weak or treated unfairly (Gucciardi et al., 2017). Moreover, considering this cultural
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9 41 stigma toward mental “weakness” – with a co-existence of poor self- or emotional-awareness, it is
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11 42 quite plausible that a given individual would be unable or reluctant to disclose to others, unable to
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13 43 or unwilling to reflect on their own limitations, mistakes, or needs, resulting in a desire to control
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15 44 or suppress any kind of perceived weakness. Altogether, these beliefs arguably limit help seeking
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17 45 behavior.
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21 46 Many of the resources associated with psychological strengths are likely to benefit
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23 47 individuals in the face of adversity, and our aim is not to critique mental toughness theory or any
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25 48 other psychological strength research, but to articulate our view that there is “space” for greater
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27 49 attention to, and integration of, psychological resources that are not traditionally desirable or
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29 50 associated with performance and well-being. Consequently, there is a value in devoting scholarly
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31 51 attention to those concepts that have traditionally been conflated with “mental weakness” in order
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33 52 to reduce stigma and the threshold for help-seeking. One such concept is vulnerability.
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37 53 *“...to be vulnerable is to be human.”*
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39 54 Quote from a Swedish high performance coach in track and field
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42 55 **Current approaches to vulnerability**

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44 56 Vulnerability is a noun, defined by the Oxford English Dictionary as “the quality or state of
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46 57 being exposed to the possibility of being attacked or harmed, either physically or emotionally”.
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48 58 Typically, vulnerability is regarded as a weakness, not least in sport cultures. This is fully captured
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50 59 by Smith (1999) who disclosed his private struggle with depression and described what goes on
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52 60 inside his head during a scene at the psychiatrist’s office
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3 61 ...I was terrified of talking to someone and the stigma of it petrified me. (...)...Pull yourself
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5 62 together, Brett. You shouldn't be here. Men don't go and see anyone about these "softs"
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7 63 and "wimpy" things. Yeah, you read about "women" being depressed, but "men", no way!
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9 64 "Men deal with these little side issues themselves – don't they?... (p. 274).

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12 65 Yet, there may be a flipside to vulnerability in the context of competitive sports waiting to
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14 66 be discovered. The literature on vulnerability in sport is nascent despite the presence of vulnerable
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16 67 narratives within for instance, work on resilience and mental toughness (Sarkar & Fletcher 2014;
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18 68 Uphill, 2014; Uphill & Hemmings, 2016). In comparison, the potential value and strength based
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20 69 approach of vulnerability have received viral attention outside of sport, primarily due to the work
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22 70 of Brené Brown. In her book *Daring Greatly* (2012), Brown argued, "*Vulnerability is uncertainty,*
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24 71 *risk, and emotional exposure. Vulnerability is also the birthplace of courage, creativity and*
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26 72 *change*". Despite popular acclaim, limited empirical research exists that supports Brown's
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28 73 conceptualization of vulnerability. Regardless, Brown (2012) is often credited with bringing the
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30 74 potential value of vulnerability to academia and applied practice.

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35 75 We propose that training and competing in high performance sport inherently means
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37 76 exposing one-self to vulnerability. When athletes and coaches prepare for and enter competition it
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39 77 is common for them to experience feelings associated with fear of failure, risk, harm, uncertainty,
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41 78 emotional and physical exposure. These individuals knowingly expose themselves to the possibility
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43 79 of being harmed, in some sports, both physically and emotionally, by their own inner self-critic,
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45 80 opponents, coaches, judges, spectators and media.

81 **Vulnerability uncovered in a mindfulness-based intervention**

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51 82 In 2016, a mindfulness-based self-reflection intervention started with two groups of
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53 83 Swedish high performance coaches from track and field and figure skating, respectively. Based on
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55 84 previous research (Lundqvist, Ståhl, Kenttä, & Thulin, 2018) this intervention included a daily

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3 85 mindful self-reflection exercise for eight weeks and follow-up focus-group interviews. In an
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5 86 organic way, narratives of vulnerability emerged from the participants when the coaches engaged
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7 87 in the focus-group interviews; specifically, that sharing one's vulnerability resulted in deeper
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10 88 connection and understanding. One of the coaches expressed the following:

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12 89 Often it feels a bit better when you talk about your concerns with someone (who is close to
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14 90 you) who listens and shows compassion. It can be very difficult sometimes, but afterwards
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16 91 you feel so much better. It does not mean I'm not brave or strong, but when I show my
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18 92 vulnerability, I'm brave and strong. The connection gets deeper, I think.

