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Meaningful Experiences in Physical Education and Youth Sport: A Review of the Literature

Stephanie Beni^a, Tim Fletcher ^{ba}, and Déirdre Ní Chróinín^b

^aDepartment of Kinesiology, Brock University, St. Catharines, Ontario, Canada; ^bDepartment of Arts Education and Physical Education, Mary Immaculate College, Limerick, Ireland

ABSTRACT

The purpose of this research is to review the literature about young people's meaningful experiences in physical education and youth sport. We reviewed 50 empirical peer-reviewed articles published in English since 1987. Five themes were identified as central influences to young people's meaningful experiences in physical education and sport: social interaction, fun, challenge, motor competence, and personally relevant learning. These themes provide future direction for the design and implementation of meaningful physical education and youth sport experiences. We also highlight the need for the development of pedagogies that facilitate and promote meaningful engagement in physical education and youth sport settings.

KEYWORDS

Curriculum; meaningfulness; pedagogy; social interaction; students

Consideration of the role and nature of meaning in physical education and youth sport has been a central research focus throughout the past 50 years, with scholars arguing for the inherent value potential of movement as a site of meaning-making to enrich human existence (Arnold, 1979; Brown, 2008; Hawkins, 2008; Kretchmar, 2000; McCaughtry & Rovegno, 2001; Metheny, 1968; Rintala, 2009). For this review, we are concerned with the forms of movement typically addressed in school physical education and youth sport programs, such as dance, aquatics, gymnastics, and games. Scholars have examined meanings related to these forms of movement in physical education and youth sport in different ways. For example, by applying a transactional socio-cultural approach to learning, Quennerstedt, Almqvist, and Öhman (2011) explored the meanings and uses given to artifacts, such as a ball, in physical education. Alternatively, Nilges (2004) adopted a transcendental phenomenological approach to examine movement meanings in creative dance. In many other instances, authors have used the general term meaning to help describe experiences of participants or the outcomes of their research; in doing so, they refer to particular types of meanings that could be described as meaningful. We adopt Kretchmar's (2007) definition of meaning, viewing it "in a broad, common sense way. It includes all emotions, perceptions, hopes, dreams, and other cognitions—in short, the full range of human experience" (p. 382). Meaning defined in this way is distinguishable from stimulation, and those things that have meaning are also distinguishable from those that are meaningful: meaningful experiences are those that hold "personal significance" (Kretchmar, 2007, p. 382). Kretchmar's (2007) definition builds on the distinction between

CONTACT Tim Fletcher tfletcher@brocku.ca Brock University, Kinesiology, 1812 Sir Isaac Brock Way, St. Catharines, Ontario L2S 3A1, Canada.

different types of meanings outlined by Metheny (1968): denotations relate to symbolic representations, and connotations are personal and idiosyncratic meaning interpretations. Connotations are personal in the context of an individual's interests, feelings, and emotions and based on the individual's interpretation of a particular context (Metheny, 1968).

Individuals therefore ascribe meaningfulness by making sense of past, present, and future experiences (including interactions with self and others, artifacts, content, and pedagogies) through a process of synthesis and reconciliation. Metheny (1968) explained that something is made personally meaningful as "we seize upon it, take it into ourselves, and become involved with it. This feeling of involvement is a symptom of what the idea means to us, or how we find it meaningful or significant" (Metheny, 1968, p. 5). To avoid confusion with more general use of the term "meaning," we rely primarily on the term "meaningful" to refer to the connotative meanings of personal significance we examine in this review. We prioritize meaningful engagement in physical education and youth sport given its potential to influence quality of life at an existential level (Kretchmar, 2006).

Meaningful physical education experiences are influenced by the value the learner attributes to physical education as well as the learning goals identified by the learner (Chen, 1998). Meaningful experiences are thus personal to the individual. From a social constructivist perspective, personal meaning interpretations lie "in potential," to be constructed and understood by the individual; not in an individual bubble detached from reality, but influenced by affective and social-cultural dimensions (Light, Harvey, & Memmert, 2013). We aim to explore connections across individual experiences (as reported in the literature) to identify elements of participation that promote meaningful experiences in ways that transcend the social and cultural differences inherent in various physical education and youth sport contexts. To accomplish this, we were guided by Kretchmar's (2006) criteria that represent qualities of meaningful experiences in physical education and youth sport settings: social interaction, fun, challenge, increased motor competence, and delight. We propose that the identification of common threads in physical education and youth sport experiences that are attributed value as meaningful by participants can provide useful guidance for teachers and coaches in designing and facilitating meaningful experiences for learners.

