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2 × 2 MODEL OF PERFECTIONISM AND YOUTH SPORT

1 The 2 × 2 model of perfectionism and youth sport participation: A mixed-methods approach

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Abstract

Objectives: Research demonstrates that four subtypes of perfectionism from the 2 × 2 model are associated with different youth sport experiences. This study provided the first exploration of the experiences of youth sport participants exhibiting different subtypes of perfectionism using mixed-methods.

Design: A two-stage, mixed-methods, approach was adopted (quantitative identification then qualitative data collection).

Method: In stage one (quantitative identification), 192 females enrolled in school- or community-based sport groups (M age = 13.91; SD = .90; range 12 to 16 years) completed a domain-specific perfectionism instrument (Sport-MPS-2) to identify participants prototypical of the four subtypes of perfectionism. In stage two (qualitative data collection), 19 prototypical participants (M age = 13.74; SD = .65; range 13 to 15 years) described their experiences of their youth sport involvement. One focus group (n = 4 to 5 per group) and one follow-up individual, semi-structured, interview (n = 4 in total) per subtype were conducted.

Results: Thematic analysis revealed that the meaning youth sport participants gave to their sport involvement (i.e., goals, values, and purposes) and the features of the social-environment they perceived to be important differed between the four subtypes of perfectionism. For the “pure PSP” and “mixed perfectionism” subtypes, sport was a time to shine and experience success. For the “non-perfectionism” and “pure ECP” subtypes, sport was a place to make friends and belong. Participants from all four subtypes described the importance of the coach and peers, with some groups identifying different preferred roles for the coach in terms of type and amount of involvement.

Conclusions: Youth sport participants exhibiting different subtypes of perfectionism vary in their experiences of youth sport. Practitioners working with young people in sport should consider these differences so to better understand and improve youth sport experiences.

Keywords: qualitative; personality; motivation; parents; peers; coaches

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42 Participation in youth sports can afford young people many performance, physical
43 health, and psychosocial benefits (e.g., Weiss, 2016). For instance, young people can develop
44 motor skills, experience enhanced physical and psychological well-being, and build
45 friendships and good moral character (e.g., Weiss, Kipp, & Bolter, 2012). Although
46 participating in sports offers a range of desirable outcomes, this is not the case for all
47 participants; sport can also be a source of negative experiences and undesirable outcomes
48 (e.g., Fraser-Thomas & Côté, 2009). For example, long-lasting physical injuries, disordered
49 eating, interpersonal difficulties, and morally questionable behaviors are also evident in youth
50 sports (e.g., Martin, Gould, & Ewing, 2017). Whether sport is a positive, negative, or mixed
51 experience for young people, and what young people come to understand about their own
52 experiences, is known to be determined by a complex set of personal and contextual factors
53 that collectively shape sport as a social domain (Roberts, 2012). Research dedicated to this
54 topic seeks to identify what personal and contextual factors are most important and the ways
55 in which these factors act upon one another. We do so in the current study by focusing on
56 whether different subtypes of perfectionism are associated with different experiences of youth
57 sport.

58 **Multidimensional perfectionism and the 2 × 2 model in sport**

59 Perfectionism is a multidimensional personality characteristic that involves setting and
60 striving for exceedingly high standards of performance accompanied by harsh critical
61 evaluations (Frost, Marten, Lahart, & Rosenblate, 1990). Several models and measures are
62 used to study perfectionism. However, perfectionism can be considered to have two broad
63 dimensions; personal standards perfectionism (PSP) (also referred to as perfectionistic
64 strivings) and evaluative concerns perfectionism (ECP) (also referred to as perfectionistic
65 concerns). PSP involves “a self-oriented tendency to set highly demanding standards and to
66 strive for their attainment” (Gaudreau & Antl, 2008, p. 357). Conversely, ECP “entails a

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67 socially prescribed tendency to evaluate oneself harshly, to doubt one's capacity to bring
68 about desired outcomes, and to perceive that others require perfection from oneself"
69 (Gaudreau & Antl, 2008, p. 357).

70 Although initially research focused on examining these dimensions independently,
71 more recently researchers have begun to examine combinations of these two dimensions.
72 This approach was formalized by Gaudreau and Thompson (2010) in the form of a 2 × 2
73 model of perfectionism, which includes four subtypes (or within-person combinations) of
74 perfectionism. As outlined by Gaudreau and Thompson (2010), the first subtype of
75 perfectionism is termed "non-perfectionism" and is characterized by low or no personal
76 orientation towards perfectionistic standards and no sense of perceived pressure from others
77 to pursue perfectionistic standards (low PSP/low ECP). The second subtype is "pure PSP" and
78 is characterized by holding perfectionistic standards that are derived solely from the self (high
79 PSP/low ECP). The third subtype is "pure ECP" and is characterized by the pursuit of
80 perfectionistic standards derived from pressures in the social-environment (low PSP/high
81 ECP). The fourth subtype is "mixed perfectionism" and is characterized by perceived pressure
82 from significant others to strive for perfection but also personal adherence to perfectionistic
83 standards (high PSP/high ECP).

84 The 2 × 2 model includes hypotheses that propose differences between the four
85 subtypes based on concepts such as internalization, motivation regulation, and person-
86 environment congruence (see Gaudreau, 2016). Hypothesis 1 offers three competing
87 assertions that pure PSP will either be associated with better (H1a), poorer (H1b), or no
88 different (H1c) outcomes compared with non-perfectionism. Hypothesis 2 (H2) asserts that
89 non-perfectionism will be associated with better outcomes compared to pure ECP. Hypothesis
90 3 (H3) asserts that mixed perfectionism will be associated with better outcomes compared to

91 pure ECP. Finally, hypothesis 4 (H4) asserts that pure PSP will be associated with better
92 outcomes than mixed perfectionism.

93 Gaudreau (2016) recently reviewed research examining the 2 × 2 model in sport and
94 dance. Seven studies were considered in Gaudreau's review (Cumming & Duda, 2012;
95 Crocker, Gaudreau, Mosewich, & Kljajic, 2014; Gaudreau & Verner-Filion, 2012; Hill,
96 2013; Hill & Davis, 2014; Mallinson, Hill, Hall, & Gotwals, 2014; Quested, Cumming, &
97 Duda, 2014). These studies included predominantly adult sport participants ($k = 2$), youth
98 sport participants ($k = 2$), youth dancers ($k = 2$), and adult coaches ($k = 1$), and a range of
99 outcomes. Of these outcomes, some could be considered indicative of more positive
100 experiences among athletes and dancers (e.g., positive affect, intrinsic motivation, and
101 physical self-worth) and other outcomes indicative of more negative experiences (e.g.,
102 negative affect, fear of failure, and burnout). For each study, Gaudreau calculated effect sizes
103 and demonstrated that H1a was supported more often than H1b (89% of the time). H2 and H4
104 were supported the most (supported 97% of the time). Finally, H3 was supported the least
105 (80% of the time) with the notable exceptions being two studies in dance in which mixed
106 perfectionism was associated with worse outcomes when compared to pure ECP (see
107 Cumming & Duda, 2012; Quested, Cumming, & Duda, 2014). Overall, then, research has
108 generally provided support for the 2 × 2 model in terms of understanding differences in sport
109 experiences.

110 **Perfectionism in sport and qualitative research methods**

111 One feature of all studies examining the 2 × 2 model is that they have exclusively
112 relied on quantitative methods. Quantitative research methods have enabled the hypotheses of
113 the 2 × 2 model to be probed in a way that they can be supported (or contradicted) with some
114 degree of certainty. However, solely relying on such methods has the potential to produce an
115 artificial, static, and limited view of individuals' experiences (Cohen, Manion, & Morrison,

116 2007). This is because quantitative research methods can be mechanistic and reductive when
117 attempting to understand the thoughts, feelings, and behaviors of individuals (Cohen et al.,
118 2007). Sport is a particularly complex setting and the experiences of athletes change over time
119 and contexts. In this regard, qualitative research methods are well suited to studying such
120 complexity and can offer a broader perspective on how and why phenomena might occur
121 (Sparkes & Smith, 2014). In context of perfectionism specifically, qualitative research
122 methods offer an alternative means of exploring the concept of perfectionism and an
123 opportunity to challenge (or affirm) the tenets of current models, here the 2 × 2 model (Hill,
124 Witcher, Gotwals, & Leyland, 2015).

