

1 Understanding and Recognizing High-Performance Swimmers' Wellbeing

2 Katie S. Uzzell, Camilla J. Knight, & Denise M. Hill

3 School of Sport and Exercise Sciences, Swansea University

4
5 Date of submission: 26th October 2021

6
7 Contact information:

8 Katie Uzzell

9 Swansea University Bay Campus

10 Crymlyn Burrows

11 Swansea

12 SA1 8EN

13 Email: 659429@swansea.ac.uk

14 This is the final accepted manuscript, which will be published in Sport, Exercise, and
15 Performance Psychology. Please visit <https://psycnet.apa.org/PsycARTICLES/journal/spy/>
16 for the proofset version.

17
18 Funding Information: This study was funded by a Knowledge Economy Skills
19 Scholarships (KESS), which is a pan-Wales higher level skills initiative led by Bangor
20 University on behalf of the HE sector in Wales. It is part funded by the Welsh Government's
21 European Social Fund (ESF) convergence programme for West Wales and the Valleys.

22 Abstract

23 The wellbeing of high-performance athletes has recently received increased research
24 attention, yet there has been little focus on how wellbeing may be conceptualized within the
25 context of specific sports. Thus, the aim of the current study was to understand and recognise
26 high-performance swimmers' wellbeing. The study used an interpretive description
27 methodology (Thorne, 2016). Semi-structured interviews were conducted with eight elite
28 swimmers and 13 coaches and practitioners currently working with swimmers on the
29 performance pathway. Interviews were analyzed using reflexive thematic analysis (Braun &
30 Clarke, 2019). Participants indicated that, within the context of high-performance swimming,
31 swimmer wellbeing is an individual phenomenon, underpinned by personal values and goals,
32 which influence how it is experienced. Changes in swimmers' wellbeing was characterized
33 by a range of affective, cognitive, and behavioral indicators that were specific to the
34 individual and influenced by their personal definition of wellbeing. The findings emphasize
35 the subjective nature of wellbeing, in terms of how it is understood, experienced, and
36 recognized within high-performance swimming. Taken together, these findings highlight the
37 importance of coaches, practitioners, and other support staff knowing each athlete with whom
38 they work, particularly regarding the personal values and goals that underpin their
39 understanding of wellbeing, as well as each person's specific indicators of changing
40 wellbeing levels.

41

42 *Keywords:* high-performance sport, Interpretive Description, mental health, self-awareness

43

44

45

46

47 Emerging evidence indicates that, at the elite level, the wellbeing and mental health of
48 athletes may be negatively impacted due to various contextual factors associated within sport,
49 such as injury and overtraining (Rice et al., 2016). Compared to the general population, elite
50 athletes are no more likely to experience mental illness (Gulliver et al., 2015), nevertheless,
51 that means approximately 34% percentage of the elite athlete population may experience
52 mental illnesses, such as anxiety and depression. Moreover, this figure may be an
53 underestimation due to the under-reporting of symptoms (Gulliver et al., 2012) and because
54 certain mental illnesses (e.g., depression) may be misdiagnosed as other psychological
55 syndromes that have similar presenting symptoms (e.g., burnout; Schwenk, 2000).

56 Additionally, evidence suggests that athletes competing in individual sports (Nixdorf
57 et al., 2016), or sports where leanness is desirable (e.g., swimming, gymnastics; Sundgot-
58 Borgen & Torstveit, 2004), are more likely to experience certain mental illnesses, such as
59 eating disorders or depression, compared to the general population. Athletes who are injured
60 (Gulliver et al., 2015), experiencing performance failure (Hammond et al., 2013), and those
61 retiring from sport have also been found to be at increased risk of anxiety and depression
62 disorders (Gouttebauge et al., 2015). Given that these scenarios encompass numerous sports
63 and situations commonplace to sport, it is critical that an understanding of how best to protect
64 athlete mental health is gained to help ensure that athletes experience positive psychological
65 outcomes, despite the multiple challenges associated with elite sport.

66 According to the World Health Organisation (WHO; 2005) mental health can be
67 defined as “a state of wellbeing in which the individual realizes his or her own abilities, can
68 cope with the normal stress of life, can work productively and fruitfully, and is able to make a
69 contribution to his or her community” (p.2). Hence, under this definition, wellbeing
70 represents a core component of mental health and, as such, increasing wellbeing levels may
71 not only be useful in reducing the risk of poor mental health, but also in promoting positive

72 mental health outcomes (e.g., Keyes et al., 2010; Rice et al., 2016). In addition, there are a
73 number of other benefits associated with high levels of wellbeing that may be relevant within
74 a high-performance sporting context. Specifically, higher levels of wellbeing may improve
75 performance via positive changes to physical health, attitudes, and cognitive abilities (Bryson
76 et al., 2014). Wellbeing has also been associated with better physical health, increased
77 resilience, and improved relationships (see Kanksy & Diener, 2017 for a review). As such,
78 enhancing the wellbeing of high-performance athletes may not only reduce their risk of
79 mental illness, but also offer additional health and performance-related benefits.

80 Despite its well-evidenced benefits, wellbeing as a concept continues to evade a
81 universally agreed definition (see Dodge et al., 2012 for a comprehensive discussion). Within
82 sport literature, one definition that has often been drawn upon is that by Dodge et al. (2012),
83 who proposed that wellbeing is “the balance point between an individual’s resource pool and
84 the challenges faced” (p.230). At an operational level, wellbeing is viewed as multifaceted,
85 including components such as positive affect, life satisfaction, and optimal psychological and
86 social functioning (Keyes, 2002). Within sport psychology, the terms flourishing and thriving
87 are often used in relation to wellbeing. Flourishing refers to the combination of high levels of
88 emotional, psychological, and social wellbeing (Keyes, 2002), whereas thriving has been
89 defined as “the joint experience of development and success, which can be realised through
90 effective holistic functioning and observed through the experience of a high-level of
91 wellbeing and a perceived high level of performance.” (Brown et al., 2017, p. 174). Thus,
92 although both flourishing and thriving encompass wellbeing, a perceived high level of
93 performance is also necessary in order for an individual to be categorised as thriving.

94 Due to the considerable time and emotional commitment required by athletes within
95 high-performance sport, wellbeing in the sporting domain is likely to have a substantial
96 impact on overall wellbeing levels (Lundqvist, 2011). Recognizing the influence that sport

97 may have on wellbeing, Lundqvist (2011) proposed a theoretical model which integrated
98 global and sport-specific wellbeing and highlighted various sport-related emotional (e.g.,
99 sport satisfaction, sport-related affect), psychological (e.g., purpose in sport, growth as an
100 athlete), and social components (e.g., social acceptance in sport) related to wellbeing in this
101 context. However, as Lundqvist (2011) acknowledged, this model was intended to, “provide a
102 broad framework of plausible well-being concepts in sport to act as a guide and inspiration
103 for further studies of well-being in competitive sports” (p.122). As such, it is unclear if this
104 model accurately and fully reflects wellbeing within sports context, or if there are
105 additional/differing constructs that should be included.

106 Since the introduction of the integrated model of global and sport-specific wellbeing
107 by Lundqvist (2011), there has been a substantial increase in research focused on athlete
108 wellbeing. Some studies have sought to contextualize athlete wellbeing, highlighting growth
109 (Sarkar & Fletcher, 2014), control (Sarkar & Fletcher, 2014), and social relationships (Brown
110 et al., 2018) as core components of, or elements that characterize, athlete wellbeing. Other
111 studies have focused on identifying specific protective and risk factors related to athlete
112 wellbeing and mental health, with a review of studies published between 1998 and 2018
113 highlighting 82 correlates related to the mental health of elite athletes (Kuettel & Larson,
114 2020). Further, a number of researchers have sought to develop sport-specific measures of
115 wellbeing. For example, based on Keyes (2002) model, Foster and Chow (2018) developed
116 the Sport Mental Health Continuum Short Form (Sport MNC-SF). Similarly, Kouali et al.
117 (2020) adapted Ryff’s (1989) Scales of Psychological Wellbeing (SPWB) to create the
118 Eudaimonic Wellbeing in Sport Scale (EWBSS).