In addition to considering what meaningful experiences comprise (i.e., Kretchmar, 2006), a wide body of conceptual research has provided a solid philosophical platform supporting arguments why an emphasis on meaningful engagement and meaning-making should be given priority in physical education across several contexts (in schools, higher education, and community settings). Furthermore, reviews suggest the personal meaningfulness derived from experiences that are satisfying, challenging, social, or simply fun is likely to lead individuals to commit to a physically active lifestyle (Teixeira, Carraça, Markland, Silva, & Ryan, 2012). More specifically, those who commit to lifelong physical activity tend to do so for the intrinsic motivational benefits of participation (such as personal meaningfulness, challenge, satisfaction, and joy) rather than for extrinsic motivational benefits (such as weight loss or disease prevention). Yet it is not guaranteed that an emphasis on meaningful engagement will necessarily promote lifelong physical activity: Pringle (2010) and Thorburn and MacAllister (2013) cautioned against an assumption of a link between more meaningful experiences and participation without sufficient evidence. With this caution in mind and given the importance of enhancing meaningful participation in current forms of physical education and youth sport, the purpose of this article is



to review the literature and understand the evidence concerning meaningful experiences in physical education and youth sport for young people.

Methods

The overarching question guiding our review is: What experiences do young people identify as meaningful in physical education and youth sport? Although we acknowledge differences between physical education and youth sport, we examined both participation contexts in this review on the basis of substantial overlap in their research, practice, and policy orientations (Cassidy, Mallett, & Tinning, 2008). Moreover, the presence or absence of meaningful experiences has been identified as a key factor in ongoing participation or dropout in both areas (Crane & Temple, 2015; Lodewyk & Pybus, 2012). In line with Kretchmar (2006), identifying ways to foster meaningful experiences may hold potential for reducing rates of decline in participation in both physical education and youth sport. This is of concern in several contexts, particularly in the Americas. For example, Dwyer et al. (2006) stated that enrollment in physical education in Ontario, Canada fell from 98% in grade 9 to 49% in grade 10. This is similar to declines in the United States, where physical education participation in an "average week" falls from 71% in grade 9 to 36% in grade 12 (Centers for Disease Control and Prevention [CDC], 2016, p. 41), while less than 35% participate in physical education across all high school grades in parts of Brazil (Tassitano et al., 2010). Canadian Heritage (2013) reported a 4% decline in sports participation in youth aged 15-19 from 1992-2010, while there was a 17% decline across all age groups.

Three databases were used in our initial search: SPORTDiscus, Education Source, and Web of Science Complete. Our search was limited to empirical (data-based research) articles written in English and published in peer-reviewed journals from 1987-2015. Because our focus was on young people's (under 18 years of age) meaningful engagement in physical education and youth sport settings, we did not review articles focused on, for example, the ways others, such as university-aged students or pre-service teachers experienced meaningfulness in physical education and youth sport (cf. Maivorsdotter, Lundvall, & Quennerstedt, 2014). While we recognize the significant and rich body of conceptual research exploring meaningful engagement (see Hawkins, 2008; Kretchmar, 2001, 2005a, 2007, 2008; McCaughtry & Rovegno, 2001), much of which we drew on to articulate our understanding of meaningful engagement, we saw value in synthesizing the empirical evidence currently available to support these theoretical perspectives and therefore limited our review to empirical research.

We chose 1987 as a cutoff date because of the publication of a research monograph on the Process-Product Curriculum Framework (PPCF) in the Journal of Teaching in Physical Education monograph that year. This was significant because the PPCF represented "the most thorough description of [a] personal meaning curriculum model" in physical education (Jewett & Bain, 1985, p. 73). Several researchers explained ways in which the PPCF and associated meaning-oriented pedagogies had been enacted across contexts (for example, with child and adult learners). However, little has been published on the PPCF since, most likely because of the complexity of translating the model into school contexts (Jewett, Bain, & Ennis, 1995). Since the 1987 monograph, research on meaningful experiences has typically involved small-scale interventions or approaches. It is these studies we aimed to review and synthesize.

Because the term *meaning* is so commonly used in any form of written or verbal text, we were selective in how we used it in our search terms. For example, using the search terms "meaning" or "meaningful" in Google Scholar produces almost 3 million results. When "physical education" is added there are still well over 100,000 results, which would make reviewing unwieldy and infeasible. Therefore, for the purposes of this review, we limited inclusion to studies in which the authors explicitly communicated a research agenda and/or reported findings related to the identification of meaningful experiences. While we recognize there may be other studies focusing on, for example, particular activities or models that provide evidence of meaningful engagement without ever employing the term "meaning" or "meaningful," we allowed the language used by the authors and their specific use of terms to guide our inclusion and exclusion decisions. For this reason, the first stage of our review involved combinations of terms we categorized according to the framing of meaning, population, and context.