125 Three studies have used qualitative research methods to explore perfectionism in sport
126 so far (Gotwals & Spencer-Cavaliere, 2014; Hill et al., 2015; Sellars, Evans, & Thomas,
127 2016). Of the three studies, one study opted to interview self-identified perfectionists without
128 any quantitative method (Hill et al., 2015). In total, 15 high-level athletes and performing
129 artists (dancers and musicians) were recruited and interviewed regarding their perceptions of
130 perfectionism. Of these participants, the majority were athletes who had competed or were
131 currently competing at International level (three males and four females; *M* age = 32 years;
132 range = 29 to 39 years). Using thematic analysis, drive, accomplishment, and strain emerged
133 as the main descriptors of how participants perceived perfectionism and its influence on their
134 lives. Drive characterized the participants' view that high standards of achievement and
135 performance are central to being a perfectionist. Accomplishment and strain highlighted the
136 specific benefits and drawbacks that participants perceived of being a perfectionist.

137 Like the intentions of the current study, the remaining two studies adopted specific
138 models of perfectionism and quantitative and qualitative methods so to explore the
139 experiences of specific groups of perfectionists. In the first study, Gotwals and Spencer-
140 Cavaliere (2014) used scores on Gotwals and Dunn's (2009) Sport Multidimensional

141 Perfectionism Scale-2 (Sport-MPS-2) to identify “healthy” (high PSP/low ECP) and
142 “unhealthy” (high PSP/high ECP) perfectionists among intercollegiate athletes. Seven healthy
143 perfectionists and 11 unhealthy perfectionists were subsequently interviewed regarding their
144 perspectives on achievement (M age = 21.46 years; SD = 1.96). They found the experiences
145 associated with perfectionism differed depending upon the dimensions and/or combinations of
146 perfectionism dimensions that prevailed among the athletes. Specifically, when healthy
147 perfectionism was identified, athletes were driven to accomplish reasonable and self-referent
148 goals, had better coping skills, and felt socially supported. By contrast, when unhealthy
149 perfectionism was identified, athletes reported being motivated to accomplish unreasonable
150 goals, were preoccupied with winning and avoiding failure, had worse coping skills, and
151 experienced greater interpersonal pressure.

152 In the second study, Sellars et al. (2016), like Gotwals and Spencer-Cavaliere (2014),
153 used scores on the Sport-MPS-2 to identify perfectionistic athletes. They then conducted
154 interviews solely with athletes reporting unhealthy perfectionism (high PSP/high ECP). Their
155 findings were similar to Gotwals and Spencer-Cavaliere’s (2014) in that these athletes were
156 highly motivated to reach lofty personal goals, had a fear of failure, and keenly felt pressure
157 from significant others. The findings provided additional insights in terms of athletes feeling
158 dissatisfied with current goal progress, being overly critical of mistakes, and employing a
159 range of skills to cope with their perfectionism (e.g., pre-performance routines). Taken
160 together, the findings of Gotwals and Spencer-Cavaliere (2014) and Sellars et al. (2016)
161 illustrate how groupings of perfectionistic athletes differ in various ways, including
162 motivational underpinnings and coping behaviors that contribute to their experiences in sport.

163 **The present study**

164 Despite these qualitative studies offering a broader, and arguably deeper,
165 understanding of perfectionism and experiences in sport, there are two notable limitations.

166 The first limitation is that none of the qualitative studies explored the personal accounts of
167 sport participants in terms of the 2 × 2 model. Rather, these studies adopted no theoretical
168 perspective (i.e., Hill et al., 2015) or adopted other theoretical approaches (i.e., tripartite
169 model of perfectionism; Gotwals & Spencer-Cavaliere, 2014; Sellars et al., 2016). Therefore,
170 while evidence using quantitative methods has begun to accrue to support the use of the 2 × 2
171 model, it has yet to be explored using qualitative research methods. The second limitation is
172 that all three studies have focused on the perspectives of perfectionistic adult sport
173 participants and not youth sport participants. This is important because youth sport
174 participants operate in sport domains that are shaped differently to adult sports and so require
175 their own consideration (Merkel, 2013). In addition, perfectionism and its effects are thought
176 to change across the adolescent developmental period and so this will likely render the
177 experiences of perfectionism in youth sport different to adult sport.

178 With these limitations in mind, the purpose of the current study was to identify youth
179 sport participants prototypical of the four subtypes of perfectionism in the 2 × 2 model using
180 quantitative research methods and, then, to explore their experiences of their youth sport
181 involvement through use of qualitative methods. The study had the potential to satisfy two
182 important aims: (i) to explore the 2 × 2 model of perfectionism in a novel manner, and (ii) to
183 provide novel insights into the sport experiences of youth participants who differ in
184 combinations (or subtypes) of perfectionism.

185 **Method**

186 **Methodology**

187 Consistent with previous studies examining specific models of perfectionism (e.g.,
188 Gotwals & Spencer-Cavaliere, 2014), a two-stage, mixed-methods approach was adopted. In
189 stage one (quantitative identification) participants completed the Sport-MPS-2 (Gotwals &
190 Dunn, 2009) to identify individuals whose PSP and ECP scores reflected the four subtypes of

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191 perfectionism from the 2 × 2 model. In stage two (qualitative data collection), focus groups
192 were used to explore the sport experiences of participants deemed to reflect/be prototypical of
193 the four subtypes of perfectionism. Focus groups were selected as they enable participants to
194 share their ideas and engage in conversation with their peers. Such interactive discussions
195 enabled both individual and collective insights into their sport experiences to be gained and
196 facilitated the identification of similar and different experiences (Kitzinger, 2005; Smith &
197 Sparkes, 2017). However, a limitation of focus groups is the public nature of the data
198 collection (Sparkes & Smith, 2014). Thus, to gain further insights into experiences and
199 clarification of the ideas that may be indicative of the socially constructed experiences of
200 individuals in each of the four subtypes of perfectionism, an individual, semi-structured,
201 follow-up interview was conducted with one participant from each group. The participant
202 selected was the individual considered the most prototypical of their subtype of perfectionism,
203 based on their scores for PSP and ECP and/or their focus group responses (as detailed in the
204 procedure). Overall, the two-stage, mixed-methods approach had a greater focus on the
205 qualitative over quantitative data. The approach was adopted because it allowed for a detailed
206 description of the experiences of numerous individuals representative of the four subtypes of
207 perfectionism in the 2 × 2 model of perfectionism (Sparkes, 2015; Sandelowski, 2000).

208 Overall, the study was approached from an interpretivist perspective, underpinned by
209 epistemological social constructivism (knowledge is believed to be socially constructed) and
210 ontological relativism (reality is multifaceted and subjective) (Sparkes & Smith, 2014). Such
211 an approach encouraged the emphasis of qualitative over quantitative data. The quantitative
212 data was collected solely to ensure that we accounted for the experiences of individuals who
213 fall within each of the four subtypes of perfectionism in the 2 × 2 model of perfectionism. The
214 qualitative data (focus groups and interviews) enabled us to gain detailed insights into the

215 individual experiences of participants, while understanding how these experiences are similar
216 and different to each other and influenced by social expectations and experiences.