119 Despite the substantial growth in research interest into athlete wellbeing however,
120 there are a number of areas that still require further consideration. First, previous studies
121 focused on contextualizing wellbeing have mainly looked at the concept in terms of

122 flourishing (e.g., Stander et al., 2017) or thriving (e.g., Brown et al., 2018; Sarkar & Fletcher,
123 2014). Yet, wellbeing occurs on a continuum from low to high (e.g., Keyes, 2002) and, within
124 the U.K. for example, only around 20% of the population can be categorised as flourishing
125 (Hone et al., 2014). Thus, it is necessary to contextualize wellbeing at all levels in order to
126 fully understand what wellbeing looks like across the continuum. Such understanding is
127 needed to facilitate a more nuanced and effective recognition of declining athlete wellbeing
128 levels, allowing for earlier intervention if necessary.

129 Second, previous studies have tended to contextualise athlete wellbeing across a
130 variety of sports (e.g., Brown et al., 2018; Sarkar & Fletcher, 2014; Stander et al., 2017),
131 which means particular sport-specific factors that affect how athlete wellbeing is understood,
132 experienced, and recognized may be overlooked. Evidence from the public health literature
133 recommends that understanding wellbeing in specific contexts is key to delivering successful
134 interventions (e.g., O’Cathain et al., 2019). Hence, there is a need to contextualise wellbeing
135 within specific sports to ensure that interventions designed to enhance athlete wellbeing are
136 relevant, well-received, and successful in achieving its aims.

137 **The current study**

138 Recognizing the importance of considering and developing a sport-specific
139 understanding of wellbeing, the current study sought to understand and recognise high-
140 performance swimmers’ wellbeing. Swimming was chosen due to the demanding nature of
141 the sport, as those competing at the highest levels (e.g., national and international) are
142 presented with a variety of challenges that have the potential to impact negatively on
143 wellbeing and mental health (Lang, 2015). In particular, intense, frequent training sessions
144 and long seasons may increase the likelihood of swimmers experiencing low wellbeing
145 and/or poor mental health (e.g., Lang, 2015; Rice et al., 2016) that may contribute to athlete
146 burnout and sport dropout (e.g., Gustafsson et al., 2017). To this end, the purpose of the

147 current study was to understand and recognize high-performance swimmers' wellbeing. The
148 study was guided by two research questions: 1) How is wellbeing understood and
149 experienced by swimmers within a high-performance swimming environment? and, 2) How
150 can different levels of swimmer wellbeing be recognized within this environment?

151 **Method**

152 **Methodological Approach and Philosophical Underpinnings**

153 The methodological approach used was Interpretive Description (ID; Thorne, 2016). ID
154 aims to produce findings with real world implications (Thorne, 2008) and is particularly useful
155 for examining topics where there is a need for the generation of meaningful new knowledge,
156 within the context of the wider environment in which it occurs (Thorne, 2016). ID is situated
157 within an interpretivist paradigm, underpinned by a relativist ontology and a constructivist
158 epistemology. That is, people construct their own subjective and multiple realities (e.g.,
159 Sparkes & Smith, 2014), however, there may be shared experiences across these multiple
160 realities, which may only be known through the co-creation of knowledge, as a result of the
161 interactions between the participants and the researcher. As such, ID acknowledges the
162 important role that the researcher plays in shaping and constructing the meaning of these shared
163 realities (Thorne, 2016). Reflecting the ontological and epistemological underpinnings of ID,
164 it is accepted that any claims made via the use of ID, do not represent a definitive truth, rather
165 a 'tentative truth claim,' that is open to future revision and modification (Thorne, 2004).

166 **Procedure**

167 The study was primarily conducted across two high-performance swimming clubs
168 within the United Kingdom, although observations and informal conversations occasionally
169 took place at other clubs (n=3) during the study, in order to provide further context to the
170 interview data. High-performance swimming clubs are those in which swimmers on the
171 performance pathway complete their training, while accessing full-time coaches and

172 additional resources such as physiotherapy, psychology, and performance lifestyle support.
173 The performance pathway is run by the National Governing Body (NGB) (an organization
174 that regulates and develops the sport on a national level) and involves a programme of
175 training that aims to support swimmers on their journey into elite swimming. The pathway
176 includes various stages that reflect the swimmer's current level of competition and their
177 training and development needs. Typically, swimmers enter the pathway around 12 years and,
178 depending on their progress, remain on the pathway throughout their swimming career.

179 Institutional ethics approval was gained (approval reference KU_10-11-18), and
180 permission to attend the various swimming clubs was granted from the relevant NGB prior to
181 starting data collection. Subsequently, data were collected using observations, informal
182 conversations, and formal interviews which allowed for methodological triangulation – a
183 technique that is recommended in ID research to help overcome the limitations of a single
184 data collection method (Thorne, 2016). The lead researcher attended morning and evening
185 training sessions, swim meets, training courses, and team meetings to collect observational
186 data and engage in informal conversations with swimmers, coaches, and support staff. In
187 total, the lead researcher was embedded within swimming environments for nine months;
188 three months prior to the formal interviews, and six months during the formal interview and
189 analysis phase.

190 **Participants (Formal Interview)**

191 Maximal variation purposeful sampling was used to ensure that formal interview data
192 were collected from a range of individuals with rich experience of wellbeing within high-
193 performance swimming. In addition to swimmers, the decision was made to collect data from
194 coaches, parents, and practitioners, as it was felt that they would be able to provide further
195 insight into swimmers' wellbeing, particularly around how swimmers' wellbeing could be
196 recognized within a high-performance environment. Thus, individuals were considered for

197 the study if they were (a) a swimmer currently or previously part of the performance pathway,
198 (b) a current coach working within the performance pathway, (c) a member of support staff
199 regularly working with swimmers on the performance pathway (see below for further detail),
200 or, (d) a parent of a swimmer currently on the performance pathway. To ensure heterogeneity
201 within the sample, swimmers and coaches from all levels of the performance pathway were
202 invited to participate in the study. Swimmers, parents, and support staff were approached
203 directly by the lead researcher (face-to-face or via email) to ascertain their interest in
204 participating in the study, while coaches received an email from the NGB's Performance
205 Director. To maintain confidentiality, all interested individuals were asked to contact the lead
206 researcher to arrange a date, time, and location for an interview.

207 In total, formal interviews were conducted with eight swimmers, five coaches, five
208 support staff, and three parents. Of the swimmers, five were male and three were female, with
209 an age range of 16-22 years. The swimmers could be categorized as competitive-elite or
210 successful-elite using the criteria suggested by Swann et al. (2015). Of the coaches, four were
211 male and one female. Three coached swimmers at the early stages of the pathway, and two
212 coached swimmers in the later stages. However, the higher-level coaches also had previous
213 experience of working with swimmers lower than the level they currently coached. In regards
214 to the support staff, three were female and two were male and they held various sport science
215 roles within the NGB (i.e., psychology and sports science practitioner roles¹). They worked
216 with swimmers at least once a week, and had been in their current role for at least a year. All
217 parents were female and related to swimmers who were in the earlier pathway stages.

218 **Data Collection**

219 ***Formal Interviews***

¹ For confidentiality reasons, the specific roles of the support staff who participated in the study cannot be revealed.

220 Semi-structured interviews were completed with 21 participants, with the content of the
221 interviews guided by the existing wellbeing literature (Dodge et al., 2012; Keyes, 2002),
222 which acted as a theoretical scaffold as recommended for ID research (Thorne et al., 2004).
223 Prior to conducting any interviews, an interview guide was piloted with a former swimmer to
224 verify the relevance of the questions, ascertain whether they addressed the necessary areas,
225 and ensure the questions were clear. As a result, the interview guide was amended to include
226 questions regarding positive experiences to balance the focus of the interview.