In the first category (framing of meaning), we used the following terms and phrases, which appeared as synonymous or interchangeable with meaning in the literature: "meaning-making," "making meaning," "sense-making," "making sense of," "making meaning of," "personal significance," and "personal meaning." We initially attempted to use common terms such as "meaningful" and "meaningless;" however, they were excluded from the search on the basis of the number of irrelevant results they yielded (that is, the number of results returned was in excess of 50,000). In the population category, we used the terms "child*," "student*," "pupil," "pre school," "elementary," "primary school," "middle school," "high school," "secondary school," "youth," "adolescent," and "teen*." In the context category, we used the terms "physical education," "fitness education," "physical activity," "sport," "games," "dance," and "gym class." Using each database's advanced search features, we entered each of the above and searched using Boolean operators (separated by "or" and "and").

Using the more strictly defined terms, there were 16 results from the three databases, which was too small to conduct a full review. We were aware of far more articles that focused on meaningful experiences; so to broaden our scope in the second stage of the review, we scanned each article's reference list for relevant results. In addition, each of the 16 articles from the database search was searched for in Google Scholar, and the list of articles citing each article was scanned for relevant results. These new findings were then searched in Google Scholar using the same process. This process yielded 161 items that met our criteria. Following the identification of 161 articles, each manuscript was scanned to ensure it met our criteria of being an empirical, peer-reviewed article that focused on young people's (under age 18) meaningful engagement in physical education and youth sport. We then read our initial selections in-depth and dismissed 111 articles, mostly because they were not empirically-based or did not focus on school-aged populations. Based on this selection process, 50 articles were included in the final review.

All three authors independently coded the major findings of the 50 articles. These were then compared and compiled into a preliminary framework with categories organized around common themes. For example, Jakobsson, Lundvall, and Redelius (2014) found the primary reason youth continued participation in club sport was a sense of fun. Therefore, this article was included in a category entitled "fun." Our emergent categories

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were at various times expanded, collapsed, and modified throughout the review. We then compared the categories with Kretchmar's (2006) criteria for meaningful experiences. For example, one final category, "social interaction," was confirmed through aligning our findings about the role of friends, peers, teachers/coaches, and others with Kretchmar's (2006) criterion "social interaction." We also combined preliminary categories that were connected in the review. For example, our categorization of "challenge" incorporates the sub-theme "competition." Kretchmar's (2006) fifth criterion was labelled "delight." There was not sufficient evidence in the studies reviewed to generate a theme aligned with "delight." There was, however, sufficient evidence of the value of personally relevant learning in contributing to meaningful experiences to warrant its inclusion as a theme. The final five categories that frame the structure of the review are: (a) social interaction, (b) fun, (c) challenge, (d) motor competence and (e) personally relevant learning.

Results

Although 50 individual studies were identified in the search period, there were few (15) studies with research questions specifically focused on meaningful engagement. This suggests an agenda focused on generating empirical evidence on meaningful experiences has not been fully developed or articulated over the past 25 years. With this in mind, the results of our review represent common patterns or threads across many small-scale studies that provide insights into and empirical support for claims regarding criteria of meaningful experiences in physical education and youth sport.

Our review indicates that the vast majority of researchers have shared findings in relation to meaning and meaningful experiences in physical education and youth sport from research studies using qualitative methods and drawing from small samples of participants. This is unsurprising, given that definitions tend to emphasize the individual and the contextually-bound nature of a meaningful experience. Keeping in mind that some studies used multiple and mixed methods, interviews (including formal/informal, individual, or focus group) were the most commonly used method (41), followed by naturalistic or taped observations (23). Additional forms of data collection were student drawings (nine), photography (four), student journals (three), text analysis (four), and other (eight). Questionnaires were used in 18 studies and involved quantitative scales (e.g., Likert responses; nine), open-ended items (three), or a combination of both (three). Three studies did not describe the specific nature of the questionnaire. The relative lack of empirical research specifically focused on meaningful experiences and the limited number of longitudinal studies together point to a significant gap between the well-established conceptual basis arguing for an emphasis on meaningful experiences in physical education and sport settings and our understanding of how individuals identify experiences as meaningful or how to facilitate such experiences. Our review draws together the available evidence in support of prioritizing meaningful experiences as well as highlighting areas where better understanding is needed.