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21 93 Another participant noted a positive experience from "being kind to oneself" by mobilizing
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23 94 social support and discussing their concerns. Such acts have association with the concept of self-
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25 95 compassion, which Neff (2003) conceptualized as having three parts: self-kindness (i.e., extending
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27 96 kindness and understanding to oneself rather than harsh judgement and self-criticism); common
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29 97 humanity (i.e., the ability to see one's experiences as a part of a larger human experience rather
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31 98 than seeing them as separating and isolating) and; mindfulness (i.e., the holding of one's thoughts
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33 99 in balanced awareness, simply noticing thoughts and emotions in the current situation without
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35 100 evaluation).

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39 101 The coaches were also asked to write down a personal definition of vulnerability. Two sides
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41 102 of the concept emerged; the traditional perspective on vulnerability reflected by the use of words
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43 103 such as weakness, but also a contrasting perspective reflected by words such as courage and
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45 104 strength.

46 47 48 49 105 **How might awareness of vulnerability benefit individuals in sport?**

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51 106 Despite culturally-inferred perceptions that vulnerability is a weakness, we propose that it
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53 107 only becomes a weakness when an individual is not aware of their vulnerability or when they are
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55 108 aware, but try to hide it from themselves and others; this is often referred to as "armoring up", in
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3 109 order to be “bulletproof” (cf. Uphill & Hemmings, 2016). In addition, Brown (2006) argued that
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5 110 vulnerability is often kept as a secret simply because of shame. Extending this notion, Brown
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7 111 presented a continuum reflecting the extent to which individuals acknowledge personal
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9 112 vulnerabilities, with those being more aware of their vulnerabilities showing greater “shame
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11 113 resilience”. According to Brown, individuals who had not acknowledged their vulnerability or
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13 114 perceived invulnerability as the experience of shame reported even more pain and confusion about
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15 115 what they were feeling or why they were feeling it. Importantly, Brown (2006) argued that
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17 116 awareness of when and with whom to share stories about vulnerabilities, and then to receive
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19 117 empathy and not to be shamed for our experiences, ultimately unfold the strength in vulnerability.
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21 118 The illusion of invulnerability in sports, as part of the culture that is driven by bulletproof athletes,
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23 119 might welcome the study and development of psychological strengths by exploring vulnerability
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25 120 beyond traditional beliefs.

30 121 **A proposal to shed light on the upside of vulnerability**

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33 122 In line with the discussion above, we suggest that practitioners adopt a more comprehensive
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35 123 approach to vulnerability (i.e., beyond traditional perspectives limited to weakness) in order to
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37 124 experience and be in touch with more of everything, including pain and love. As previously noted,
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39 125 mindfulness training can become one important method to fully connect, open up to, and non-
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41 126 judgmentally accept pain, suffering and vulnerabilities. Instead of judgmentally labelling any
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43 127 moment of suffering or vulnerability as a weakness and surrendering to this experience of
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45 128 suffering, there is an opportunity to notice “a choice point” and make committed actions based on
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47 129 what is important in life. Moreover, mindfulness that emphasizes self-compassion also includes
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49 130 recognizing and accepting moments of suffering as part of the human experience. In this process it
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51 131 is also important to acknowledge that this experience is part of a common humanity embracing
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53 132 being kind to oneself and others. Consequently, creating a safe-place to share stories of
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3 133 vulnerabilities may strengthen this experience and enhance the perception of support and
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5 134 relatedness. For instance, one way this approach could be conveyed within applied practice is a
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7 135 workshop format.

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10 136 The first step toward a full vulnerability experience can be described as an intra-individual
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12 137 core process driven by self-reflection and self-awareness. This is paying attention with a purpose
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14 138 and noticing the inner world. For this purpose, a brief daily mindfulness based self-reflection
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16 139 exercise can provide momentum. The subsequent step is the interdependent behavior-oriented
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18 140 process that fully capitalizes on this awareness to stimulate the upside of vulnerability by personal
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20 141 growth and strength. However, more attention and research is needed to better understand the role
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22 142 vulnerability plays in high performance sports.