227 Written consent was obtained from each participant before they took part in the
228 interview. Within our institution, parental assent is only required for those individuals aged
229 under 16 years and, as there were no participants under this age included in the study, there
230 was no requirement for parental assent. Once consent had been gained, interviews began with
231 introductory questions to help participants relax and build rapport (Rubin & Rubin, 2012;
232 e.g., “Tell me about your swimming career so far”) before moving on to the main questions.
233 For swimmers, these were focused on their own wellbeing experiences within their sport and
234 included questions such as, “Tell me about a time when you feel you have experienced high
235 levels of wellbeing,” with follow-up questions including “How were you feeling at that
236 time?.” Swimmers were also asked to comment on how they recognized wellbeing in their
237 peers. For coaches, support staff, and parents, the main questions focused on how they judged
238 the wellbeing of the swimmers they worked with or parented (e.g. “What type of behaviors
239 do you notice in swimmers that you perceive to be experiencing low levels of wellbeing?”).

240 During the interviews, a responsive interviewing style (Rubin & Rubin, 2012) was
241 used, which allowed the participant some control over the direction of the conversation, and
242 exploration of novel areas not included in the interview guide. As such, the direction of each
243 interview was led by the participants' responses, with the lead researcher choosing to follow
244 up on responses that they perceived to be relevant to the research question. Where follow-up

245 questions produced insightful answers, the interview guide was amended to include this
246 question. Interview length ranged from 26 to 76 minutes ($M = 50$ min; $SD = 13.77$).

247 *Observations and Informal Conversations*

248 According to Thorne et al. (2004), observations can help contextualize findings and
249 avoid an overemphasis on interview data. In total, approximately 200 hours were spent
250 observing swimmers, coaches, and practitioners within the swimming environment. All
251 formal interview participants were included in the observations, as well as other swimmers,
252 coaches, and practitioners who did not participate in the formal interviews. The majority
253 (approximately 160 hours) of observations took place at training sessions, with the remaining
254 hours at squad education days and competitions. An additional 40 hours of observation was
255 conducted at specific staff training courses (e.g., mental health first aid) and monthly team
256 meetings where swimmer wellbeing formed part of the meeting agenda. As such, observing
257 these situations was beneficial to gaining an understanding of how wellbeing was being
258 discussed within the environment by coaches and the wider support team.

259 Throughout the study, an 'unstructured' approach to observation was used (e.g.,
260 Mulhall, 2003), which involved documenting all behaviors, interactions, and elements of the
261 environment considered relevant to the research topic (e.g., social interactions, body
262 language). This information was used to contextualize interview data, act as a trigger for
263 subsequent interview questions, and test and refine the themes generated during the interview
264 analysis. Further, the observations provided the opportunity to engage in informal
265 conversations, which facilitated understanding of participants' experiences more clearly.

266 During the observation period, a number of informal conversations with swimmers,
267 coaches, and sport science staff also took place before, after, or during training sessions. The
268 specific topics of the conversations were broad and wide-ranging, but they encouraged
269 participants to reflect on their previous and current experiences within the high-performance

270 swimming environment (e.g., how they were feeling today, thoughts around upcoming and
271 previous events). These conversations were not recorded and transcribed, but relevant
272 information was written as fieldnotes or reflections, and included in the data analysis. All
273 individuals were made aware that they were being observed as part of a research project and
274 that information from these observations and any informal conversations may be recorded via
275 fieldnotes and used as data. Everyone the lead researcher interacted with had an opportunity
276 to indicate if they did not want any of their information to be included in the study, although
277 none indicated any concerns aligned with the ethical approval for this study. Only quotes
278 from the formal interview participants (i.e., participants who have consented for their data to
279 be used in this way) are presented in the results. Data from the informal conversations are
280 presented in excerpts from field notes and are integrated with researcher reflections.

281 **Data Analysis**

282 All formal interviews were recorded electronically and transcribed verbatim. The
283 transcription process began shortly after each interview, and where possible, before the next
284 interview. This approach allowed for data immersion, and thus formed the first stage of the
285 data analysis process. Additionally, it encouraged reflection around the interview questions,
286 which were amended where necessary (i.e., to include additional questions around common
287 themes that participants discussed). In relation to data analysis, Thorne (2016) presents
288 readers with some guidance, but acknowledges that there are other existing data analysis
289 methods that are suitable for use within an ID framework.

290 For the current study, interview data were analyzed using reflexive thematic analysis
291 (RTA; Braun & Clarke, 2013; 2019) - a method that is theoretically flexible and suited to
292 analyzing data from multiple data sources (Braun & Clarke, 2013). Moreover, RTA seeks to
293 generate patterns of shared meaning organized around a particular theme or 'central
294 organizing concept' (Braun & Clarke, 2013). Thus, as the aim of an ID study is to explore

295 shared meaning within individual experiences (Thorne, 2016), the use of RTA as an analysis
296 method was considered a good fit for this study. The data analysis process involved moving
297 through the six main phases outlined by Braun and Clarke (2019). The first stage,
298 familiarisation, began during the transcription process described earlier and continued
299 throughout the analysis process, where transcripts were read and re-read, as well as returning
300 to the audio recordings at times. The second stage, data coding, involved reading the
301 transcripts line-by-line whilst highlighting and assigning descriptive codes to parts of the
302 transcripts which were relevant to the research questions. For example, during this stage, I
303 used codes such as “smiling as a sign of + wellbeing,” and “withdrawal indicative of low
304 wellbeing.” Generating initial themes was the third stage, which involved the grouping
305 together of related codes under a ‘central organizing concept’ that captured the essence of
306 each theme (Braun and Clarke, 2013).

307 The fourth stage, reviewing and developing themes, involved taking the themes back to
308 the raw data and checking whether they were a good reflection of the data. The fifth stage
309 involved refining, defining, and naming themes with titles that adequately reflected the sub-
310 themes within them. For example, the second theme, “Wellbeing characterized by change”
311 was originally labelled “Wellbeing characterized by consistent changes.” However, this
312 suggested that there were universally consistent changes by which various wellbeing levels
313 could be recognized and, although there was some consistency, the specific changes that
314 participants experienced were individual. As such, the word consistent was removed.

315 Finally, themes were written up and presented in a coherent way, which addressed the
316 research questions. Although this process is described step-by-step, the process was an
317 iterative one, which involved moving between phases until the research team were satisfied
318 the themes were sufficiently developed. Throughout the analysis process, observational and
319 informal interview data were initially used to contextualize the themes as they were being

320 developed and, as the analysis progressed, informal conversations occurred to discuss the
321 themes with participants to see if they made sense and reflected swimmer wellbeing within
322 this context. Where there was conflict (e.g., tensions between interview and observational
323 data), swimmers' perspectives were prioritized, and the iterative process between data
324 collection continued to encourage a fuller exploration of these experiences. Individual
325 differences were accounted for in the analysis and included in the presented results.

326 **Positionality**

327 Reflexivity is a core component of RTA that distinguishes it from other types of
328 thematic analysis (Braun & Clarke, 2019). Engaging in reflexive practice involves 'turning
329 inwards' (Alvesson & Skoldberg, 2017) to understand how researcher positionality may have
330 influenced the study. I (the lead researcher) am a white, British, female, with no prior
331 experience of competitive swimming. Further, I had very little knowledge of swimmer
332 wellbeing, beyond what I had previously read in the literature when beginning this study.
333 Therefore, at the outset of the project, due to my lack of swimming experience, I could be
334 considered an 'outsider.' However, in some aspects, I could also be considered an 'insider';
335 specifically, I was white, British, and female, characteristics that I shared with the majority of
336 participants who took part in the study. Although my positionality presented initial challenges
337 in that it took some time to understand and become familiar with swimming-related terms, at
338 times I felt that my position as a non-swimmer led to some participants being more open with
339 me about times when they struggled with their wellbeing, as I was not seen as a threat to their
340 swimming career. In addition, my initial position as a non-swimmer also meant that my
341 observations were not clouded by personal experience and, as such, I was open to seeing a
342 wider perspective (Fay, 1996).