There was support for a meaningful experience as an individualized process. For example, in a small-scale qualitative study, Nilges (2004) suggested that the individuality of how meaningful experiences are ascribed in physical education stems from the influence of one's feelings and emotions. This was supported by a large-scale quantitative study that involved the development and administration of a Personal Meaningfulness Scale to 698 secondary school physical education students from three schools (Chen, 1998). Chen's (1998) research supported "the notion that the conception of meaningfulness is individually constructed. The conception seemed to follow a process of construction that varies from person to person in terms of personal experiences in life" (p. 303). Thus, an individual's life experiences, including their involvement in sport and physical activity as children and youth and their specific cultural and community values, shape how they find something meaningful from one physical education situation to the next (Chen, 1998). For example, a case study of one highly-skilled student in a sport education (SE) season showed that the meaningfulness attributed to the experience was strongly influenced by that student's prior sport experiences outside of school (Crance, Trohel, & Saury, 2013).

The studies we reviewed demonstrated some broad patterns that represent common individual interpretations of how meaningfulness is ascribed to experiences in physical education and youth sport. Patterns were evident according to sex/gender, grade level, socioeconomic status (SES), family structure, community, and school location. For example, Chen (1998) found that high-school students' conceptions of meaningfulness can be differentiated according to gender, grade level, and SES. Numerous studies across geopolitical contexts support claims that many female students find non-sports based activities (such as dance or personal fitness) more meaningful in their physical education experience. For example, Clark, Spence, and Holt (2011) interviewed eight Canadian sixth-grade girls who were dissatisfied with a focus on organized sport in physical education, preferring self-expressive and creative activities. Female high-school students demonstrated similar preferences. For example, five Irish female students who co-designed a physical education curriculum with teachers prioritized individual, non-competitive activities (Enright & O'Sullivan, 2010). Gibbons (2009) and Gibbons and Gaul (2004) also showed that tailoring physical education curricula to include activities that female students find relevant and applicable across the lifespan promotes the likelihood of meaningful experiences.

Social context (including family composition), school location, and SES (Wright, MacDonald, & Groom, 2003) also influenced ways students identified experiences as meaningful. In particular, parents were identified as an extrinsic influence on the ways students ascribe meaning to physical education experiences. For example, Quarmby and Dagkas (2013) interviewed children from low-income, lone-parent homes, identifying the influence of their parents' perceptions of the importance of physical activity and their level of engagement therein; however, the authors did not consider the views of children from low income, two-parent families alongside those from lone-parent families. One's cultural community was also found to influence the meaning ascribed to physical activity by children and their parents. For example, Wright et al. (2003) interviewed students from three Australian high schools from disparate geographical, social, and cultural contexts. Participants' involvement in physical activity demonstrated the various ways they "construct their lives and their identities in relation to physical activity and physical culture differently, while at the same time using cultural resources that are similar" (p. 30). For participants in one location, soccer was the primary physical activity of choice, while in another, surfing was most important. In the latter location, being associated with the culture of those who play soccer through wearing certain brands was considered socially unacceptable. Thus, how individuals experience moments of personal significance in



physical education and youth sport will differ depending on where they are located and what is valued in their communities, influenced by cultural, political, and economic circumstances.

Although it is clear that the identification of a meaningful experience is an individualized process, our synthesis also provides evidence of common threads between individual experiences of meaningful participation in physical education and youth sport. While the articles reviewed provide some insights and identify patterns regarding meaningful experiences, the nature of methodologies used and consideration of the contexts in which these studies were conducted point to large gaps in our understanding. Thus, there is merit in a more systematic approach to the study of meaningful engagement across a variety of contexts. Nonetheless, with these overarching descriptive and demographic patterns we have identified in mind, in the following sections, we attempt to unpack and articulate some of the common threads evident in how young people identify experiences in physical education and youth sport as meaningful.

Social interaction

We're all quite close. We're all really good friends here. It's a very important part of my life. I haven't got many like, extremely good friends at school or wherever outside the swimming club ... so it's really important to me. (Light, 2010a, p. 40)

As demonstrated by a participant's comment from Light's (2010a) research above, social interaction was identified as contributing to meaningful experiences. The role of social interaction has been studied with a wide variety of people involved in physical education and youth sport contexts: friends, peers, teachers, coaches, and even family members of other participants (Jakobsson, 2014; Jakobsson et al., 2014; Kinchin & O'Sullivan, 2003; Smith & Parr, 2007). This highlights the importance of investigating the role of all relationships in the learning context, not just the role of peers and teacher/ coach. In a study of 129 club swimmers aged 9-12 from Australia, France, and Germany, between 75 and 90% of questionnaire respondents in each country valued the social dimension of club swimming as one of the primary reasons for continued participation (Light et al., 2013). Similarly, Maivorsdotter, Quennerstedt, and Öhman's (2015) audio and video observations led to social interaction being identified as a primary factor in the way seven 15-year-old Swedish school students ascribed meaningfulness and learned when using exergames in physical education.