217 **Participants**

218 Following institutional ethical approval, 192 females taking part in school- or
219 community-based sports (M age = 13.91; SD = .90; range 12-16 years) were recruited for the
220 quantitative identification stage. Only adolescent females were recruited because they are
221 known to have different experiences to adolescent males in youth sport (O'Sullivan &
222 MacPhail, 2010) and the focus here was on identifying similarities and differences in
223 individuals' sport experiences based on subtypes of perfectionism rather than gender.
224 Participants had been playing their sport for an average of 3.40 years (SD = 2.36) and
225 trained/played for an average of 2.87 hours per week (SD = 2.35). Most participants were
226 involved in their sport at club level and considered their participation very important
227 compared to other activities in their lives (M = 6.49; SD = 1.68; 1 = *not at all important* to 9 =
228 *extremely important*). In the qualitative data collection stage, participants were 19 females (M
229 age = 13.74; SD = .65; range 13-15 years) purposefully sampled from the quantitative stage
230 because they met the criteria (as detailed in the procedure) to be considered prototypical of
231 one of the four subtypes of perfectionism (see Table 1). Participants had been playing their
232 sport for an average of 2.56 years (SD = 1.90) and trained/played for an average of 2.31 hours
233 per week (SD = 1.60). Their participation in sport was also considered very important (M =
234 7.16; SD = 1.50).

235 **Procedure**

236 **Quantitative identification.** Sport-MPS-2 (Gotwals & Dunn, 2009) responses were
237 subjected to a missing value analysis, which revealed that there were 163 complete cases and
238 29 cases with missing data. The missing data cases had 24 unique patterns and so data was
239 deemed missing in a non-systematic manner. Due to having > 5% missing data (i.e., the

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240 equivalent of more than 2 items missing; see Tabachnick & Fidell, 2007), five participants
241 were removed. The mean of the missing item subscale was used to impute values for the
242 remaining missing data cases (see Graham, Cumsille & Elek-Fisk, 2003). To ensure that
243 participants could verbally discuss their sport experiences, 17 were removed for indicating
244 that English was not their first spoken language, one further participant was removed for not
245 reporting their age, and 10 participants were removed for perceiving their sport involvement
246 to be less than moderately important (i.e., a score of < 4 on a 9-point scale). As no univariate
247 and multivariate outliers were detected, the final sample for the quantitative identification
248 phase comprised 159 participants (M age = 13.85; SD = .90; range 12-15 years).

249 Following computation of PSP (personal standards subscale) and ECP (concern over
250 mistakes subscale added to doubts about actions subscale) composite scores (i.e., total PSP
251 and total ECP), a median-split was conducted to categorize participants into groups reflective
252 of the four subtypes of perfectionism from the 2 × 2 model. This is consistent with extant
253 research adopting variable-centered approaches to form high and low perfectionism groupings
254 (e.g., Hill, Hall, Duda, & Appleton, 2011). Based on this approach and the withdrawal of one
255 school-based sport group due to the departure of their gatekeeper, 86 participants were
256 available for participation in the qualitative data collection stage: 26 non-perfectionism (M
257 PSP = 1.97, SD = .50; M ECP = 3.90, SD = .80), 15 pure PSP (M PSP = 3.34, SD = .42; M
258 ECP = 4.24, SD = .64), seven pure ECP (M PSP = 2.43, SD = .23; M ECP = 5.77, SD = .83),
259 and 38 mixed perfectionism (M PSP = 3.42, SD = .52; M ECP = 6.39, SD = .84) participants.
260 A one-way ANOVA with Scheffe post-hoc tests revealed that there was a statistically
261 significant difference between the four subtypes in terms of PSP, $F(3, 82) = 54.16, p < .05,$
262 $\eta^2 = .67$ and ECP, $F(3, 82) = 59.83, p < .05, \eta^2 = .69,$ consistent with how the four subtypes
263 of perfectionism should have high and/or low levels of PSP and ECP.

264 **Qualitative data collection.** One focus group, involving four to five participants, was
265 conducted for each of the four subtypes of perfectionism (see Table 1). Focus groups ranged
266 from 34-43 minutes ($M = 39$ minutes; $SD = 4.50$). To help participants to feel comfortable
267 discussing their experiences each focus group comprised participants from the same school-
268 or community-based sport group. Participants were also reflective of the same subtype of
269 perfectionism so to create a homogeneous group and allow for any contrasts in sport
270 experiences between subtypes to be observed (Hennessy & Heary, 2005; Morgan, 1997).

271 Each focus group involved the same moderator (lead author) and a note taker. A semi-
272 structured questioning route with opening, introductory, transition, key (e.g., who, if anyone,
273 influences how much you like participating in your sport or not?), and ending questions was
274 employed (see Appendix 1). The questioning route was created and refined based on extant
275 qualitative research regarding the quality of youth sport experiences (e.g., Holland,
276 Woodcock, Cumming, & Duda, 2010), a review by a ‘critical friend’ (a researcher who had
277 previously conducted focus groups with youth sport participants), and a pilot focus group with
278 five 13-year-old female participants from the same school-based sport group. The pilot focus
279 group proved useful in terms of refining the questioning route, establishing the typical
280 duration of a focus group, and allowing the moderator and note taker to become familiar with
281 the questions (Morgan, 1997). Following the pilot, minor changes to the order of questions
282 were made and a question regarding future sport intentions was added.

283 To explore some of the concepts that emerged from the focus groups in greater depth,
284 an individual semi-structured follow-up interview was conducted with the one participant,
285 from each of the four focus groups, that was considered the most prototypical of their subtype
286 of perfectionism. Consistent with the interpretivist paradigm, interviews helped ensure that
287 the experiences of individuals (as well as the collective group) were fully explored. A
288 participant was considered most prototypical if they met the criteria of having a PSP and ECP

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289 score one standard deviation above or below the mean, dependent upon the subtype being
290 examined (e.g., mixed perfectionism involves $zPSP \geq 1$ and $zECP \geq 1$), and/or their focus
291 group responses were deemed typical for the subtype. This is consistent with the manner in
292 which the 2 × 2 model is typically examined (Gaudreau & Thompson, 2010). In total, four
293 individual follow-up interviews (one per subtype of perfectionism) were conducted (see Table
294 1). Interviews ranged from 21-33 minutes ($M = 27$ minutes; $SD = 5.00$). This excluded a 10-
295 minute re-familiarization period with participants, which took place prior to the interviews.

296 The same interviewer (also the focus group moderator) conducted all four follow-up
297 interviews. There was an introduction, main discussion, and a closure period. For the main
298 discussion, a semi-structured interview guide informed by Gotwals and Spencer-Cavaliere
299 (2014) was used because their study yielded insights into personal (e.g., perceptions of
300 success) and social-environment factors (e.g., role of coaches, parents, and teammates) that
301 had been identified as important by participants in the focus group stage (see Appendix 2).
302 Prompts were also employed to follow-up on responses. After each interview, the interviewer
303 documented her own reflections.

304 **Data analysis**

305 Each of the focus groups and individual interviews were audio-recorded and transcribed
306 verbatim. Participants were given pseudonyms to help ensure anonymity. Thematic analysis,
307 based on Braun and Clarke (2006), was then used to understand the sport experiences of
308 participants deemed prototypical of the four subtypes of perfectionism. For familiarization,
309 transcripts were read and re-read by the lead author and the second author. In the coding
310 phase, the lead and second author individually generated succinct codes for a focus group
311 transcript immediately followed by the corresponding individual interview transcript for each
312 subtype of perfectionism. The codes and collated data for each subtype of perfectionism were
313 then examined by the lead author to identify broader patterns of meaning (candidate themes).

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314 The candidate themes were reviewed and refined through further comparing against the coded
315 data and entire data-set (Braun & Clarke, 2013). As such, abductive analysis was used
316 throughout. To supplement this phase, the lead author created a data matrix of codes and
317 themes for each of the subtypes of perfectionism, which were reflected on with the second
318 author (see Miles & Huberman, 1994). Finally, to define the themes, a narrative account of
319 each theme was produced by the lead author and an informative name was determined with
320 the second author throughout the write-up as clear interpretations of the data occurred.