343 However, throughout the study, I was embedded within the high-performance
344 swimming environment and over time my position changed to a 'knowledgeable outsider'

345 and, gradually, more of an 'insider.' This shift came with both benefits and challenges – as I
346 became familiar with certain terminology and the structure of the sport (i.e., competition
347 season, training schedules), I spent less time asking for clarification and as a result, my data
348 became richer. However, during participant recruitment and interviews, some participants felt
349 that sharing their experiences might impact their selection opportunities and so it became
350 even more pertinent that I emphasized that I was not involved in team selection processes.

351 During data analysis, my own wellbeing experiences influenced my interpretation of
352 participant's experiences. In seeking to understand the internal and external changes related
353 to wellbeing, I reflected on the changes that I notice in myself and how these may be similar
354 and/or different to changes that participants talked about. For example, I reflected that when
355 my own wellbeing is low, I tend to withdraw from social situations. In analyzing the data, I
356 found that this was similar for many swimmers included in the study, however, I noticed there
357 were swimmers who, when their wellbeing was low, would seek social interaction and
358 become 'louder', in order to distract themselves from their thoughts and feelings.

359 **Methodological Rigor**

360 For this study, the four criteria that Thorne (2016) proposed for evaluating the quality
361 of ID studies are considered. First, *epistemological integrity* is demonstrated as the research
362 question, alongside the lead researcher's underlying philosophical beliefs, led to the choice of
363 ID as a suitable methodological framework. Subsequently, all research and analytical decisions
364 were made within the guidelines of interpretive description to ensure methodological coherence.
365 Such decisions included the study design, participant sampling method, data collection and
366 analysis methods and the write-up of results.

367 Second, *representative credibility* was ensured via maximal variation sampling,
368 methodological triangulation of data collection methods, and prolonged engagement within the
369 environment, which allowed for rapport to be built with participants and encourage responses

370 which were rich, descriptive, in-depth, and authentic (Harrison et al., 2001). Further,
371 contradictory examples were actively sought during data analysis and included within the
372 results, to acknowledge individual differences within the shared experience. The ongoing
373 results and observations were also discussed with people in the environment, who were able to
374 indicate the extent to which they appeared to fit with what they had witnessed.

375 Third, the use of examples of methodological and analytic decisions throughout the
376 manuscript provide a clear *analytic logic*, by providing the reader with transparency regarding
377 how decisions were made and how these may have influenced the findings which have been
378 reported. Further, the results of the study have been presented using supporting data from the
379 formal interviews, informal conversations, and researcher reflections, allowing the reader to
380 see how different data collection methods may have been used in the construction of the results.

381 Finally, Thorne (2016) argues for *interpretive authority* to be made clear, in order to
382 achieve trustworthiness. To achieve this, the lead researcher completed a reflexive journal
383 throughout the research process, which served to prompt recognition of how their own beliefs
384 and prior understanding of wellbeing may have shaped the data collection and analysis. In
385 addition, the research team acted as *critical friends* during the analysis, to challenge thinking,
386 encourage reflexivity, and ensure findings were grounded in the data rather than, as Thorne
387 (2016, p. 196) described, an 'over inscription of self.'

388 Results

389 The current study aimed to understand and recognize high-performance swimmers'
390 wellbeing. Two main themes were developed: i) wellbeing understood and experienced in
391 relation to personal values and goals; and ii) wellbeing characterized by change.

392 Wellbeing Understood and Experienced in Relation to Personal Values and Goals

393 Participants' interpretation of wellbeing varied and appeared to be influenced by their
394 personal values (e.g., being in control and feeling supported) and goals (e.g., making a

395 qualifying time), although there were some similarities in what participants understood
396 wellbeing to mean. In particular, many participants associated wellbeing with happiness, as
397 most participants associated high levels of wellbeing with feeling “happy”, although feelings
398 of happiness were related to personal values and goals. Reflecting the above, this theme
399 comprises two sub-themes: variation in the values and goals that underpin swimmers’
400 understanding and experience of wellbeing, and the role of happiness in evaluating wellbeing
401 in relation to personal values and goals.

402 *Variation in the Values and Goals that Underpin Swimmers’ Understanding and*
403 *Experience of Wellbeing*

404 When asked what wellbeing meant, each participant defined wellbeing slightly
405 differently. Emphasizing this point, Support Staff 1 mentioned, “no one really understands
406 [wellbeing], everyone kind of has their own definition.” Indeed, although there were
407 similarities, many swimmers had different beliefs about what comprises wellbeing. For
408 example, Swimmer 1 felt, “wellbeing is like happiness really, and health” whereas Swimmer
409 7 felt that wellbeing was “physical as well, not just mental.” For many, wellbeing was
410 considered to be multi-faceted and listed multiple components that characterized wellbeing
411 for them as individuals. For example, Swimmer 2 felt that wellbeing was, “the state of mind
412 you’re in” and “how you deal with things” and Swimmer 4 thought that wellbeing included,
413 “being like happy mentally, physically, and maybe like emotionally.”

414 In developing their understanding of wellbeing, swimmers tended to draw upon their
415 own personal values. That is, things that they as an individual perceived as important, such as
416 being in control, winning, or having good relationships with others, influenced how they
417 understood and evaluated their own wellbeing. For instance, one swimmer indicated that his
418 interpretation of wellbeing was one of feeling in control of a situation. Therefore, low levels

419 of wellbeing were associated with “not being in control.” Subsequently, this swimmer
420 reiterated the consequences of feeling out of control:

421 It makes you feel powerless, because you lose everything, it’s like hitting a wall, it’s
422 like racing cars running out of grip, you hit the brakes, they lock up and you just go
423 sliding off the track, that’s what it feels like, it’s not fun (Swimmer 5).

424 Contrastingly, Swimmer 3 identified that their meaning of wellbeing was “the support and
425 stuff that I get from other people, like my coaches, my peers, and my family.” As such, they
426 commented that, “I think generally, the whole way through [my wellbeing] has been good
427 because I do, like I’ve got a lot of support from my family.” Additionally, fieldnotes
428 describing an informal conversation between them and the lead researcher indicated that the
429 swimmer valued hard work, and so although managing a job alongside swimming was
430 challenging, they found it positive for their wellbeing. The fieldnote recorded:

431 Spent some time chatting with [Swimmer] – talked about how they were tired from
432 work. I asked how they managed to juggle work and swimming. [Swimmer] told me
433 they find it hard sometimes but ‘hard work is always worth it’... also said they’d
434 struggle if they were just ‘swimming, swimming, swimming.’

435 Moreover, in addition to personal values, it was clear that swimmers experienced
436 wellbeing in relation to their goals. For example, one swimmer had been trying to qualify for
437 a major games for a number of years, noting, “I’m still chasing that time that I’ve been after
438 for three years, I’m still trying to do it” (Swimmer 2). As such, they felt that their wellbeing
439 was closely linked to how well they performed in relation to that time. Speaking about this,
440 the swimmer recalled how their wellbeing was negatively affected even though they had
441 achieved personal best times, as they had still not made the qualifying time, “[I] swam best
442 times, but obviously missed it [qualifying time], um, and obviously I was very upset”

443 (Swimmer 2). Indeed, changes in wellbeing related to goals (especially performance goals)
444 was something that was commonly observed during the study. One fieldnote recorded:

445 First session back for all of the swimmers after trials and nearly a week of rest. Most
446 swimmers seemed in a good mood, probably due to some really good performances...
447 Only exception was [Swimmer]... had a quick chat with [them] after the session and
448 said [they were] “disappointed” with performance... didn’t seem to want to chat too
449 much about it but I could sense [they were] quite down compared to usual.

450 *The Role of Happiness in Evaluating Wellbeing in Relation to Personal Values and Goals*

451 Despite individual differences across participants’ interpretation of wellbeing,
452 happiness was a consistent characteristic of wellbeing for most participants. For example,
453 Swimmer 8 felt that wellbeing was, “just being happy in general,” while Coach 2 considered
454 their role in relation to swimmer wellbeing to be, “managing them so that they feel happy”
455 and Parent 3 indicated that their child’s wellbeing is, “just that she’s happy, really.”
456 Furthermore, many participants used happiness as an indicator of their own wellbeing levels,
457 and when talking about experiences of high levels of wellbeing, simply referred to “feeling
458 happy,” whereas when talking about experiences of poor wellbeing, participants often
459 referred to feeling “bad.” For instance, Swimmer 1 shared an experience of low wellbeing as
460 “I felt bad like within myself. I know that’s a bad word, but I felt bad within myself.”