Azzarito and Ennis (2003) found that teaching guided by social constructivism facilitated the promotion of meaningful experiences: observations and interviews with students from two middle school physical education classes showed how connecting with peers enhanced meaningful experiences for participants. Similarly, the social support received from both peers and teachers enhanced meaningful engagement with physical education content, as evidenced by journals, group discussions, and questionnaires gathered from 24 female high-school students (Gibbons & Gaul, 2004). The social component of the SE model has also been shown to enhance meaningful participation across several qualitative studies. Interviews, questionnaires, and reflections have revealed that the role of working regularly with peers in teams enhanced students' physical education experience (Kinchin

& O'Sullivan, 2003; Kinchin, Macphail, & Ní Chróinín, 2009; MacPhail, Kinchin, & Kirk, 2003; Tsangaridou & Lefteratos, 2013).

While social interaction can positively influence students' meaningful engagement in physical education, several studies have demonstrated its negative influence. For example, feelings of isolation reported by students reduced the meaningfulness of their experience (Carlson, 1995; Dyson, 1995). One participant interviewed by Carlson (1995) captured this feeling, stating: "I don't feel that I am a part of gym. I feel left out, not really a part of that team feeling" (p. 471). The social role of teachers can also contribute to reducing meaningfulness. Through observations and interviews with participants from four urban middle schools, Satina, Solmon, Cothran, Loftus, and Stockin-Davidson (1998) identified how teachers' actions can lead to gender inequity through (sometimes unintentionally) supporting ideas about male superiority and female inferiority. To illustrate how this can happen, Solmon and Carter's (1995) observations showed that first-grade girls were often left sitting on the sidelines waiting for a turn while boys were active for the entire physical education lesson. Further, one male and five female teachers interviewed by Satina et al. (1998) believed boys were easier to motivate than girls in physical education, citing stereotypical concerns about girls "mess[ing] their hair" or "break[ing] their nails" (p. 192).

One recurring aspect of social interaction was students' perspectives on group composition, with support for self-selected groups as well as groups selected by teachers. Koekoek and Knoppers (2015) found students preferred to select their own groups in physical education, yet they also preferred (at times) groups that did not include friends, as they were aware that their friends could easily become a distraction to learning. However, students interviewed about an SE unit involving regular teams (where students had no say in group composition) made many positive references to their teams and the fun they had while learning together (Kinchin et al., 2009). Therefore, although previous bonds matter (that is, allowing students to form groups with friends), positive social experiences can also be generated from other grouping arrangements. There is no conclusive evidence supporting one group selection method over another in promoting meaningful engagement. Indeed, students themselves can see pros and cons for each approach. For instance, elementary students interviewed by Dyson (1995) suggested they accomplish more when they are not with their friends but expressed disliking the groups the teacher would form. Alternatively, focus group interviews conducted by Gray, Sproule, and Wang (2008) showed that secondary students liked playing team invasion games "such as basketball, soccer, and hockey" (p. 179) with friends or peers of the same ability because they felt this would result in fewer negative comments from more able peers. These data suggest that student perspectives go beyond mere preference, reflecting concerns about the quality of their own participation, ability, learning, achievement, and social/emotional well-being in the physical education or youth sport environment.

While practical issues about classroom management support teachers making decisions about group composition, there is also strong empirical support for allowing students to make choices in how physical education classes are organized. Recent studies have demonstrated statistically significant increases in intrinsic motivation (Moreno-Murcia & Sánchez-Latorre, 2016) and physical activity levels (How, Whipp, Dimmock, & Jackson, 2013) for students in groups encouraged to make choices when compared to control groups who were not encouraged to make choices. Friendship and ability influence how students make groups and/or behave within groups, which, in turn, has the potential to

influence meaningfulness. For instance, when groups received little instruction from the teacher, high-school students were observed taking on roles of novice or expert based on their perceived level of knowledge in the given physical education situation (Barker, Quennerstedt, & Annerstedt, 2015; Quennerstedt et al., 2014). Quennerstedt et al. (2014) suggested that student interactions within this approach facilitated a deeper learning experience than if students simply followed the teacher's instructions.

