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- The  $2 \times 2$  model of perfectionism and youth sport participation: A mixed-methods approach
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15 The  $2 \times 2$  model of perfectionism and youth sport participation: A mixed-methods approach

16	Abstract
17	<b>Objectives:</b> Research demonstrates that four subtypes of perfectionism from the $2 \times 2$ model
18	are associated with different youth sport experiences. This study provided the first
19	exploration of the experiences of youth sport participants exhibiting different subtypes of
20	perfectionism using mixed-methods.
21	<b>Design:</b> A two-stage, mixed-methods, approach was adopted (quantitative identification then
22	qualitative data collection).
23	Method: In stage one (quantitative identification), 192 females enrolled in school- or
24	community-based sport groups ( $M$ age = 13.91; $SD$ = .90; range 12 to 16 years) completed a
25	domain-specific perfectionism instrument (Sport-MPS-2) to identify participants prototypical
26	of the four subtypes of perfectionism. In stage two (qualitative data collection), 19
27	prototypical participants ( $M$ age = 13.74; $SD$ = .65; range 13 to 15 years) described their
28	experiences of their youth sport involvement. One focus group ( $n = 4$ to 5 per group) and one
29	follow-up individual, semi-structured, interview ( $n = 4$ in total) per subtype were conducted.
30	<b>Results:</b> Thematic analysis revealed that the meaning youth sport participants gave to their
31	sport involvement (i.e., goals, values, and purposes) and the features of the social-
32	environment they perceived to be important differed between the four subtypes of
33	perfectionism. For the "pure PSP" and "mixed perfectionism" subtypes, sport was a time to
34	shine and experience success. For the "non-perfectionism" and "pure ECP" subtypes, sport
35	was a place to make friends and belong. Participants from all four subtypes described the
36	importance of the coach and peers, with some groups identifying different preferred roles for
37	the coach in terms of type and amount of involvement.
38	Conclusions: Youth sport participants exhibiting different subtypes of perfectionism vary in
39	their experiences of youth sport. Practitioners working with young people in sport should
40	consider these differences so to better understand and improve youth sport experiences.
41	Keywords: qualitative; personality; motivation; parents; peers; coaches

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

### Multidimensional perfectionism and the $2 \times 2$ model in sport

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

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

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

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

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

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

#### Perfectionism in sport and qualitative research methods

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

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2007). This is because quantitative research methods can be mechanistic and reductive when attempting to understand the thoughts, feelings, and behaviors of individuals (Cohen et al., 2007). Sport is a particularly complex setting and the experiences of athletes change over time and contexts. In this regard, qualitative research methods are well suited to studying such complexity and can offer a broader perspective on how and why phenomena might occur (Sparkes & Smith, 2014). In context of perfectionism specifically, qualitative research methods offer an alternative means of exploring the concept of perfectionism and an opportunity to challenge (or affirm) the tenets of current models, here the  $2 \times 2$  model (Hill, Witcher, Gotwals, & Leyland, 2015). Three studies have used qualitative research methods to explore perfectionism in sport so far (Gotwals & Spencer-Cavaliere, 2014; Hill et al., 2015; Sellars, Evans, & Thomas, 2016). Of the three studies, one study opted to interview self-identified perfectionists without any quantitative method (Hill et al., 2015). In total, 15 high-level athletes and performing artists (dancers and musicians) were recruited and interviewed regarding their perceptions of perfectionism. Of these participants, the majority were athletes who had competed or were currently competing at International level (three males and four females; M age = 32 years; range = 29 to 39 years). Using thematic analysis, drive, accomplishment, and strain emerged as the main descriptors of how participants perceived perfectionism and its influence on their lives. Drive characterized the participants' view that high standards of achievement and performance are central to being a perfectionist. Accomplishment and strain highlighted the specific benefits and drawbacks that participants perceived of being a perfectionist. Like the intentions of the current study, the remaining two studies adopted specific models of perfectionism and quantitative and qualitative methods so to explore the experiences of specific groups of perfectionists. In the first study, Gotwals and Spencer-

Cavaliere (2014) used scores on Gotwals and Dunn's (2009) Sport Multidimensional

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

In the second study, Sellars et al. (2016), like Gotwals and Spencer-Cavaliere (2014),