461 However, the role of happiness in relation to wellbeing was complex, and
462 rather than a general feeling of happiness, it appeared that how happy participants felt in
463 relation to personal values determined their overall wellbeing levels. For example, if an
464 individual valued social support and believed this was important for their wellbeing, they
465 judged their wellbeing based on how happy/satisfied they felt with their social network. As
466 Swimmer 6 suggested, they felt their wellbeing was good if, “I’m happy emotionally with my
467 parents and my friends.” In contrast, Swimmer 5, who judged their wellbeing in relation to

468 control, mentioned that when things felt out of control, “you don’t feel happy, because you’re
469 having to work harder and harder every day, just to maintain.”

470 **Wellbeing Characterized by Change**

471 Participants felt that there were various affective, cognitive, and behavioral indicators
472 that suggested a change in wellbeing. However, these indicators were often specific to each
473 individual. For example, whereas one individual may withdraw from social interactions as a
474 result of low levels of wellbeing, another may become overly talkative. Additionally,
475 swimmers’ ability to recognize changes in themselves was dependent upon each individual’s
476 level of self-awareness. These ideas are encapsulated within three sub-themes: Internal
477 changes, external changes, and the role of awareness.

478 ***Internal Changes***

479 Internal changes refer to the unobservable changes associated with varying wellbeing
480 levels. Internal changes fell into two main categories; affective and cognitive. Considering
481 the affective changes, participants often noted a change in feelings of motivation, particularly
482 regarding training, as a result of their wellbeing levels. At times, a lack of motivation led to
483 swimmers missing training sessions or not putting as much effort in as they usually would. In
484 contrast, participants felt that higher levels of wellbeing made them feel more motivated to
485 train. For example, when experiencing high levels of wellbeing, Swimmer 3 felt “really
486 motivated... really looking forward to getting in the pool and having a good session.” A lack
487 of motivation related to wellbeing was also recorded during observations at training sessions.
488 For example, one fieldnote recorded, “[Swimmer] told me they “weren’t feeling it this
489 morning.” I asked why and [Swimmer] said they “just didn’t feel great.” I’m wondering if it’s
490 because of the competition on the weekend – try to find out how they did.”

491 Participants also identified variation in feelings of enjoyment, related to increasing or
492 decreasing wellbeing levels, again particularly regarding training. For example, when

493 discussing training during periods of high wellbeing, Swimmer 3 mentioned, “it’s fun, it’s
494 hard but it’s a good hard like you feel like you’re accomplishing something rather than just
495 slaving away up and down the pool.” Conversely, Swimmer 8 said, “when you’re not in the
496 best state of mind and all that, the sessions drag, it’s not as fun, you’re there and you feel like
497 you’re swimming up and down for no reason.” Related to this, Swimmer 1 noted how, when
498 they had low wellbeing, other swimmers’ behaviour could affect their wellbeing further,
499 saying, “it doesn’t even have to be something that annoys me but like, I’ll find a way to get
500 annoyed by it.” Related to the influence of other’s wellbeing on swimmer enjoyment, the
501 impact of the coach on swimmer wellbeing was also recorded during observations. One
502 fieldnote described, “[coach] not as upbeat as usual, very quiet... this seemed to put everyone
503 on edge... not too much talking between staff or athletes.”

504 With regards to cognitive changes, participants identified two main ways in which
505 changing wellbeing levels affected these, specifically their ability to focus and their ability to
506 rationalize. For instance, speaking about focus during periods of low wellbeing, Swimmer 2
507 said, “you’re not a 100% focused or committed on what you should be doing...10, 20% could
508 have wandered off somewhere else, that’s going to affect your performance.” In contrast,
509 high levels of wellbeing were associated with an increased ability to focus. As Swimmer 4
510 mentioned when they had good wellbeing they would be, “really looking forward to getting
511 in the pool... [because] you can just focus on going up and down swimming.”

512 Beyond focus, some participants reported an inability to rationalize when
513 experiencing low levels of wellbeing. For example, Swimmer 6 said, “when I’m having a
514 hard day I’m just like, it’s that session, that’s the one that is going to make me so rubbish.”
515 However, as Support Staff 3 mentioned, when experiencing high levels of wellbeing,
516 swimmers were perceived to be better able to “recognize this [a bad session] is not the end of
517 the world.” Reiterating this point, Coach 4 said, “they [swimmers] can think about things in a

518 bit more of a logical way, instead of reacting emotionally.” During the times when they found
519 it difficult to rationalize, swimmers felt that the people around them could help. For example,
520 Swimmer 2 explained how, when they had not made the times to qualify for a squad, the
521 coaches helped them to rationalize the situation, saying:

522 I was like what am I doing now, there's nothing, I haven't got anything to aim for so
523 they sat me down and they were like yeah, obviously we know your situation, like
524 you haven't qualified but, they were still the best times you've ever done so they were
525 like, it's like you haven't become a shit swimmer overnight.

526 *External Changes*

527 Participants referred to a number of noticeable behavioral changes that were
528 considered to occur as a result of changing levels of wellbeing. These were identified by
529 swimmers themselves, as well as coaches, support staff, and parents. Behavioral changes
530 were most commonly observed via social cues, namely, through social interactions and body
531 language. Specifically, higher levels of wellbeing were often associated with more interaction
532 with others, whereas lower levels of wellbeing were associated with reduced interaction.
533 Swimmer 3 highlighted this point, “On a day when where I'm feeling good in the pool, I'll
534 talk to anyone in my squad . . . whereas if I'm not [feeling good], I'll just talk to my close
535 circle and sort of exclude everyone else.” Additionally, participants reported noticing changes
536 to the language used in interacts while experiencing lower levels of wellbeing. Swimmer 1
537 noted, “I feel like I swear a lot more if I'm not happy . . . a lot more bad words come out.”

538 Participants also considered changes to body language to be an indicator of varying
539 levels of wellbeing. For example, some of the participants felt the way swimmers walked
540 onto poolside provided a useful indicator of their wellbeing level, as Swimmer 1 explained:

541 People walk up like on pool side, like chest out you know head up, having a bit of a
542 laugh and smiley, that sort of stuff um, but if you're having a bad day it's like head
543 down, bit slumped, bit sad, miserable face.

544 In addition, participants spoke about changes to facial expressions related to wellbeing,
545 including smiling, frowning, and eye contact and a number of observations related to this
546 point were recorded. For example, one fieldnote noted, "I tried to smile if I caught [staff
547 member's] eye but no response," whereas another observed "[swimmer] had a vacant look in
548 his face". Finally, participants felt that body posture was a consistent indicator of wellbeing
549 and many coaches believed that changes to body posture and movement could also be
550 recognized in the water. Speaking about this, Coach 2 noted, "I mean..., you can see them in
551 the [water], you're thinking goodness me, it's just like have you ever swam before (laughs),
552 what's happened, do you have arms and legs?"

553 Although there were commonalities in the behavioral changes perceived to indicate
554 wellbeing levels, the specific changes observed were dependent on the individual's typical
555 behavior. As Support Staff 2 commented "the kind of the main thing with the athletes I work
556 with is they become a different person." Indeed, as the study progressed, comments regarding
557 changes to typical behaviour were often recorded in the observational fieldnotes. For example,
558 one entry stated, "one swimmer ignored me which is not unusual but also seemed very quiet
559 even with other swimmers" and another entry observed that a swimmer was, "much more
560 relaxed than normal." However, despite the individuality in the changes observed, there
561 appeared to be within-person consistency, as Support Staff 3 noted, "there's one athlete who
562 very much disengages from the coach when they're not in a state of great wellbeing."