To complicate matters, although social interaction can promote meaningful experiences, Nilges (2004) recognized times when meaningfulness was fostered through deeply personal and private experiences. While Nilges conceptualized social interaction and private experiences as mutually exclusive categories, we suggest this is not necessarily the case. For example, in many physical education experiences, moments that are personal and private occur in the midst of students' interactions with others (peers and teachers). In keeping with social constructivism, we suggest these personal experiences are often framed within a socially interactive physical education or sport environment. Thus, while social interaction was regularly cited as an important factor in contributing to young people's meaningful engagement in physical education, it does so in different ways. As such, teachers and coaches should carefully consider the ways in which opportunities for social interaction are organized and structured based on the needs and desires of learners. Such considerations require taking into account all relationships in the learning environment (including managing interactions between peers and moderating one's own potential biases, such as gender roles), providing opportunities for both individual and group work, carefully considering dynamics of group composition while providing choice when possible, and understanding the ways pedagogical decisions hold the potential for both meaningful and meaningless experiences for learners.

Fun

Everybody was screaming and laughing and I just thought that it was really nice that they were having fun, because school-work is sort of fun and sort of boring. Gym is nicer.... I think gym should be longer, too, because it's funner than everything else, I think. (Dyson, 1995, p. 399)

Many participants in physical education and youth sport have described fun as central to meaningful activity experiences (Dyson, 1995; Jakobsson et al., 2014; Smith & Parr, 2007; Solmon & Carter, 1995). For example, in a case study of one British middle school, participants interviewed said having fun in physical education was more motivating than participating for health's sake (Hemming, 2007). When asked if she participated in physical education activities because they were healthy or for a better reason, one student's response was: "[A] better reason, 'cos they were fun" (p. 359). Secondary students also commonly cited fun as a contributor to meaningful participation in physical education. Some secondary students' interpretation of fun was different to that of primary or middle school students. For example, secondary students interviewed by Dismore and Bailey (2011) suggested fun was less about playing games and more about learning and challenge. From responses to a questionnaire about their attitudes toward physical education (Rikard & Banville, 2006), secondary students' (n = 515) reasons for liking or disliking aspects of their physical education experience centered around fun. For example, 19% of respondents liked sports activities because they found them fun. The highest rated reason for liking fitness activities was also fun (9.7%), while the second highest rated reasons for disliking fitness activities was because they were boring. In a follow up focus group one student said: "I guess my biggest problem with the fitness activities is that they are really boring. It is boring to just run in circles for a long period of time" (p. 393). Thus, it appears a *lack* of fun can have deleterious effects on participation and the meaningfulness of an experience. For instance, one student interviewed in Koekoek, Knoppers, and Stegeman (2009) said: "When I do not have fun, then I do not feel like participating" (p. 321). Further, MacDougall, Schiller, and Darbyshire (2004) found that participants associated play with fun but saw organized youth sport as an adult-controlled and overly-structured activity that often lacked enjoyable qualities of play.

The use of game-centered approaches (GCAs) and SE instructional models have been found to contribute to students having fun and finding value in physical education (Fry, Tan, McNeill, & Wright, 2010; Georgakis & Light, 2009; Wallhead & Ntoumanis, 2004). For example, in discussing his thoughts about a drawing that represented his learning in physical education through GCAs, one student said: "I [used to] think playing sports are pretty boring ... but I think it's a lot of fun now ... and I really look forward to whenever like I can go" (Georgakis & Light, 2009, p. 26). Additionally, 26 high-school students taught through SE showed statistically significant increases in enjoyment of their lessons, while 25 students in a comparison group taught using a traditional approach did not (Wallhead & Ntoumanis, 2004). Collectively, these findings support the use of GCA and SE models as ways to promote fun and enjoyment, and to contribute to a meaningful experience in physical education.

While these studies point to the importance of including fun experiences for young people, Quennerstedt's (2013) review of 285 physical education lessons posted on YouTube from 27 different countries showed there was, at times, an overemphasis on fun, represented by allowing students to sit around on the sidelines to chat, wrestle with peers, or "mess around" during a physical education lesson. Quennerstedt (2013) suggested these situations can result in lack of learning and students not taking physical education seriously, detracting from the meaningfulness of the experience. Thus, for fun to be considered as part of a meaningful experience, it does not necessarily reflect an unstructured or undisciplined approach by the teacher or coach.

Fun appears to be a necessary component of physical education or youth sport experiences identified as meaningful. Pedagogical models, such as GCAs (like Teaching Games for Understanding [TGfU] or Game Sense) and SE seem to effectively facilitate meaningful experiences that are fun for children in physical education. Further, although planning for fun is important, we caution that it should not be viewed as the only focus of a physical education lesson but rather as an effective vehicle for, and therefore integral component of, meaningful experiences. To that end, we recommend that fun should not be ignored, nor should it be prioritized at the expense of other criteria for meaningful experiences.