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25 143 We propose the upside of vulnerability to be, at first, “the ability to accept and
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27 144 connect with all of one’s own feelings with compassion. This builds self-awareness and the
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29 145 courage to uncover and know one’s shortcomings and weaknesses as well as the possibility to
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31 146 develop strengths and resources. Secondly, it is having the courage and capacity to share
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33 147 experiences, seek support and knowing when to share, with whom and to what extent”. This
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35 148 suggested definition is based on our collective professional experience and definitions provided by
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37 149 the coaches in the intervention alluded to earlier, and inspired by the work of Brené Brown, plus
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39 150 research on mindfulness and self-compassion.

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42 151 It is important to keep in mind the emphasis placed on the *experience* of vulnerability in the
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44 152 definition provided above and not being vulnerable *per se*. Indeed, self-compassion has previously
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46 153 been misunderstood as: a form of self-pity, weakness, selfishness, self-indulgent behavior, a form
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48 154 of making excuses, and something that might undermine motivation. The willingness to fully open
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50 155 up to the experience of vulnerability may also eventually be a critical step towards sustainability in
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52 156 high performance settings. A non-judgmental awareness of this experience may lead to adaptive
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3 157 responses such as viewing help-seeking behavior from a strength based perspective, and in turn,
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5 158 potentially closing the divide between undesirable (i.e., “mentally weak”) and desirable (i.e.,
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7 159 “mentally tough”).
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10 160 With this proposal, we invite practitioners and applied researchers, to consider the upside of
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12 161 vulnerability to facilitate mental health and sustainability in high performance settings. In doing so,
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14 162 we have outlined a strength based approach to vulnerability based on a mindfulness self-reflection
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16 163 intervention.
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Number	Associate Editor's general comments	Action	Location
	The guest editors appreciated the authors for bring up the concept of vulnerability.	Thank you for your comments on the strengths and potential of the manuscript. Please note that all stated locations are referred to the uploaded document named Hägglund et al. Manuscript.	
1	Please consider to reduce the length of the manuscript to six pages or less than six pages. This way the authors can prepare a practitioner-note type of paper with a complete attention on vulnerability.	The manuscript is now six pages and prepared as practitioner-note style paper with complete attention on vulnerability.	
2	Please consider using continuous line numbers. This makes it easier for reviewers and guest editors to make comments.	The manuscript now has continuous line numbers.	
3	Please consider using the past tense instead of the active tense. The use of too many "WEs" breaks the logic flow.	We have changed tense when appropriate and the limited the use of "WE's" throughout the manuscript.	
4	There are many places the writing styles is colloquial and lengthy. Please re-work throughout the manuscript.	That has been taken into consideration and changes have been made throughout the manuscript.	
5	The format of many places in the main text and the references is not consistent with APA style. Please revise to make manuscript consistent with APA style.	We have formatted the manuscript in accordance with the APA manual (6 th edition) and JSPA stylistic specifics.	
Number	Specific comments	Action	
1	Page 1 Lines 2-5: Please consider take out the background information and start to directly talk about vulnerability.	This has been revised and here is the section that we have added.	Page 1 Line 2-5
2	Page 2 Line 18 & Line 24: For the citation of "Shinke, Stambulova, Si, & Moore, 2017", if appears twice. The	The second reference to Schinke has been taken out.	

	second time will be Schinke et al., 2017. Again, please check the APA style.		
3	Page 2 Lines 19-26 & Page 3 Lines 1-4: The paragraph can be taken out. It deviates from the key concept of vulnerability.	This paragraph has been taken out.	
4	Page 3 Lines 5-13: This paragraph can also be taken out. This is like an abstract and there is no need to mention what will be described in the whole paper here.	This paragraph has been taken out.	
5	Page 3 Lines 14-26, Page 4, & Page 5 Lines 1-14: This is an extremely long paragraph. Authors are suggested to take this out. This also deviates from the key focus of the current paper.	This paragraph has been taken out.	
6	Page 5 Lines 18 & 19: Revise the format of these two paragraphs.	These paragraphs have been taken out.	
7	Page 6 Lines 17-22: The direct quote should have page numbers. Again, use APA styles. And direct quotes should be limited, as much as possible.	Page numbers have been inserted.	Page 4 Line 67
8	Page 7 Lines 1-13: Try to summarize the definition in a more systematic way. Avoid too much XXX said and XXX said. Integrate the points and pay attention to the logic flow.	This text has been summarized and here is the revised section.	Page 4 Lines 68-77
9	Page 7 Lines 20-26 & Page 8: Please get rid of this section on “Steps toward a working definition of vulnerability”. Basically, this section is just too colloquial.	This paragraph has been revised extensively and the title is “Vulnerability uncovered in a mindfulness-based intervention”. Here is the section we’ve re-worked.	Pages 4-5 Lines 84-107
10	Page 9: Authors are suggested to better summarize the key points here. Currently, it reads a little bit messy as the description is more like Brown (2006) said and mentioned. Please	The long quotes have been deleted and we have summarized this section, and here is the revised section.	Pages 5-6 Lines 108-123