321 **Methodological rigour**

322 All eight key markers outlined by Tracy (2010) were considered to ensure
323 methodological rigor. First, the topic appears worthy and of significant contribution because
324 the 2 × 2 model of perfectionism is the most current conceptualization of perfectionism and
325 perfectionistic youth sport participants' views on their sport experiences have yet to be
326 elicited through qualitative research methods. The study was also designed in a manner that
327 should satisfy rich rigor as a variety of data collection methods (focus groups and interviews)
328 were employed to gain enough data to address the research question. In addition, the lead
329 author immersed herself in the context of the participants on multiple occasions to try and
330 ensure enough time was spent gathering the data. Participants were also selected based on
331 being at a stage of development where they should be able to discuss their sport experiences
332 in-depth. The study demonstrates sincerity as each step of the method and any challenges
333 faced when gathering and analyzing the data have transparently been documented. The
334 research is marked by thick description and the showing rather than telling of the participants'
335 experiences through inclusion of focus group exchanges between participants and individual
336 participant quotes. The study should resonate with adolescent female sport participants
337 exhibiting differing combinations of perfectionism dimensions and their coaches; potentially
338 influencing coach practice. Ethically, the study gained institutional ethical approval for

339 working with human subjects. Finally, there is meaningful coherence as the study set out to
340 explore the tenets of the 2 × 2 model of perfectionism in a more innovative manner and to
341 provide novel insights into the sport experiences of youth participants who differ in
342 combinations (or subtypes) of perfectionism dimensions. Through use of quantitative, and in
343 particular, qualitative research methods and analysis, these two objectives were met.

344 **Results**

345 Data analysis highlighted differences between the four subtypes of perfectionism in
346 terms of (i) the meaning youth sport participants gave to their sport involvement. That is, the
347 goals, values, and purposes participants expressed regarding sport. (ii) The environment that
348 they perceived could support or detract from them obtaining the outcomes they desired from
349 sport. The following sections provide a description of these two overarching themes for each
350 subtype of perfectionism. As a consequence of concurrently analyzing the focus group and
351 individual interview transcript data for each of the four subtypes of perfectionism, the
352 findings of both are interwoven in the following sections. To enable the voice of the
353 participants to be heard above and beyond pre-existing literature, the results are presented
354 devoid of links to the perfectionism and youth sport literature. Rather, the findings are
355 examined in the context of extant theory and research within the discussion.

356 **Non-perfectionism**

357 **Sport: An enjoyable hobby for friendship and learning.** For these participants,
358 netball was one of several hobbies they engaged in, as Erin said, “I feel netball is a big part of
359 my life” but she also stated that, “I personally have other hobbies.” Netball seemed to be
360 important to participants for social and personal reasons, as Erin also expressed, “I think
361 netball is a really great like social way of making friends and meeting new people but it’s also
362 really good exercise.” Although netball was important for this group, it was not necessarily

363 the hobby they most valued, as Julia articulated, “Sometimes it’s like, when I have a match I
364 can’t drop everything to play netball.”

365 The social importance of netball initially appeared to be related to providing
366 opportunities for the participants to be with, and make friends, as Lorna said, “You make
367 loads of friends from it [netball].” However, the social value of netball was not restricted to
368 spending time with friends, but also having an opportunity to be part of a team that comprised
369 friendly and similar others. Erin explained, “I think mostly people are the same... so if you all
370 feel good afterwards then that means you’ve worked well as a team, used teamwork skills, so
371 everybody’s been quite encouraging and happy and things.” Further to social opportunities,
372 this group valued their participation in netball because it provided them with an opportunity to
373 develop, learn, and test their skills, as Erin said, “It’s fun because we do different exercises to
374 test different skills ... dodging and stuff ... and then you play a game and you use that in your
375 game and that shows how you can improve.”

376 In contrast to their focus upon learning and development, the participants appeared to
377 have limited regard for winning and losing as the following exchange shows:

378 Erin: ...I mean we finished last season quite positive where did we come second so that
379 was actually a big achievement for us because before we didn’t do.

380 Julia: Yeah we didn’t do that well.

381 Erin: But that proves that the training we’ve done has improved so that means if we’re
382 all dedicated players which I think most of us are with the training we have we can
383 always be improving and if not like coming third I’m not saying we have to like always
384 improve where we come just like noticing that we’re playing better.

385 Overall, opportunities to develop friendships and skills were especially important for
386 this group because they seemed to contribute to the overriding motive for participating in
387 netball, which was enjoyment. For example, Julia simply stated, “Netball is really fun to

388 play,” and Erin explained, “Well I said making new friends that’s good it makes you feel
389 happy... I like encouraging other people as well... and learning new skills.”

390 **An environment that enables non-perfectionists to enjoy sport as a hobby for**
391 **friendship and learning.** Several environmental influences supported or detracted from the
392 participants experiencing sport as an enjoyable hobby for friendship and learning. Perceptions
393 of coaches, parents, and peers were among the most prominent influencers. With regards to
394 coaches, having an understanding that sport was not the participants’ only hobby appeared
395 desirable. Julia said, “But Jill [coach] if you can’t play ‘oh don’t worry it’s fine’ she just says
396 ‘oh you can play next time’ like she doesn’t see it as a bad thing to do.” Coaches who did not
397 understand the girls’ competing priorities were seen as less desirable, as Erin explained,
398 “...matches are always on the days I have Spanish... and then if I say like ‘oh I’m going to
399 Spanish’ they [coaches] get really annoyed.”

400 When coaches adopted a more supportive approach, by offering instructional feedback
401 in a non-threatening manner and praising the girls, they seemed able to reinforce the
402 participants’ desire for improvement. This was clearly articulated by Erin, who said:

403 When you go wrong they [coaches] tell you how you can improve but they never shout
404 at you... Then when you do something right you get loads of praise and it makes you
405 feel good and it makes you keep going... so then you can improve that.

406 By being supportive of performance attempts and accepting of mistakes, a coach could further
407 support the value this group placed on developing their skills, as Julia said, “Yeah cos it’s like
408 when like you get encouraged like you think you can do it and then you can do it well...”

409 However, a coach could detract from the participants’ desire for improvement if they
410 expressed performance expectations or provided criticism. Such coach behaviours could
411 result in the girls withdrawing, as Julia shared:

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412 Like when we played for our other team... They were a bit strict like they expected you
413 to be... probably so much better than you actually like were... when you didn't really
414 know what to do in a situation and... they'd say 'oh no you shouldn't have done that'.

415 Parents and peers also played an important role in supporting the participants' desire for
416 improvement and reinforcing their confidence. For instance, discussing parents, Erin said:

417 Well it's good when your parents encourage you... you could see the massive
418 difference between how confident you'd be without it and with it so when they say like
419 'oh you played really well there' or even if you didn't play well they still pick up on the
420 positive things cos they're parents... but it also helps when they say how you can
421 improve... cos you think I know what I have to do now so I can play better.

422 Peers could also support participants' desire to demonstrate competence through personal
423 improvement by acting as a reference point for improvement. Erin explained:

424 We played a game the other week and we noticed loads of techniques that the other
425 team were using that we hadn't and it wasn't really... that we didn't enjoy the match
426 but it was more like you thought 'oh maybe we should do that'... and it kind of makes
427 you feel a little bit like 'oh we should train harder we should be learning those things'.

428 Although peers could support the meaning of sport for this group, they could also detract from
429 it. For instance, peers were perceived as preventing participants from having an opportunity to
430 demonstrate improvement if they behaved in an unfair manner or undermined sport being an
431 enjoyable and social endeavour, as Sonia, Erin, and Melanie discussed:

432 Sonia: Maybe when you're playing against like a rough team that's bad... they're
433 really, really rough and they like elbow you and trip you up, stuff like that.

434 Erin: Yeah people like it can be quite sneaky cos people can do things like small things.

435 Melanie: And get away with it.

436 Erin: ...and then you might say something but it doesn't change how you like you can't
437 change the score but you know you could have played better if that person wasn't there
438 distracting you.

439 **Pure personal standards perfectionism**

440 **Sport: A collaborative adventure to achieve team success.** For these participants,
441 emphasis was placed on netball being a collaborative team endeavour, as Gemma said that
442 she liked netball because, "I think just like the whole team thing and playing like together."
443 Collaborating with teammates seemed to be important to this group because it enabled them
444 to achieve success, as Ellie said, "you participate as a team... and motivate each other cos like
445 we all want to do well." Success appeared to manifest in working to the best of their abilities
446 together and winning as a team. Lydia explained, "...we play a match like we all try and do it
447 the best we can and it like pays off cos like all our matches so far we've had we've won so
448 we're doing pretty well."