Challenge

The thing I enjoyed most was the sit-ups.... I was trying so hard, and when I made 27, then I felt pretty good.... Because I feel I met my goal because I thought that I couldn't do more than five, but I actually got more. (Dyson, 1995, p. 400)

Engagement in activities that provided an appropriate challenge for participants was noted as another important component of a meaningful experience. For example, when

students could take ownership of what they were trying to achieve (that is, choose their level of challenge), they found physical education more meaningful (Dyson, 1995). Through individual and focus group interviews, Dyson (1995) and Rikard and Banville (2006) found that some students wanted greater challenge than what they were currently experiencing and frequently associated challenge with enjoyment. Moreover, some learners associated boredom in physical education with inadequate levels of challenge (Clark et al., 2011; Dismore & Bailey, 2011).

Challenge was sometimes cited as a motivating factor that led to continued participation. Gillison, Sebire, and Standage (2012) identified 10 secondary school girls who showed an increase in autonomous motivation over a year. Participants came to value "exercise for the opportunity it provides to set and achieve personally meaningful challenges" (p. 536). Challenges that were identified as personally meaningful were associated with a sense of achievement, noticing outcomes and reasons to try, the option to set one's own goals, and self-improvement in skills or fitness (Gillison et al., 2012). One interviewed student said, "I think [my exercise has increased] because ... I know that there's something gonna come out of it for doing it. So I enjoy like, chasing targets, like doing a target and just achieving stuff" (pp. 543-544). Youth sport participants have expressed similar perspectives on challenge when asked about their reasons for continuing participation. One participant interviewed suggested a need for "challenges, excitement, and the struggle of the moment" (Jakobsson, 2014, p. 10). While challenge can be conceptualized in terms of the relative difficulty of a task for learners, we identified competition as a sub-theme that further extends how students think of challenge.

Competition

The role of competition contributed in both positive and negative ways to participants' meaningful engagement in physical education and youth sport. Four studies conducted in youth sport settings saw participants respond explicitly to the role of competition as part of a meaningful experience (Jakobsson, 2014; Jakobsson et al., 2014; Light, 2010a, 2010b). Although many participants enjoyed competition, enjoyment was associated with different aspects. For example, Light (2010a, 2010b) conducted case studies of youth swimming clubs in Australia and France and found that while competition was valued highly by members of both clubs, members of the Australian club placed more value on success from competition than members of the French club. Interviews with French swimmers and their parents revealed that competition was valued for the social interactions and personal challenge it provided (Light, 2010b). Such positive views about competition were not present to the same extent in other studies reviewed. Specifically, from open-ended surveys of 377 Swedish youth, only five from 190 statements responded positively to the place of competition or its role in continuing sport participation (Jakobsson et al., 2014). However, follow-up in-depth interviews revealed that participants enjoyed the challenge and "struggle" that came from competition (Jakobsson, 2014).

Competition was also mentioned in research conducted in physical education but not to the extent we assumed prior to conducting the review. This is not to say it was absent, however. In particular, some students spoke about the different ways competition was conceptualized and emphasized (or de-emphasized) in physical education. For example, one high-school student in Gibbons and Gaul's (2004) research said of competition in physical education: "It is competitive in the way that I want to be there every time, but it is not the same kind of stressful competitiveness there is in team sports or with friends" (p. 10). Similarly, an elementary student interviewed in Dyson's (1995) research said:

I learned competition doesn't really matter. It's how you play.... If you're in two groups, and one of the groups wins, most of the time they go back [to class] nagging you, [saying] "We won, we won." [Today that didn't happen]. It was just plain fun. (p. 402, brackets in original)

Although competition may be viewed as meaningful for many youth sport participants, the evidence from this review suggests this is not the case for students in physical education. For this reason, we suggest that physical education teachers carefully consider how competition is presented; students from research reviewed preferred emphasis to be placed on the challenge(s) inherent in the process of competing rather than on the outcome (that is, winning and losing).

Motor competence

"If I was better at the sport I would participate more because I wouldn't be afraid to do it.... I am afraid that I am going to mess up and that everyone is going to laugh at me" (Carlson, 1995, p. 471). As the quote from the participant in Carlson's (1995) research suggests, experiences in physical education were more positive when students' perceptions of their own motor competence were high, which had implications for the meaningfulness made from their experiences (Dyson, 1995; Erhorn, 2014; Gray et al., 2008; Lee, Carter, & Xiang, 1995; Nilges, 2004). For instance, students from one elementary class reported finding creative dance meaningful when they believed—or they felt peers believed—their performance was "good" as demonstrated through motor competence (Nilges, 2004). Through interviews and observations of primary-school physical education students, low perceived motor competence levels were associated with a lack of enjoyment and an inability to participate satisfactorily (Erhorn, 2014).