	delete the long direct quotes (e.g., Lines 11-18).		
11	Page 10: Please re-work. This section reads like the proposed solution though the not complete and lacks detailed and systematic discussion. This section can be further worked on.	The last section has been substantially re-worked and new content has been added to provide a more specific discussion leading up to the proposed definition and to the conclusions in the manuscript. Here is the revised section and the sections that we've added.	Pages 6-7 Lines 124-166 New content Page 6 Lines 125-138 Page 6 Lines 140-142 Page 7 Lines 150-162
Number	Reviewer One comments	Action	
	The basic premise of increasing acceptance, exploration, and active contact with vulnerability in sport is sound and likely to produce positive outcomes. The way the author(s) present the issue is a bit confusing and it is not clear to this reviewer if this is not already being addressed. Highlighting this, on page 6, lines 3-12, a quote from a coach could be interpreted as encouraging vulnerability, which would suggest there may be efforts ongoing to address this need. This reviewer encourages the author(s) to investigate further into what is currently being attempted in this domain (specifically with Mindfulness, ACT, and MAC approaches)	Considering the limited length and number of references we cannot provide support that we considered regarding the literature on mindfulness, ACT and self-compassion in sports.	

	Generally, the discussion leading up to the specifics about the Swedish coaching experiment meanders a bit. It could stay tighter to the perception of vulnerability as 'weakness,' the negative outcomes, and how to go about addressing this and this would be a better article.	This discussion has to a great extent been revised and concentrated on the perception on vulnerability and here is the section that we've revised.	Page 3-4 Lines 57-83
	This reviewer found a number of claims to be lacking any citations (Pg 5 Lines 6-14 & Pgs 5-6 Lines 25-2), the provided material did not support the claim of harm (Pg 7 Lines 5-13), and the use of the term 'masculinity' was not supported by the given examples. (Pg 4 Lines 3-7 consider "aggressive," & Pg 5 Lines 3-6)	These lines have all been taken out of the manuscript.	
	Did the authors mean to use "popular nature" instead of "populist nature" when describing Mrs. Brown's material? (Pg 7 Line 10)	The term "popular acclaim" has replaced this term and the line is found here.	Page 4 Line 75
	The article starts by mentioning elite sport a number of times but does not make a clear distinction between elite and non-elite sport nor carries the distinction through the article.	The term high performance sport is now used throughout the manuscript. This term is commonplace within the sport and exercise literature and carries less of a conceptual overtone.	
	Small issues that could be improved with minor revisions included a repeated paragraph (Pgs 2-3 Lines 19-4), missing subjects (Pg 3 Line 5 "the main purpose.." (of what? please specify)	These lines have been taken out.	
	Pg 7 Line 25 "self-reflection to..." (to what?))	This has been revised and the line is found here.	Page 4 Line 88
	A broad overgeneralization (Pg 5 Lines 17-18),	These lines have been taken out.	

1 2 3 4 5 6 7 8 9 10	Other minor English grammar issues. It is this reviewer's impression that this may have been written by author(s) who use English as a second language.	We have taken this into consideration; revised and improved the language throughout the manuscript.	
11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	Overall, this reviewer agrees with the goal outcome of inspiring more research and application into normalizing/destigmatizing vulnerability in athletic populations but questions if the author(s) are familiar enough with current progress in this domain. That, combined with the noted issues leads this reviewer to recommend the author(s) further familiarize themselves with current practices in the above-mentioned technologies and revise and resubmit.	Thank you for your comments on the strengths and potential of the manuscript.	
30	Number	Reviewer Two comments	Action
31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46	This manuscript describes the concept of vulnerability and highlights the value and use of mindfulness interventions in elite sport. I think that the ideas are interesting and worthwhile. I also think there are some improvements that could be made to the writing to enhance the communication of these ideas and to better translate the concepts into practical and usable advice.	Thank you for your comments on the strengths and potential of the manuscript	
47 48 49 50 51 52 53 54 55 56 57 58 59 60	It would be helpful to provide a definition of mindfulness and a description of mindfulness based interventions. There is little clear description of what mindfulness means. Doing so early on would help set up the rest of the ideas.	A definition of mindfulness has been inserted as well description on what mindfulness means, and here is the section we've added.	Page 2 Line 31-34