449 As success was linked to working as a team, it was vital that all team members were of
450 a similar disposition, as Gemma explained, "Just like trying with all their effort and just
451 constantly running and jumping and not giving up and just trying to stay positive even if it
452 could be a bad situation." There was also a sense that teammates who did not put forth effort
453 to achieve team success were not tolerated by this group, as Gemma said, "...they
454 [teammates] don't try and that's like annoy like the rest of the team... it's like well everybody
455 else is putting in their best so why can't like you do the same." Such was the emphasis placed
456 on working well as a team that it appeared to underpin enjoyment. As Gemma said, "Just that
457 you're happy you played well you just feel like as a team you feel really like together and
458 happy and like you've really enjoyed it and you've done well."

459 However, it was not just working well as a team that contributed to enjoyment, as
460 Gemma also described, "like when we win I always really enjoy that especially the whole like

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461 winning with your friends as a team that's I really like the feeling of like well done and
462 things." Thus, enjoyment for this group was also located in winning as a team. When team
463 triumphs came against opponents that were perceived to be of higher ability and the girls had
464 worked well together, then enjoyment was even more pronounced:

465 Ellie: I enjoyed our match on Thursday.

466 *Focus group moderator: What was it about that that was good Ellie?*

467 Lydia: We won.

468 Ellie: Well I dunno I think it's quite nice because they're like a private school and really
469 posh and I think it's quite nice that like it doesn't really matter what facilities you have
470 we still beat them and also I quite liked it because we worked quite well as a team.

471 Lydia: Yeah we started to concentrate more.

472 ...

473 Ellie: Yeah and we were quite competitive, yeah but in a positive way.

474 Winning and losing were kept in perspective, however, as Ellie said:

475 ...we did like really well compared to previous years because we like practiced a lot and
476 quite a lot of the game we might have lost overall but we actually like won one half of it
477 and it was against teams like that we've always considered much better than us... it was
478 a good achievement.

479 When this group did achieve as a team, there was a sense of pride, as Gemma stated,
480 "...everyone proud that you've actually like achieved something." Similarly, if individuals
481 were recognised for the efforts that they put forth to do their best for the team this also evoked
482 feelings of pride and satisfaction, as Gemma explained, "...you get a feeling of like pride like
483 I was picked out of all these people, it just makes you feel quite good about yourself."
484 Although there was a sense that the girls in this group could take pride and satisfaction from
485 their endeavours, they could also be frustrated and disappointed with themselves if they did

486 not perform to their best. Imogen explained, "...when you get injured... it means that you
487 can't play the best that you could... so it's frustrating."

488 **An environment without critical evaluation.** Several factors were important for
489 supporting or detracting from participants being able to experience sport as an opportunity for
490 success through team collaboration. The two most prominent factors concerned the role of the
491 coach and perceptions of peers. In terms of the coach, this group seemed to require an
492 environment where they were setting the criteria for achievement, as Bryony said:

493 ...at [team] like if you want to change or you want to improve like your skills... if you
494 want like you don't have to do one set thing all the time and I like the freedom of that
495 like you can choose what you want to improve on.

496 The girls in this group also appeared most comfortable if their coach had limited expectations
497 of them, as Bryony expressed, "...I enjoy it at [team] a bit more because you get less kind of
498 like pressure on everything and it is a bit more enjoyable really because you're not yeah I
499 think a bit less is expected of you."

500 A coach who supported the girls' desire for collaborative team success by reinforcing
501 messages of trying their best and offering instructional feedback in a non-threatening manner
502 was also viewed positively. Imogen articulated this idea:

503 Well I like it cos our coach I feel like she knows us like inside out. She can have a joke
504 with us and kind of like have a laugh and stuff, but like she always wants us to like do
505 our best and stuff. And I like it cos like if you're a shooter she might say like if I shoot
506 she might say that was like rubbish or something cos she knows how I usually play and
507 like I understand then she'll tell me what to do next and she just like helps us all really.

508 In terms of peers, teammates could support this groups' desire to work well together as a team
509 by being encouraging, as Bryony and Ellie discussed:

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510 Bryony: Well if you're playing and like you do something good and then someone
511 cheers or whatever like you know like they think you're doing it well as well it feels
512 like you're being part of the team.

513 Ellie: Yeah like whenever you make an interception and like people shout at you well
514 done and whatever it kind of helps motivate you and feel like you're working as a team.
515 Peers could detract from netball being a collaborative endeavour, however, if they were
516 unfriendly or judgmental. As the girls discussed:

517 Lydia: I don't know it's like with trials like with the [academy] thing from in June...
518 and I've gotten into it before but this time I didn't get in and it was absolutely awful and
519 I hated it.

520 Ellie: I felt like everyone was like much better than me.

521 Imogen: It was so difficult.

522 Lydia: The girls that do it weren't very supportive. They were more... for themselves.
523 In addition, this group viewed peers who were thought to be elevating themselves above the
524 team and again were judgmental, negatively. Lydia explained, "Stevie was telling us all what
525 we could do better, the thing is she wasn't doing it in a nice way she was like 'I'm gonna tell
526 you all what you're doing wrong you need to do this.'"

527 **Pure evaluative concerns perfectionism**

528 **Sport: An opportunity to experience belonging, togetherness, and hide within a**
529 **crowd.** These participants placed considerable emphasis on sport providing an opportunity for
530 them to develop connections with others, as Bianca said she liked dance because, "...in dance
531 we work together cos we're in a group and so we're in a whole squad... so you get to work
532 with other people..." For this group, social connections appeared to be about more than just
533 working together and extended to feelings of belonging and togetherness, as Brooke said,
534 "...it's [rugby's] just fun cos we're all like a family..." Kiera reiterated this when she said,

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535 "...it's [netball's] kind of like... large community type thing and... everyone's just there to
536 help you and give you encouragement."

537 There seemed to be a protective function associated with belonging to a group of equal
538 and supportive peers, as Keira explained, "...like you don't get judged for it like cos we all
539 like do the same... and like if you make a mistake it doesn't matter cos everyone's there to
540 support you." Being aware of other people's judgements was a recurring concern for this
541 group but feeling strongly connected with and supported by peers appeared to waylay some of
542 these worries. As Kiera and Maisie discussed:

543 Kiera: Like the first time we played in teams against each other I was panicking quite a
544 lot because I thought 'oh if I do a mistake then like will everyone hate me or something'
545 but like now when we're playing teams against each it's not like that at all like
546 everyone's really supportive and like even if you make a mistake it doesn't matter.

547 Maisie: Like yeah I thought that as well like when you first started going to the matches
548 and everything it was kind of like you wanted to like make sure you got it right... but
549 then like as it got on it was just really enjoyable going like on the bus and then coming
550 back and it never really mattered that much cos we were all like friends and we were
551 helping each other.

552 It was the feeling of belonging and not being exposed and judged that seemed to
553 underpin enjoyment for this group, as Maisie said, "I just like netball cos you're kind of like
554 one of the team... you do just kind of feel less like judged and you can just have fun and work
555 as you know like a team and work with your friends. Brooke went on to say, "I just like how
556 we can all be different but all like do the same thing like we can all like I dunno we can all
557 help each other out and not like be bothered by whatever goes on or anything, I find it fun,
558 different." As the enjoyment for this group was in belonging with others and not being
559 evaluated, winning was not a valued objective for these girls. Beatrice articulated this point

560 when she said, “Well I just don’t think it’s all about the winning I don’t really care about the
561 what you get I just like doing it [dance].”

562 **A judgement and challenge-free environment.** Many personal and environmental
563 factors supported or detracted from sport being valued as a social opportunity free from
564 judgement for this group. This group seemed to require a sense of agency and control over
565 their sport involvement as this could temper concerns over being evaluated, as Kiera said,
566 “Like so if like you’re there [at lunchtime practice] voluntarily like there’s not as much like
567 pressure to do well because like you’re going voluntarily.” Brooke reiterated the preference
568 for an environment free from judgement of others, such as teachers/coaches, when she said:

569 Well on Tuesday some of our rugby like girls we went over to [another school] and
570 started training there like by ourselves without a teacher or anything and it was just fun
571 and like how we helped each other out like some of us weren’t good at kicking but the
572 people that were good at kicking like taught us how to do it like properly and stuff.