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

#### The present study

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

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

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

185 Method

### Methodology

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

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perfectionism from the  $2 \times 2$  model. In stage two (qualitative data collection), focus groups were used to explore the sport experiences of participants deemed to reflect/be prototypical of the four subtypes of perfectionism. Focus groups were selected as they enable participants to share their ideas and engage in conversation with their peers. Such interactive discussions enabled both individual and collective insights into their sport experiences to be gained and facilitated the identification of similar and different experiences (Kitzinger, 2005; Smith & Sparkes, 2017). However, a limitation of focus groups is the public nature of the data collection (Sparkes & Smith, 2014). Thus, to gain further insights into experiences and clarification of the ideas that may be indicative of the socially constructed experiences of individuals in each of the four subtypes of perfectionism, an individual, semi-structured, follow-up interview was conducted with one participant from each group. The participant selected was the individual considered the most prototypical of their subtype of perfectionism, based on their scores for PSP and ECP and/or their focus group responses (as detailed in the procedure). Overall, the two-stage, mixed-methods approach had a greater focus on the qualitative over quantitative data. The approach was adopted because it allowed for a detailed description of the experiences of numerous individuals representative of the four subtypes of perfectionism in the  $2 \times 2$  model of perfectionism (Sparkes, 2015; Sandelowski, 2000). Overall, the study was approached from an interpretivist perspective, underpinned by epistemological social constructivism (knowledge is believed to be socially constructed) and ontological relativism (reality is multifaceted and subjective) (Sparkes & Smith, 2014). Such an approach encouraged the emphasis of qualitative over quantitative data. The quantitative data was collected solely to ensure that we accounted for the experiences of individuals who fall within each of the four subtypes of perfectionism in the  $2 \times 2$  model of perfectionism. The

qualitative data (focus groups and interviews) enabled us to gain detailed insights into the

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

### **Participants**

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

### **Procedure**

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

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equivalent of more than 2 items missing; see Tabachnick & Fidell, 2007), five participants were removed. The mean of the missing item subscale was used to impute values for the remaining missing data cases (see Graham, Cumsille & Elek-Fisk, 2003). To ensure that participants could verbally discuss their sport experiences, 17 were removed for indicating that English was not their first spoken language, one further participant was removed for not reporting their age, and 10 participants were removed for perceiving their sport involvement to be less than moderately important (i.e., a score of < 4 on a 9-point scale). As no univariate and multivariate outliers were detected, the final sample for the quantitative identification phase comprised 159 participants (M age = 13.85; SD = .90; range 12-15 years). Following computation of PSP (personal standards subscale) and ECP (concern over mistakes subscale added to doubts about actions subscale) composite scores (i.e., total PSP and total ECP), a median-split was conducted to categorize participants into groups reflective of the four subtypes of perfectionism from the  $2 \times 2$  model. This is consistent with extant research adopting variable-centered approaches to form high and low perfectionism groupings (e.g., Hill, Hall, Duda, & Appleton, 2011). Based on this approach and the withdrawal of one school-based sport group due to the departure of their gatekeeper, 86 participants were available for participation in the qualitative data collection stage: 26 non-perfectionism (M PSP = 1.97, SD = .50; M ECP = 3.90, SD = .80), 15 pure PSP (M PSP = 3.34, SD = .42; MECP = 4.24, SD = .64), seven pure ECP (M PSP = 2.43, SD = .23; M ECP = 5.77, SD = .83). and 38 mixed perfectionism (M PSP = 3.42, SD = .52; M ECP = 6.39, SD = .84) participants. A one-way ANOVA with Scheffe post-hoc tests revealed that there was a statistically significant difference between the four subtypes in terms of PSP, F(3, 82) = 54.16, p < .05,  $\eta p^2 = .67$  and ECP, F(3, 82) = 59.83, p < .05,  $\eta p^2 = .69$ , consistent with how the four subtypes of perfectionism should have high and/or low levels of PSP and ECP.

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Qualitative data collection. One focus group, involving four to five participants, was conducted for each of the four subtypes of perfectionism (see Table 1). Focus groups ranged from 34-43 minutes (M = 39 minutes; SD = 4.50). To help participants to feel comfortable discussing their experiences each focus group comprised participants from the same schoolor community-based sport group. Participants were also reflective of the same subtype of perfectionism so to create a homogeneous group and allow for any contrasts in sport experiences between subtypes to be observed (Hennessy & Heary, 2005; Morgan, 1997). Each focus group involved the same moderator (lead author) and a note taker. A semistructured questioning route with opening, introductory, transition, key (e.g., who, if anyone, influences how much you like participating in your sport or not?), and ending questions was employed (see Appendix 1). The questioning route was created and refined based on extant qualitative research regarding the quality of youth sport experiences (e.g., Holland, Woodcock, Cumming, & Duda, 2010), a review by a 'critical friend' (a researcher who had previously conducted focus groups with youth sport participants), and a pilot focus group with five 13-year-old female participants from the same school-based sport group. The pilot focus group proved useful in terms of refining the questioning route, establishing the typical duration of a focus group, and allowing the moderator and note taker to become familiar with the questions (Morgan, 1997). Following the pilot, minor changes to the order of questions were made and a question regarding future sport intentions was added. To explore some of the concepts that emerged from the focus groups in greater depth, an individual semi-structured follow-up interview was conducted with the one participant,

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

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

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

### **Data analysis**

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

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

### Methodological rigour

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

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

344 Results

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

#### Non-perfectionism

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

the hobby they most valued, as Julia articulated, "Sometimes it's like, when I have a match I can't drop everything to play netball."

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

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

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

Julia: Yeah we didn't do that well.