	<p>In particular, I think that a stronger connection between mindfulness and vulnerability is helpful. For example, it is important to note that being mindful can be a form of vulnerability – that is to fully experience potentially difficult emotions or thoughts or physical experiences. However, the key of mindfulness is to not only be aware, but to also experience without judgement. It is the combination of both attention and non-judgment that make mindfulness a powerful and adaptive way to experience vulnerability.</p>	<p>This has been taken into consideration and the connection between mindfulness and vulnerability is now further explained in the last section and these are the sections that we've added.</p>	<p>Page 6 Lines 125-138 Page 6 Lines 140-142 Page 7 Lines 150-162</p>
	<p>Page 2, lines 24-26 are redundant with lines 19-21.</p>	<p>These lines have been taken out.</p>	
	<p>Page 3, lines 20-23 it would be helpful to provide some example references here.</p>	<p>These lines have been taken out.</p>	
	<p>Page 4, line 23 – I don't find this sentence to be clear in referring to self-actualization. Consider expanding on this more.</p>	<p>These lines have been taken out.</p>	
	<p>Page 5, lines 6-10 – this sentence is quite long and contains two points that would probably be stronger if made in two sentences.</p>	<p>These lines have been taken out.</p>	
	<p>Page 5, lines 10-14 – this sentence connected to overuse injury is not well connected to the rest of the paragraph which address mental health.</p>	<p>These lines have been taken out.</p>	
	<p>Page 6, lines 17-18 – I am not sure this sentence makes sense.</p>	<p>These lines have been taken out.</p>	
	<p>Page 6, line 24 – I'm not sure what you mean by "desire for control" in this sentence.</p>	<p>Within ACT the desire to control anxiety is considered to be the problem itself. Due to space limitations we have not elaborated on this sentiment, but can do if the AE feels this is necessary.</p>	

	Page 7, line 10 – I don't think the use of the word "populist" is appropriate here.	The term "popular acclaim" has replaced this term and the line is found here.	Page 4 Line 75
	<p>Page 8, the working definition of vulnerability includes courage. I agree that one can be courageous and vulnerable, but one can also be vulnerable and not courageous. I have a problem with this as a definition of vulnerability broadly rather than as one type of response to being vulnerable. I think that perhaps this isn't a general definition. I would refer to this more specifically as "adaptive sport vulnerability" or something that is more specific to this description.</p> <p>Being vulnerable is one thing, but what you are really describing are different ways to experience vulnerability. I think this is an important distinction. It might help to set up a better picture of being vulnerable in sport. Then several ways to experience that vulnerability could be presented, one maladaptive and one adaptive.</p>	<p>It is important to keep in mind the emphasis placed on the <i>experience</i> of vulnerability in the definition provided in the manuscript and not being vulnerable <i>per se</i>.</p> <p>This view has been further developed in the revised manuscript and here is the section we've added.</p>	Page 7 Lines 150-162
	Page 9, lines 24-26 this sentence does not make sense.	This sentence has been edited and is found here.	Page 6 Line 121-123
	<p>The closing section on the proposal for the upside of vulnerability on page 10 was very brief and was a bit of a let down. I was expecting a richer description and more information. Some examples might help the reader to be able to visualize the ideas.</p> <p>Ultimately, I didn't feel that the</p>	The last section has been substantially re-worked and new content has been added to provide a more specific discussion leading up to the proposed definition and to the conclusions in the manuscript. Here is the revised section and the sections that we've added.	Pages 6-7 Lines 124-166 New content Page 6

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	connections were strong in describing both vulnerability in sport, the ways in which vulnerability can lead to positive outcomes in sport, and the way that mindfulness could be a tool that leads to the acceptance of making oneself vulnerable in sport and then having an adaptive response through awareness and non-judgment.		Lines 125-138 Page 6 Lines 140-142 Page 7 Lines 150-162
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