573 Teachers/coaches supported the girls’ values for social connection by being friendly,
574 supportive, or tolerant of mistakes, as Bianca described, “...our teacher ...she treats she
575 doesn’t treat us like little kids and students she treats us like friends she’s dancing with so that
576 makes it a lot it makes more fun...” In contrast, parents did not seem to be as instrumental in
577 supporting the girls’ desire for togetherness, as Bianca simply stated, “Well when they
578 [parents] come and watch I guess it’s nice to hear them say you danced well...” Parents
579 appeared more influential in detracting from the girls’ desire to be social and participate
580 devoid of evaluation. The way they did this was by having high expectations or being
581 unsupportive, as Brooke said:

582 My dad like is a really like he just pushes you and cos he was like he used to be on one
583 of the biggest like rugby teams he used to be like really known and then he just like tries

584 to push me into doing well like trying to get me more out there into the rugby kind of
585 thing and it just gets really really stressful.

586 The most prominent environmental factor that influenced whether this groups'
587 meaning of sport was supported or not were their peers. As Bianca explained:

588 If they're [peers] nice to you then it makes you want to be around them more ... in other
589 sports that I've played I have noticed people who get competitive makes you want to
590 play less because they kind of ruin the sport and ruin the fun because they care too
591 much for what they're gaining rather than actual taking part which kind of ruins it.

592 When unpacking what overly competitive peers meant, Kiera said:

593 Like you're playing and if you like miss with the pass or say if you like drop it when
594 like you catch it and you drop it and then the other person gets it and everyone just
595 starts having a go.

596 **Mixed perfectionism**

597 **Sport: A time to shine and affirm self-worth.** For these participants, sport was an
598 arena in which they could feel competent, as Caitlin said, "Well I'm usually quite confident in
599 sport... just kind of like having that reassurance that you are like good at something like just
600 find that comfort within like sports." Other domains in their lives did not seem to afford them
601 the same opportunity to feel confident, as Bridget said, "...when I'm at school I don't feel like
602 as confident but then when I'm at dance I'm confident and just a lot different and free."

603 Ultimately, these girls felt that through sport they could be themselves, as Caitlin said, "It's
604 [sport is] just reassuring and something where you can just be yourself..."

605 Perceptions of competence appeared to be linked with performing to the best of their
606 abilities, as Eden said, "If you've played a good game if you feel like you've done all you can
607 even if you didn't win as long as you've done all you can you've played at your best."

608 Competence judgements also involved winning, as Hannah said, "Well you just want to play

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609 your best and just focus on the game and nothing else so if you play your best you're probably
610 gonna win." Given the value this group placed on feeling competent, self-criticism and
611 negative emotions were invoked when they did not perform to their best, as Caitlin said:

612 It's quite frustrating when like you can't do something like you try quite a few times
613 and it's not going well for you...it gives you that feeling like you feel like you've just
614 let yourself down a bit...

615 Being recognised by peers as being competent was a valued outcome for this group
616 because it seemed to hold positive implications for their self-worth, as Danielle said:

617 ...I do get into it a lot in rounders but cos it's sort of like I sort of like the fact that it's
618 sort of like depending on you to... score and get a rounder so it sort of like drives you
619 more to like do well in the sport...

620 There was a balancing act, however, between being recognised for their competence and not
621 feeling responsible when their personal contributions were not effective. Further, the girls
622 expressed concerns over having their competence negatively evaluated by others and letting
623 others down. As Caitlin said:

624 Well like at school it might be like my friends or like peers who like might be expecting
625 you to be good at that and then if I'm not... I'm not like sure how they feel but it might
626 be like disappointing or like might be unsure of how good I actually am at that sport.

627 Learning from others and for themselves was seen as vital to self-advancement and
628 being able to demonstrate their ability. This was clearly illustrated in the following exchange:

629 Hannah: Well you get to meet new people as well and you hear about how they play and
630 you also see their tactics and then you can use the tactics to make your team better.

631 Bridget: Yeah you hear like other people's stories of like what they use to help them so
632 you can sort of go off that and help yourself by hearing what they've said.

633 When peers demonstrated superior ability to these girls, they viewed this in a dichotomous
634 manner. On the one hand, it was viewed as another opportunity to help them improve and
635 become better than others. On the other, it made them feel like they lacked competence and
636 this invoked self-criticism, as Eden said, “It’s usually like when I can’t do something that
637 everybody else can and so I feel like I’m letting myself down cos I know I can probably do it
638 cos everybody else can do it but then I just feel bad cos I’ve let myself down...”

639 Overall, demonstrating their best in sport, relative to themselves or others, was related
640 to some feelings of enjoyment, as Eden said, “I think I would feel like I’d achieved something
641 because obviously you’ve done well in your sport you feel proud of yourself that you’ve gone
642 and done something well and you can sort of feel good about it.”

643 **A competence-supportive environment/an environment for success.** Many important
644 influences could support or detract from participants’ experiences of sport as an opportunity
645 to develop and demonstrate competence. First, these girls seemed to require some clear
646 success criteria against which their competence would be judged, as Bridget said:

647 ... It sort of like puts me off because like when my dance teacher is like giving me
648 something to aim for then I feel fine and I’ve got something to go for but when like
649 they’re just watching me and not telling me anything I sort of feel like I don’t know
650 anything and any of my routines.

651 When judgements were perceived as unfair (e.g., incongruent feedback with the criteria for
652 success), offered by peers of perceived lesser status (e.g., those not as invested or as capable),
653 or were unexpected, this ran counter to the value this group placed on demonstrating
654 competence, as Eden said:

655 I usually don’t like it when they [coaches] sort of repeat on something but I already
656 know how to do it just I’ve made a mistake and they think that I can’t do it and are
657 telling me how to do it again...

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658 Bridget further illustrated this idea when she said, “Well it’s kind of annoying when like you
659 feel like you’ve done something good but then they [teacher/coach] pick up on something that
660 you don’t realise.”

661 The coach seemed to play an important role in supporting this groups’ need to develop
662 their abilities by ensuring equal opportunity for personal advancement, as Eden said, “...here
663 everybody gets to play the same amount of games so we get the same amount of practice and
664 no one gets left out...” Coaches also supported the girls’ desire to demonstrate competence by
665 offering praise/recognition, as Hannah said, “It’s good when they [coaches] recognise you’ve
666 done something good and it builds on your confidence as well...” The final way coaches
667 supported the values of this group was by offering helpful advice. Parents also seemed to be
668 able to support this groups’ desire for personal advancement by offering useful advice, as
669 Eden articulated:

670 Both my parents aren’t really sporty anymore but they both used to play badminton so
671 they know like what it takes and what I’ve got to do to improve and what areas are
672 important so they can like help me to get better...

673 As was alluded to in earlier quotes, peers were viewed as important co-competitors in
674 this groups’ quest for competence. However, there were a few ways in which they could
675 detract from this role. Peers who overshadowed this group led to them feeling disappointed
676 that their best may not be good enough, as Danielle said, “If you’re like if you’re working
677 against each other in groups and then they win and then they boast it just makes you feel a bit
678 like ‘great thanks for that.’” Further, when peers engaged in unsportspersonlike conduct, it ran
679 counter to the enjoyment that this group could derive from demonstrating their best
680 performance, as Eden said, “Bad sportsmanship people that don’t play by the rules argue back
681 sort of make games unenjoyable to play.”

682 **Discussion**

683 The current study explored the sport experiences of youth participants who differ in
684 subtypes of perfectionism based on the 2 × 2 model of perfectionism. First, we discuss how
685 the themes that emerged relate to novel insights regarding the 2 × 2 model and its tenets. We
686 then provide a comparison of the findings of the current study of perfectionistic youth sport
687 participants with findings from previous qualitative research with perfectionistic adult sport
688 participants. Finally, we provide a discussion of some of the practical implications of the
689 findings.