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

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

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

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

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

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

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

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

412	Like when we played for our other teamThey 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.

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

### Pure personal standards perfectionism

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

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

However, it was not just working well as a team that contributed to enjoyment, as

Gemma also described, "like when we win I always really enjoy that especially the whole like

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winning with your friends as a team that's I really like the feeling of like well done and things." Thus, enjoyment for this group was also located in winning as a team. When team triumphs came against opponents that were perceived to be of higher ability and the girls had worked well together, then enjoyment was even more pronounced: Ellie: I enjoyed our match on Thursday. Focus group moderator: What was it about that that was good Ellie? Lydia: We won. Ellie: Well I dunno I think it's quite nice because they're like a private school and really posh and I think it's quite nice that like it doesn't really matter what facilities you have we still beat them and also I quite liked it because we worked quite well as a team. Lydia: Yeah we started to concentrate more. . . . Ellie: Yeah and we were quite competitive, yeah but in a positive way. Winning and losing were kept in perspective, however, as Ellie said: ...we did like really well compared to previous years because we like practiced a lot and quite a lot of the game we might have lost overall but we actually like won one half of it and it was against teams like that we've always considered much better than us... it was a good achievement. When this group did achieve as a team, there was a sense of pride, as Gemma stated, "...everyone proud that you've actually like achieved something." Similarly, if individuals were recognised for the efforts that they put forth to do their best for the team this also evoked feelings of pride and satisfaction, as Gemma explained, "... you get a feeling of like pride like I was picked out of all these people, it just makes you feel quite good about yourself." Although there was a sense that the girls in this group could take pride and satisfaction from their endeavours, they could also be frustrated and disappointed with themselves if they did

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

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

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

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

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

Well I like it cos our coach I feel like she knows us like inside out. She can have a joke with us and kind of like have a laugh and stuff, but like she always wants us to like do our best and stuff. And I like it cos like if you're a shooter she might say like if I shoot she might say that was like rubbish or something cos she knows how I usually play and like I understand then she'll tell me what to do next and she just like helps us all really. In terms of peers, teammates could support this groups' desire to work well together as a team by being encouraging, as Bryony and Ellie discussed:

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." **Pure evaluative concerns perfectionism** 527 528 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,

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

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

Kiera: Like the first time we played in teams against each other I was panicking quite a lot because I thought 'oh if I do a mistake then like will everyone hate me or something' but like now when we're playing teams against each it's not like that at all like everyone's really supportive and like even if you make a mistake it doesn't matter. Maisie: Like yeah I thought that as well like when you first started going to the matches and everything it was kind of like you wanted to like make sure you got it right... but then like as it got on it was just really enjoyable going like on the bus and then coming back and it never really mattered that much cos we were all like friends and we were helping each other.

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

when she said, "Well I just don't think it's all about the winning I don't really care about the what you get I just like doing it [dance]."

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

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

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

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

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

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

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

When unpacking what overly competitive peers meant, Kiera said:

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

### Mixed perfectionism

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

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

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

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

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 youit 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.

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telling me how to do it again...

When peers demonstrated superior ability to these girls, they viewed this in a dichotomous manner. On the one hand, it was viewed as another opportunity to help them improve and become better than others. On the other, it made them feel like they lacked competence and this invoked self-criticism, as Eden said, "It's usually like when I can't do something that everybody else can and so I feel like I'm letting myself down cos I know I can probably do it cos everybody else can do it but then I just feel bad cos I've let myself down..." Overall, demonstrating their best in sport, relative to themselves or others, was related to some feelings of enjoyment, as Eden said, "I think I would feel like I'd achieved something because obviously you've done well in your sport you feel proud of yourself that you've gone and done something well and you can sort of feel good about it." A competence-supportive environment/an environment for success. Many important influences could support or detract from participants' experiences of sport as an opportunity to develop and demonstrate competence. First, these girls seemed to require some clear success criteria against which their competence would be judged, as Bridget said: ... It sort of like puts me off because like when my dance teacher is like giving me something to aim for then I feel fine and I've got something to go for but when like they're just watching me and not telling me anything I sort of feel like I don't know anything and any of my routines. When judgements were perceived as unfair (e.g., incongruent feedback with the criteria for success), offered by peers of perceived lesser status (e.g., those not as invested or as capable), or were unexpected, this ran counter to the value this group placed on demonstrating competence, as Eden said: I usually don't like it when they [coaches] sort of repeat on something but I already know how to do it just I've made a mistake and they think that I can't do it and are

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

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

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

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

682 Discussion

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

### Youth participants and their experiences of sport

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

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

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

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

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

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

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

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

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

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

Sport experiences of perfectionistic youth and adult sport participants

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

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

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

### Practical implications for working with perfectionistic youth sport participants

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

### Limitations and future research directions

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

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

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

854 Conclusion

This study was the first to explore the sport experiences of youth participants in context of the  $2 \times 2$  model of perfectionism using qualitative data collection methods. The findings provide initial evidence that the experiences young people have of sport differs across the four subtypes of perfectionism from the  $2 \times 2$  model. This is reflected in both the meaning they give to sports participation (i.e., goals, values, and purposes) and elements of the social-environment they considered most important.

Table 1
Demographic information and mean scores for focus group and individual interview
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

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

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

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

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# 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?	

# 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?
sport:	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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