563 *The Role of Awareness*

564 Within the context of this study, awareness referred to an individuals' ability to
565 recognize changes, either in themselves or in others. In particular, participants felt that

566 swimmers needed a certain level of self-awareness to be able to recognize both internal and
567 external wellbeing related indicators, though not all participants considered swimmers to
568 have the level of self-awareness required. Specifically, some participants considered that self-
569 awareness was age related, and developed over time. As such, compared to other swimmers,
570 more experienced swimmers were perceived as better able to identify changes associated with
571 their wellbeing. Discussing this, Coach 2 said, “I think, as an adult, you kind of learn to know
572 yourself a little bit better in that way, but I think that’s where the swimmers are still learning
573 about themselves a bit.” Some swimmers felt that they could not always identify changes to
574 their own wellbeing, rather, it was only when others noticed, or they reflected, that they
575 became aware of them. Swimmer 1 explained, “I think it takes a while for me to realize when
576 I’m in peaks or troughs or whatever like, with how I’m feeling.”

577 Participants felt that, in particular, coaches had a good awareness of the wellbeing
578 levels of their swimmers, with Swimmer 8 noting, “he [coach] will notice, it’s a bit creepy
579 actually!” Reiterating this point, Parent 3 said, “I think sometimes [the coach] recognizes
580 more in my daughter than what I do.” However, given the individual nature of behavioral
581 changes related to wellbeing, coaches, support staff, and parents felt it took extended time
582 with each swimmer to observe their responses in a range of situations and establish a baseline
583 for future comparison. Discussing this, Coach 4 explained, “it’s that change in their day to
584 day emotions, that you’ve learnt over a period of time.”

585 However, coaches noted that changes to behavior were harder to spot in individuals
586 who did not display large variations in their day-to-day social interactions and body language.
587 For example, Support Staff 1 felt it was difficult to notice changing wellbeing in a certain
588 swimmer because they appeared to be constantly cheerful, noting, “he looks so cheerful all of
589 the time... I think people like him are probably the worst ones to try and like pick up on subtle
590 signs.” Similarly, Coach 5 felt that it was harder to recognize changes in wellbeing in swimmers

591 who were quieter because, “they’re so neutral all of the time, you don’t know, there’s not very
592 many changes in their, their everyday characteristics... they’re the harder ones to figure out.”

593 **Discussion**

594 The purpose of the current study was to understand and recognize high-performance
595 swimmers’ wellbeing. Overall, the findings point to a close association between participants’
596 personal values and goals in both their understanding and experience of wellbeing. That is,
597 findings suggest that wellbeing of high-performance swimmers is a highly subjective
598 experience, and that swimmers understand wellbeing in relation to their own personal values
599 and goals, and experience wellbeing in terms of happiness related to those values and goals.
600 Further, the findings indicate that wellbeing can be recognized via various cognitive,
601 affective, and behavioral indicators and that changes in wellbeing levels may be recognized
602 via changes in these indicators, although the manifestation of these changes differ between
603 swimmers. Related to this, the present study highlights the variation in levels of self-
604 awareness that meant that not all swimmers were able to recognize their own wellbeing
605 indicators, and instead relied on others (i.e., coaches, parents, peers) to notice these for them.

606 Generally, participant’s understanding of wellbeing was aligned with Lundqvist’s
607 (2011) model of wellbeing, in that participants characterized wellbeing using both hedonic
608 (e.g., feelings of happiness) and eudaimonic (e.g., functioning and social) aspects. However,
609 the current study extends our understanding by highlighting the individual differences in the
610 value that participants placed on certain aspects of wellbeing over others (i.e., emotional,
611 psychological). For example, some participants viewed social aspects as critical to wellbeing,
612 whereas others felt that emotional functioning was more important for their overall
613 wellbeing. Consequently, these findings suggest that to understand an individual’s wellbeing
614 it is necessary to delve below the categories of hedonic and eudiamonic functioning, to
615 consider the personal factors that underpin each individual’s experience of these.

616 The individuality in participants' understanding of wellbeing found in the current
617 study offers a novel contribution to the literature as, with the notable exception of Ashfield et
618 al. (2012) whose findings emphasized the individual nature of the flourishing experience,
619 previous studies have tended to approach the conceptualization of wellbeing from a "one size
620 fits all" perspective that views wellbeing as a common experience. As such, previous studies
621 have aimed to identify shared aspects of wellbeing that characterize the experience for all
622 (e.g., Sarkar & Fletcher, 2014; Brown et al., 2018). This endeavor has proved challenging
623 and, despite increased research focus in this area, researchers have struggled to reach an
624 overall consensus with regards to what characterizes athlete wellbeing. In light of the current
625 study's findings, we suggest that such challenges will remain while attempts to define
626 wellbeing in terms of a generalized set of characteristics continue.

627 Instead, future research may benefit from redirecting its focus towards more fully
628 understanding the underpinning values and goals related to wellbeing, and how they may
629 influence, or are influenced by, wellbeing. Indeed, this shift would reflect that of the broader
630 psychology literature, where studies have begun to consider individual differences in the
631 wellbeing experience (e.g., Wissing et al., 2021). For example, a recent study by Wissing et
632 al. (2021) that examined differences in the goals of individuals with high and low levels of
633 wellbeing found that those who had lower levels of wellbeing (i.e., languishing) were more
634 likely to have self-focused and hedonic goals, whereas those with higher levels of wellbeing
635 (i.e., flourishing) were more likely to have other-focused and eudaimonic goals. Such insights
636 within the context of sport would allow researchers to better understand what factors might
637 affect wellbeing, how they might impact on wellbeing, and in what situations.

638 Further, the subjective and personal nature of wellbeing emphasized by the findings of
639 the present study have implications for how athlete wellbeing is measured. Previously, studies
640 have looked to develop sport-specific measures of wellbeing, such as the Sport Mental Health

641 Continuum Short Form (SMHC-SF; Foster & Chow, 2018) and the Eudaimonic Wellbeing in
642 Sport Scale (EWBSS; Kouali et al., 2020). However, these instruments take a criterion-based
643 approach to measuring the construct and, given that wellbeing appears to be closely tied to
644 personal values and goals, this approach may not provide an accurate or appropriate way of
645 measuring wellbeing as it does not account for differences in how wellbeing may be
646 understood and judged by the individual; nor does it factor in an individual's aspirations and
647 goals. Based on the current findings, to provide useful and useable results, any measure of
648 athlete wellbeing would need to account for variation in a respondent's personal values and
649 goals that underpin their understanding of wellbeing. In practical terms, this might mean
650 including additional questions around identifying personal values and goals and/or amending
651 the wording of items to encourage respondents to answer in relation to their own specific
652 values and goals, rather than global or societal norms. Another option may be to administer
653 wellbeing measures to the same person multiple times in order to form a baseline against
654 which further within-person comparisons may be made.

655 Despite the individual variation in how wellbeing was understood, the association of
656 wellbeing with feelings of happiness was similar across participants. This is consistent with
657 the wider psychological literature on subjective wellbeing, in which happiness is considered a
658 core component (Diener, 1984). However, the findings demonstrate that there is another layer
659 of complexity underpinning this, with feelings of happiness related to satisfaction with, and
660 progress in, personal values and goals. One explanation may be that swimmers who achieve
661 their goals and live a life consistent with their values may experience more happiness. This
662 aligns with the self-concordance model (Sheldon & Elliot, 1999) which suggests that
663 autonomously motivated goals are more likely to be attained. Within sport, Smith et al.
664 (2011) found that, for athletes who had goals that were intrinsically regulated and of personal
665 value, goal attainment was associated has been linked to increased positive affect and life

666 satisfaction. Thus, it appears important that athletes set goals that are meaningful to them, as
667 they will be more likely to achieve these and, thus, may experience higher wellbeing.