690 **Youth participants and their experiences of sport**

691 The two overarching themes identified provided a number of novel insights into the
692 sport experiences of youth participants who differ in subtypes of perfectionism. The first
693 theme was the meaning youth sport participants gave to their sport involvement. That is the
694 goals, values, and purposes expressed by the sport participants and how these were reflected
695 in their experiences. The second theme was the social environment that the youth sport
696 participants perceived supported or detracted from them obtaining the outcomes they desired
697 from sport. We discuss these two themes in relation to the 2 × 2 model and its tenets below.

698 One of the key tenets of the 2 × 2 model is that the four subtypes of perfectionism
699 differ in their motivational underpinning (Gaudreau & Verner-Filion, 2012). Typically, this
700 has been expressed and studied as a function of motivational regulation (e.g., intrinsic
701 motivation; Quested et al., 2014). In the current study, we found evidence that this extends
702 more broadly to the goals, values, and purposes that participants hold. We adopted the phrase
703 “meaning of sport participation” to reflect this and the social-cognitive approaches to
704 motivation that emphasize these factors (e.g., see Roberts, 2012). In particular, how socially
705 acquired beliefs influence the interpretation of events, such as whether success is construed as
706 personal effort or outperforming others, or whether the purpose of sport is considered to be
707 for personal development or social status.

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708 The non-perfectionism group appeared to value sport because it was an opportunity to
709 learn and develop their skills and to be with and make new friends. This aligns with adopting
710 task or mastery goals and social affiliation goals, which are two orientations frequently
711 observed in youth sports (Allen, 2003; Roberts, 2012). In context of extant perfectionism
712 literature, this finding is particularly insightful as there is typically little focus on non-
713 perfectionism. Moreover, to some, it could be considered counterintuitive to find individuals
714 who report no internal commitment or external pressure to pursue perfectionistic standards in
715 an achievement domain like sport. The findings here help to shed some light on this issue and
716 are consistent with what might be expected of non-perfectionism as a control or relatively
717 adaptive subtype in the 2 × 2 model (Gaudreau & Verner-Filion, 2012). Members of this
718 subtype of perfectionism are participating in sport to pursue goals other than personally
719 prescribed or socially prescribed perfection.

720 The pure PSP and mixed perfectionism groups also appeared to adopt similar goal
721 orientations to the non-perfectionism group. This was demonstrated through their focus on
722 putting forth effort to do their best. However, unlike the non-perfectionism group, these two
723 groups also described the importance of winning and outperforming others (i.e., higher ego
724 goals or performance goals; Roberts, 2012). In addition, the pure PSP group valued
725 developing and maintaining mutually satisfying relationships with similar others (Allen,
726 2003) and the mixed perfectionism group valued sport as a vehicle to maintain social status
727 (see Smith, 2003). The different combinations of goals may account for some of the
728 differences between the subtypes in terms of their experiences in sport. They also offer some
729 insight into some of the complexities of pure PSP and mixed perfectionism, such as the need
730 for multipronged hypotheses and mixed findings regarding the outcomes they are related to
731 (see Gaudreau, 2016). Specifically, based on the accounts provided by the participants, sport

732 will be a positive experience for members of these two subtypes when they have superior
733 comparative ability but less so when this is not the case.

734 The findings regarding the meaning of sport for the pure ECP group were also
735 illuminating. This group reported neither actively pursuing skill development nor wanting to
736 demonstrate their comparative superiority. Instead, they placed an especially high value on
737 taking part in sport for social reasons and the sense of belonging it can bring. Unlike social
738 affiliation goals, belonging in the manner that these participants described does not feature
739 prominently in social-cognitive approaches. However, it does feature in other approaches
740 (e.g., relatedness in organismic approaches; see Allen, 2006). That this group identified sport
741 as a means to feel valued and connected with others is a particularly novel finding in that it
742 might explain why we find individuals exhibiting this subtype of perfectionism participating
743 in sport when they also report other motivational qualities and experiences that suggest they
744 may shun sport participation altogether (e.g., amotivation and burnout; Nordin-Bates,
745 Raedeke, & Madigan, 2017; Madigan, Stoeber, & Passfield, 2016).

746 The second theme regarding the social environment revealed that sport experiences for
747 perfectionistic youth sport participants are at least in part dependent on significant others.
748 While this may be intuitive, research has yet to pay attention to the role of significant others
749 within the 2 × 2 model. Coaches, parents, and peers were mentioned throughout, with coaches
750 considered most important for all four subtypes. In particular, preferences for how coaches
751 should behave were expressed by all subtypes. This is a more novel finding than just
752 identifying they were important. All four of the subtypes desired coaches to be accepting of
753 mistakes and not to hold unrealistic expectations. Thereafter, there were differences. For
754 instance, the non-perfectionism and pure PSP groups appeared especially aware of the
755 instrumental value of the coach and were clear in their demands for coaches to provide

756 instructional feedback, recognize improvement, and reinforce effort but not to criticize or
757 display punitive behaviors.

758 One further notable difference was that the mixed perfectionism group expressed a
759 desire to have opportunities to exercise their competitive instincts (i.e., outcompete peers).
760 This preference was unique to this particular group. This directly reflects the purpose of sport
761 and personal goals that members of this subtype held for their sport participation (e.g., social
762 status). While research has demonstrated that endorsing ego goals may be less problematic
763 when participants are more capable than others, there is a vulnerability associated with
764 coaches adopting such an approach (e.g., Standage, Duda, & Ntoumanis, 2003). That is, when
765 perceived ability is not comparatively superior, it cannot buffer the effects of ego goals and,
766 as was seen here, may lead to undesirable outcomes and negative experiences in youth sport
767 (e.g., feeling incompetent and engaging in self-criticism).

768 The pure ECP group desired minimal coach involvement. The marginalized role of the
769 coach may again reflect the primary purpose of sport for this particular group (i.e.,
770 belonging). It is revealing that the coach was not considered particularly important in
771 fulfilling this purpose. Rather, perhaps unsurprisingly, peers appeared to be most important in
772 this regard. At best, coaches were viewed as friendly and supportive facilitators of the sport
773 experience. At worst, they were viewed as overly observant and judgmental. Research
774 examining perfectionism and peers in sport is limited to only a few studies (e.g., Greblo,
775 Barić, & Erpič, 2015). The accounts provided here suggest that research examining the
776 interplay between perfectionism and peer-relations has the potential to offer additional insight
777 into the experiences that young people have in sport, particularly for those exhibiting pure
778 ECP.

779 **Sport experiences of perfectionistic youth and adult sport participants**

780 Prior to the current study, there were three qualitative accounts of perfectionism and
781 the experiences of perfectionists in sport. These accounts focused solely on adult athletes and
782 the equivalent of two subtypes of perfectionism: pure PSP and mixed perfectionism (Gotwals
783 & Spencer-Cavaliere, 2014; Hill et al., 2015; Sellars et al., 2016). In comparing the accounts
784 of youth sport participants in the current study with adult sport participants in previous
785 studies, some similarities but also some notable differences emerged. The similarities for pure
786 PSP in youth and adult sport participants were that both expressed a drive to accomplish
787 achievable, self-referent goals in sport and felt socially supported. Where the accounts from
788 this subtype differed for youth sport participants, compared to adults, is that youth
789 participants also reported feeling disappointed in themselves when personal/team expectations
790 were not met. In addition, youth participants identified peers (not just coaches) as possible
791 sources of social support and distress (not just social support). The presence of more
792 dissatisfaction and, again, the importance of peers among youth sport participants require
793 additional examination in future research examining this subtype of perfectionism, with the
794 former finding being perhaps more surprising than the latter.

795 For mixed perfectionism, both adult and youth sport participants pursued lofty
796 personal goals to be the best in sport. Further, the outcomes of competition mattered to both
797 youth and adult sport participants. Mixed perfectionists in both adult and youth sport could
798 also be overly critical of themselves particularly when they were not performing to their best
799 and expressed pressure from significant others to succeed. The differences were that, unlike
800 adults, these youth sport participants did not overly fear failure or feel dissatisfied with goal
801 progress so long as they could learn from others and their mistakes. It is possible that these
802 differences reflect the tendency for sport to become more serious, and the stakes higher, as
803 athletes get older. In addition, there is also greater opportunity for fun, less pressure, and

804 acceptance of a formative process of learning in youth sport than in adult sport (Weiss et al.,
805 2012). This too might explain the differences.

806 **Practical implications for working with perfectionistic youth sport participants**

807 In describing their goals and their preferred role of the coach, the participants
808 expressed preferences that map on to current literature regarding motivational climates
809 (Roberts, 2012). It appears that a more task-involving climate whereby coaches emphasize
810 self-improvement, effort, and co-operation matches the preferences of most of the subtypes.
811 Such a climate also has the advantage of being known to contribute to a range of positive
812 outcomes in youth sport such as self-esteem, intrinsic forms of motivational regulation, and
813 objective performance (Harwood, Keegan, Smith, & Raine, 2015). Providing such a climate
814 would entail using strategies like rewarding effort even if the skill is not perfect, emphasizing
815 the importance of the learning process rather than the result, and ensuring that, regardless of
816 ability, all participants have the chance to participate to their full potential (Miulli & Nordin-
817 Bates, 2011). Interestingly, providing the opposite type of motivational climate, an ego-
818 involving climate, whereby coaches emphasize comparative ability, reward only success, and
819 encourage competition would partly match the preferences expressed by the mixed
820 perfectionism subtype. However, an ego-involving climate is known to contribute to a range
821 of negative outcomes in youth sport such as negative affect, extrinsic regulation, and avoiding
822 practice/training (Harwood et al., 2015). In this instance, then, it would be unwise for coaches
823 to promote an ego-involving climate. Rather, emphasis on opportunities to learn and develop
824 their skills should take precedence, and offers greater benefit to this group over the longer-
825 term. With respect to acting on these practical implications, caution should be exercised.
826 Although the findings of qualitative research can be transferred to similar contexts, this is not
827 always the case.

828 **Limitations and future research directions**

829 We adopted qualitative methods so to gain novel insights into the experiences of
830 perfectionistic youth sport participants. In doing so, we acknowledge the subjective nature of
831 our interpretations. In addition, we also acknowledge the limitations associated with
832 idiographic methods and the importance of nomothetic methods in seeking to generalize the
833 accounts of the participants. We presume the accounts of these prototypical individuals
834 reflect, at least to some degree, the experiences of other similar youth sports participants.
835 However, to assess if this is the case, based on the accounts documented, examining
836 achievement goals, social affiliation goals, and perceptions of achievement climates in larger
837 samples would be one means of gauging the representativeness of the youth sport participants
838 in the current study.

839 The manner in which we identified participants will have influenced the accounts
840 provided. This includes the instruments used as well as the specific procedure (e.g., median-
841 split). This may create findings specific to the instruments and also give an artificial sense of
842 discreet groups and experiences. Other instruments may capture different experiences and
843 warrant examination as has been the case outside of sport (e.g., Speirs Neumeister, Williams,
844 & Cross, 2007). Similarly, the use other techniques to establish groups (e.g., self-assessment
845 tools; Gaudreau, 2015) could be used to verify the experiences described here as
846 corresponding to subtypes of the 2 × 2 model.

847 Finally, the sample of the current study comprised only adolescent female youth sport
848 participants. Thus, the accounts of perfectionistic adolescent male youth sport participants,
849 and if they differ from females within the 2 × 2 model, remains unexamined. Previous
850 research highlights that adolescent females and males differ in their sport experiences
851 (O’Sullivan & MacPhail, 2010). Thus, differences are a distinct possibility. As such, it would
852 be valuable to account for the experiences of adolescent male sport participants from the
853 perspective of the 2 × 2 model in future research.

854

Conclusion

855

This study was the first to explore the sport experiences of youth participants in context

856

of the 2 × 2 model of perfectionism using qualitative data collection methods. The findings

857

provide initial evidence that the experiences young people have of sport differs across the four

858

subtypes of perfectionism from the 2 × 2 model. This is reflected in both the meaning they

859

give to sports participation (i.e., goals, values, and purposes) and elements of the social-

860

environment they considered most important.

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861 Table 1

862 *Demographic information and mean scores for focus group and individual interview*863 *participants (n = 19)*

Demographic information			Mean scores	
Subtype of perfectionism	Age	Sport	PSP	ECP
Non-perfectionism	15	Netball	1.14	2.38
Non-perfectionism	14	Netball	1.00	2.33
Non-perfectionism	14	Netball	2.29	4.55
Non-perfectionism	14	Netball	1.57	3.83
Non-perfectionism	14	Netball	1.29	3.25
Pure PSP	14	Netball	3.43	4.79
Pure PSP	14	Netball	3.57	4.71
Pure PSP	14	Netball	3.00	4.71
Pure PSP	14	Netball	3.14	3.42
Pure PSP	13*	Netball	3.86	3.00
Pure ECP	15	Dance	2.14	5.38
Pure ECP	14	Rugby	2.17	5.17
Pure ECP	13	Netball	2.29	6.71
Pure ECP	13	Netball	2.67	5.54
Mixed perfectionism	13	Netball	3.29	5.42
Mixed perfectionism	14	Dance/Athletics	3.71	6.42
Mixed perfectionism	13*	Badminton	3.71	7.29
Mixed perfectionism	13	Swimming	2.86	6.50
Mixed perfectionism	13	Horse Riding/Netball	3.57	5.63

864 *Note.* Bold = participants included in individual interviews; * these participants were 14 years

865 old when interviewed; PSP = Personal Standards Perfectionism (range = 1-5); ECP =

866 Evaluative Concerns Perfectionism (range = 2-10).

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867 Appendix 1.

868 *Question guide for focus group participants (n = 19)*

Main questions	Specific follow-up/Clarifying questions
What is it about your sport that you really like?	
Can you give me an example of a time recently, in training, when you really liked participating in your sport?	What was it about that which you liked?
Can you give me an example of a time recently, during competition, when you really liked participating in your sport?	What was it about that which you liked?
Can you give me any more examples of times when you have really liked participating in your sport?	What was it about that which you liked?
What do you least like about your sport?	
Can you give me an example of a time recently, in training, when you disliked participating in your sport?	What was it about that which you disliked?
Can you give me an example of a time recently, during competition, when you disliked participating in your sport?	What was it about that which you disliked?
Can you give me any more examples of times when you have disliked participating in your sport?	What was it about that which you disliked?
Who, if anyone, influences how much you like participating in your sport or not?	What things can your coach do or say that influences how much you like participating in your sport or not? What things can your parent(s)/guardian(s) do or say...? What things can your peers/teammates do or say...?
What, if anything, would make you like your sport more?	Is there anyone else who is influential?
Looking to the next school year/season, how do you see yourself continuing with your sport?	

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869 Appendix 2.

870 *Question guide for individual interview participants (n = 4)*

Main questions	Specific follow-up/Clarifying questions
What motivates you to participate in your sport?	Can you give me any examples? Are there any other things that motivate you to want to participate?
Describe what a typical 'good training session' looks like to you.	What would a training session where you feel good afterwards look like to you? Can you describe the kind of thoughts and feelings you experience after a good training session?
Describe what a typical 'good game/competition' looks like to you.	What would a game/competition where you feel good afterwards look like to you? Can you describe the kind of thoughts and feelings you experience after a good game/competition?
What makes you not want to participate in your sport?	Can you give me any examples? Are there any other things that make you not want to participate?
Describe what a typical 'bad training session' looks like to you.	What would a training session where you feel bad afterwards look like to you? Can you describe the kind of thoughts and feelings you experience after a bad training session?
Describe what a typical 'bad game/competition' looks like to you.	What would a game/competition where you feel bad afterwards look like to you? Can you describe the kind of thoughts and feelings you experience after a bad game/competition?
What makes the difference between feeling good/bad about your sport participation?	
How do you think you got your ideas of good/bad sport participation?	Where or who do you think you got your ideas from?

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