668 In addition to how wellbeing was understood and experienced, the current study
669 provided insight into how the wellbeing levels of high-performance swimmers might be
670 recognized and, importantly, findings highlighted that swimmers' ability to recognize their
671 own wellbeing indicators was often poor, with swimmers noting that they rarely thought
672 about their own wellbeing, unless it became problematic. The lack of awareness around
673 mental health and mental illness related symptoms is not new within sport and is already
674 starting to be addressed through the delivery of Mental Health Literacy (MHL) interventions
675 (e.g., Van Raalte et al., 2015; Liddle et al., 2021). Such interventions have shown to be useful
676 in increasing knowledge around symptoms and signs of common mental disorders, as well as
677 increasing intentions to seek help for a mental illness. However, these interventions are
678 pathology-oriented in that they focus on the identification of, and help-seeking for, mental
679 illness. Whilst it is critical that athletes are able to recognize and seek support for mental
680 illnesses, it is equally important that they are also able to recognize the signs and symptoms
681 of mental health (i.e., wellbeing). By being aware of what wellbeing "looks like" for them,
682 athletes will be better able to recognize and intervene when their wellbeing is declining. In
683 addition, if athletes are aware of what high levels of wellbeing look and feel like for them,
684 they may be better able to reflect on situations that foster and facilitate wellbeing for them.

685 **Practical Implications**

686 In addition to the aforementioned theoretical implications, there are a number of
687 practical implications related to the findings of the current study. First, the findings highlight
688 the need for coaches and practitioners to spend time learning about each swimmer's personal
689 values and goals that may underpin their understanding (and experience) of wellbeing. This is
690 an essential first step in being able to protect and enhance the wellbeing of swimmers as, by

691 doing this, coaches, practitioners, and other support staff may be able to anticipate when and
692 how a swimmer's wellbeing might be impacted, as well as being able to create an
693 environment that supports swimmer wellbeing. This can be achieved through regular
694 conversations that are not just focused on swimming-related goals, but also swimmers' wider
695 lives, alongside continual observation and reflection by coaches and support staff.

696 Second, the findings emphasize the importance of developing an awareness of each
697 swimmer's typical behaviors as this may provide an informal way for coaches to assess
698 swimmer wellbeing. For coaches within a high-performance swimming setting, who often
699 spend around 4+ hours a day with their swimmers, it is likely that they already have a good
700 understanding of the typical behaviors of each swimmer. By encouraging coaches to look for
701 changes in these behaviors and use these as a signal to ask the swimmer about their
702 wellbeing, then declining levels of wellbeing may be identified earlier.

703 Related to wellbeing indicators, increasing self-awareness should be a key focus for
704 sports organizations looking to protect the wellbeing of their athletes. Self-awareness may be
705 developed through the process of self-reflection, and so coaches and practitioners should
706 encourage and provide opportunities for this behavior. However, it is important to note that
707 reflection can lead to rumination, which is associated with lower levels of wellbeing (e.g.,
708 Harrington & Loffredo, 2010). As such, athletes should be encouraged to reflect on positive
709 experiences and previously effective strategies, rather than ruminating on negative memories.

710 **Limitations and Future Research Directions**

711 The current study is the first known attempt to conceptualize high-performance
712 swimmers' wellbeing, and the findings provide a unique insight into how wellbeing is
713 understood, experienced, and recognized within a high-performance environment. In
714 conceptualizing the wellbeing of high-performance swimmers, the study has produced some
715 novel findings that would benefit from further investigation. In particular, it would be

716 beneficial to establish whether increased levels of self-awareness are related to earlier help-
717 seeking behaviors for declining wellbeing. Finally, a more in-depth examination of the factors
718 that influence wellbeing, with a specific focus on how these relate to an individual's values
719 and goals would be useful, as it is only by understanding *how* wellbeing is affected within
720 specific contexts that we can develop targeted interventions, aimed at protecting and
721 promoting wellbeing within high-performance sporting environments (Lundqvist, 2011).

722 The findings of the present study should be considered within the limitations.
723 Specifically, the study design consisted of one-off interviews with participants and, as such,
724 they offer a snapshot of how wellbeing was understood at that particular time, although the
725 observational data collected throughout the study did allow for contextualization of the
726 interview data and provided an insight in to how participants' understanding of wellbeing was
727 affected within the environment. Even so, future research may wish to adopt a longitudinal
728 focus to explore how swimmers' understanding of wellbeing may change over time.

729 **Conclusion**

730 The current study sought to understand and recognize high-performance swimmers'
731 wellbeing, with the findings encapsulated within two main themes: wellbeing understood and
732 experienced in relation to personal values and goals, and wellbeing characterized by change.
733 Taken together, these findings suggest that wellbeing is a subjective and dynamic experience
734 which is understood in relation to a swimmer's values and goals, experienced via happiness
735 in relation to these values and goals, and recognized via numerous affective, cognitive, and
736 behavioral indicators. In addition to providing some support for the limited extant research in
737 this area, the findings offer some novel insights into athlete wellbeing, specifically regarding
738 the role of personal values and goals in how wellbeing may be understood, and the important
739 role of self-awareness for being able to recognize the person-specific indicators of changing
740 wellbeing levels.

741 **References**

- 742 Alvesson, M., & Sköldbberg, K. (2017). *Reflexive methodology: New vistas for qualitative*
743 *research*. Sage.
- 744 Ashfield, A., McKenna, J., & Backhouse, S. (2012). The athlete's experience of flourishing.
745 *Qualitative Methods in Psychology Bulletin*, 14, 4–12.
746 <https://doi.org/10.1080/10413200.2017.1354339>
- 747 Braun, V., Clarke, V. (2013). *Successful qualitative research: A practical guide for*
748 *beginners*. Sage Publications.
- 749 Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research*
750 *in Sport, Exercise and Health*, 11, 589-597.
751 <https://doi.org/10.1080/2159676x.2019.1628806>
- 752 Brown, D. J., Arnold, R., Fletcher, D., & Standage, M. (2017). Human thriving. A conceptual
753 debate and literature review. *European Psychologist*, 22, 167–179.
- 754 Brown, D. J., Arnold, R., Reid, T., & Roberts, G. (2018). A qualitative exploration of thriving in
755 elite sport. *Journal of Applied Sport Psychology*, 30, 1–21.
756 <https://doi.org/10.1080/10413200.2017.1354339>
- 757 Bryson, A., Forth, J. and Stokes, L. (2014). *Does wellbeing affect workplace performance?*
758 London: Department for Business Innovation and Skills.
759 <https://doi.org/10.1177/0018726717693073>
- 760 Diener, E. (1984). Subjective wellbeing. *Psychological Bulletin*, 95, 542–575.
761 <https://doi.org/10.1037/0033-2909.95.3.542>
- 762 Dodge, R., Daly, A. P., Huyton, J., & Sanders, L. D. (2012). The challenge of defining wellbeing.
763 *International Journal of Wellbeing*, 2, 222-235. <https://doi.org/10.5502/ijw.v2i3.4>
- 764 Fay, B. (1996). *Contemporary philosophy of social science: A multicultural approach* (Vol.
765 1). Blackwell.

- 766 Foster, B. J., & Chow, G. M. (2019). Development of the Sport Mental Health Continuum—
767 Short Form (Sport MHC-SF), *Journal of Clinical Sport Psychology*, *13*, 593-
768 608. <https://doi.org/10.1123/jcsp.2017-0057>
- 769 Gouttebauge, V., Frings-Dresen, M. H. W., & Sluiter, J. K. (2015). Mental and psychosocial
770 health among current and former professional footballers. *Occupational medicine*, *65*(3),
771 190-196. <https://doi.org/10.1093/occmed/kqu202>
- 772 Gulliver, A., Griffiths, K. M., Christensen, H. (2012). Barriers and facilitators to mental health
773 help-seeking for young elite athletes: a qualitative study. *BMC Psychiatry*, *12*,
774 157. <https://doi.org/10.1186/1471-244X-12-157>
- 775 Gulliver, A., Griffiths, K. M., Mackinnon, A., Batterham, P. J., & Stanimirovic, R. (2015).
776 The mental health of Australian elite athletes. *Journal of science and medicine in*
777 *sport*, *18*(3), 255-261. <https://doi.org/10.1016/j.jsams.2014.04.006>
- 778 Gustafsson, H., DeFreese, J. D., & Madigan, D. J. (2017). Athlete burnout: Review and
779 recommendations. *Current Opinion in Psychology*, *16*, 109–113.
780 <https://doi.org/10.1016/j.copsyc.2017.05.002>
- 781 Hammond, T., Gialloredo, C., Kubas, H., & Davis IV, H. H. (2013). The prevalence of
782 failure-based depression among elite athletes. *Clinical Journal of Sport Medicine*, *23*(4),
783 273-277. <https://doi.org/10.1097/jsm.0b013e318287b870>
- 784 Harrington, R., Loffredo, D. A. (2011). Insight, rumination, and self-reflection as predictors of
785 well-being. *Journal of Psychology*, *145*, 39-57.
786 <https://doi.org/10.1080/00223980.2010.528072>
- 787 Harrison, J., MacGibbon, L., & Morton, M. (2001). Regimes of trustworthiness in qualitative
788 research: The rigors of reciprocity. *Qualitative Inquiry*, *7*, 323-345.
789 <https://doi.org/10.1177/107780040100700305>

- 790 Hone, L. C., Jarden, A., Schofield, G. M., & Duncan, S. (2014). Measuring flourishing: The
791 impact of operational definitions on the prevalence of high levels of wellbeing. *International*
792 *Journal of Wellbeing*, 4(1). <https://doi.org/10.5502/ijw.v4i1.4>
- 793 Kansky, J., & Diener, E. (2017). Benefits of well-being: Health, social relationships, work, and
794 resilience. *Journal of Positive Psychology and Wellbeing*, 1, 129–169.
- 795 Keyes, C. L. M. (2002). The mental health continuum: From languishing to flourishing in
796 life. *Journal of Health and Social Behaviour*, 43, 207–222. <https://doi.org/10.2307/3090197>
- 797 Keyes, C., Dhingra, S., & Simoes, E. (2010). Change in level of positive mental health as a
798 predictor of future risk of mental illness. *American Journal of Public Health*, 100, 2366-
799 2371. <https://doi.org/10.2105/AJPH.2010.192245>
- 800 Kouali, D., Hall, C., & Pope, P. (2020). Measuring eudaimonic wellbeing in sport: Validation of
801 the Eudaimonic Wellbeing in Sport Scale. *International Journal of Wellbeing*, 10, 93-106.
802 <https://doi.org/10.5502/ijw.v10i1.776>
- 803 Kuettel, A., & Larsen, C. H. (2020). Risk and protective factors for mental health in elite
804 athletes: a scoping review. *International Review of Sport and Exercise Psychology*, 13, 231-
805 265. <https://doi.org/10.1080/1750984X.2019.1689574>
- 806 Lang M. (2015). “None of the kids are allowed to eat junk at the pool”: Discourses of “optimal
807 nutrition” in competitive youth swimming and the impact of athlete welfare. *International*
808 *Journal of Sport and Society*, 5, 11-22.
- 809 Liddle, S. K., Deane, F. P., Batterham, M., & Vella, S. A. (2021). A Brief Sports-Based Mental
810 Health Literacy Program for Male Adolescents: A Cluster-Randomized Controlled Trial.
811 *Journal of Applied Sport Psychology*, 33, 20-44. <https://doi.org/gf7qt9>
- 812 Lundqvist, C. (2011) Well-being in competitive sports – the feel-good factor? A review of
813 conceptual considerations of well-being. *International Review of Sport and Exercise*
814 *Psychology*, 4, 109 -127. <https://doi.org/10.29359/BJHPA.10.4.20>

- 815 Mulhall, A. (2003). In the field: notes on observation in qualitative research. *Journal of*
816 *advanced nursing*, 41, 306-313. <https://doi.org/10.1046/j.1365-2648.2003.02514.x>
- 817 Nixdorf, I., Frank, R., & Beckmann, J. (2016). Comparison of athletes' proneness to depressive
818 symptoms in individual and team sports: Research on psychological mediators in junior elite
819 athletes. *Frontiers in Psychology*, 7, 893. <https://doi.org/10.3389/fpsyg.2016.00893>
- 820 O'Cathain, A., Croot, L., Duncan, E., Rousseau, N., Sworn, K., Turner, K. M., ... & Hoddinott, P.
821 (2019). Guidance on how to develop complex interventions to improve health and
822 healthcare. *BMJ open*, 9, 8. <https://doi.org/10.1136/bmjopen-2019-029954>
- 823 Rice, S. M., Purcell, R., De Silva, S., Mawren, D., McGorry, P. D., & Parker, A. G. (2016). The
824 mental health of elite athletes: A narrative systematic review. *Sports Medicine*, 4, 1333-1353.
825 <https://doi.org/10.1007/s40279-016-0492-2>
- 826 Rubin, H.J. and Rubin, I.S. (2012). *Qualitative interviewing: The art of hearing data* (3rd ed.).
827 Sage Publications.
- 828 Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of
829 psychological well-being. *Journal of Personality and Social Psychology*, 57, 1069-1081.
830 <https://doi.org/10.1037/0022-3514.57.6.1069>
- 831 Sarkar, M., & Fletcher, D. (2014). Ordinary magic, extraordinary performance: Psychological
832 resilience and thriving in high achievers. *Sport, Exercise, and Performance Psychology*, 3,
833 46–60. <https://doi.org/10.1037/spy0000003>
- 834 Schwenk, T. L. (2000). The stigmatization and denial of mental illness in athletes. *British*
835 *Journal of Sports Medicine*, 34, 4-5. <http://dx.doi.org/10.1136/bjism.34.1.4>
- 836 Sheldon, K. M., & Elliot, A. J. (1999). Goal striving, need satisfaction, and longitudinal well-
837 being: The self-concordance model. *Journal of Personality and Social Psychology*, 76,
838 482–497. <https://doi.org/10.1037/0022-3514.76.3.482>

- 839 Smith, A. L., Ntoumanis, N., Duda, J. L., & Vansteenkiste, M. (2011). Goal striving, coping, and
840 well-being: A prospective investigation of the self-concordance model in sport. *Journal of*
841 *Sport & Exercise Psychology*, 33, 124–145. <https://doi.org/10.1123/jsep.33.1.124>
- 842 Stander, F., Rothmann, S., & Botha, E. (2017). Pathways to flourishing of athletes: The role of
843 team and individual strength use. *South African Journal of Psychology*, 47, 23-34.
844 <https://doi.org/10.1177/0081246316649095>
- 845 Sundgot-Borgen, J. & Torstveit, M. K. (2004). Prevalence of eating disorders in elite athletes is
846 higher than in the general population. *Clinical Journal of Sport Medicine*, 14, 25–32.
847 <https://doi.org/0.1097/00042752-200401000-00005>
- 848 Swann, C., Moran, A., & Piggott, D. (2015). Defining elite athletes: Issues in the study of expert
849 performance in sport psychology. *Psychology of Sport and Exercise*, 16, 3-14.
850 <https://doi.org/10.1016/j.psychsport.2014.07.004>
- 851 Thorne, S. (2004). Commentary by Thorne. *Western Journal of Nursing Research*, 26, 104–106.
852 <https://doi.org/10.1177/0193945903259463>
- 853 Thorne, S. (2008). *Interpretive description*. Left Coast Press.
- 854 Thorne, S. (2016). *Interpretive description: Qualitative research for applied practice*. Routledge.
- 855 Thorne, S., Kirkham, S.R. and O'Flynn-Magee, K. (2004). The analytic challenge in Interpretive
856 Description. *International Journal of Qualitative Methods*, 3, 1-11.
857 <https://doi.org/10.1177/160940690400300101>
- 858 Van Raalte, J. L., Cornelius, A. E., Andrews, S., Diehl, N. S., & Brewer, B. W. (2015). Mental
859 health referral for student-athletes: Web-based education and training. *Journal of Clinical*
860 *Sport Psychology*, 9, 197–212. <https://doi.org/10.1123/jcsp.2015-0011>
- 861 World Health Organization. (2004). *Promoting mental health: Concepts, emerging evidence,*
862 *practice*. Geneva: WHO.