Additionally, Gray et al. (2008) conducted a mixed-method study of 285 primary and secondary students' experiences of invasion games when taught through GCAs. Analysis of survey data revealed "38 per cent of the pupils' value/importance scores could be accounted for by their perception of competence scores" (p. 192). Further, focus group participants reported putting more effort into physical education when their perceived competence was high, while they were less motivated to continue participation when their perceived competence was low (Gray et al., 2008). In reference to their perceived lack of competence, one student was quoted as saying "sometimes it makes you like really like you just want to like stand around and not do anything" (p.190). Motor competence contributed to students' meaningful engagement through executing game skills, understanding their performance relative to others in the class, receiving praise from the instructor and/or peers, and negative responses made by classmates.

Personally relevant learning

For our test in ping pong we had to know how long the ping pong table is and how high the net is. When is that ever going to help you?... [Whereas] if you were watching a basketball game and you could say "oh they are doing a full court press and so maybe that caused this. That would be more interesting to learn about. (Garn, Cothran, & Jenkins, 2011, p. 232, brackets in original)

Physical education and youth sport was identified as more meaningful when participants were able to recognize the importance of what they were learning and could make explicit connections between their current physical education and sport experiences and future aspects of daily living outside of the school or community setting (Azzarito & Ennis, 2003; Enright & O'Sullivan, 2010; Erhorn, 2014; Kinchin & O'Sullivan, 2003; Leonard, 2014a; Leonard & McShane-Hellenbrand, 2012). Failure to do so can make a physical education experience meaningless, as the student quoted in Garn et al. (2011) suggested. In their qualitative research of eight suburban middle-school students in the United States, Garn et al. showed that students rarely felt they learned anything new (including skills, rules, and strategies), particularly when their physical education experience was so heavily oriented toward short units of sport that were taught through direct instruction and as part of a multi-activity curricular model. When students struggle to establish connections to their broader lives, they report a lack of meaningfulness in these physical education and youth sport experiences (Koekoek et al., 2009; Quennerstedt, 2013; Redelius, Quennerstedt, & Öhman, 2015; Smith & Parr, 2007). The use of exergames represents one contemporary way to help students make connections between physical education in schools and physical activity interests outside school and thus enhance meaningful participation for students (Maivorsdotter et al., 2015; Meckbach, Gibbs, Almqvist, & Quennerstedt, 2014).

Due to an inability to find relevance in what they were learning, some students expressed a desire to focus on what they perceived to be more "academic" subjects instead of physical education. Consequently, some students interviewed by Smith and Parr (2007) saw physical education as "a break from academic lessons that you have to use your head for" (p. 44). Students interviewed by Georgakis and Light (2009) similarly reported not being able to find relevance in their typical physical education experiences; however, their perspectives changed when taught through a GCA. For example, one student said, "normally we play sports that include not much thinking, but these few weeks, we've been playing sports that include us to think where to hit the ball" (p. 26). Indeed, several pedagogical models, in particular GCAs and SE, have been shown to help students make connections between physical education experiences and their lives outside of the classroom (MacPhail et al., 2003). Kinchin and O'Sullivan (2003) found that several students saw long-term relevance in the opportunities the SE unit provided; in particular, students interviewed suggested that working with a team helped them learn social skills to use in their everyday lives. These findings highlight the importance of instructors making explicit connections for learners in how experiences in physical education can inform their broader physical activity participation. However, one case study of SE involving a highly skilled male student revealed that SE did not facilitate an authentic sport experience for him (Crance et al., 2013). This suggests the importance of taking students' individual skill level or levels of experience into account when planning and teaching physical education. Students who are highly skilled or who have extensive experience in a content area may be grouped together, a strategy that models such as SE or GCAs enable. Although a case study of one student does not support generalizable claims, these findings may highlight the importance of individualizing pedagogical approaches to help students make personalized connections.

In previous sections, we described how others have made similar recommendations to individualize instruction, primarily through offering student choice. Offering choice and/ or the opportunity to provide input into learning experiences has been identified by students as something that could help increase the personal relevance of activities in physical education and therefore the meaningfulness ascribed to an experience. For example, a British participant interviewed by Dismore and Bailey (2011) said: "Most people in the school are football fans but I am not a football person ... so I think they should give us a wider selection of what kids like" (p. 511). Further, over 75% of 5,382 secondary school questionnaire respondents in Hong Kong felt their physical education curriculum should be designed through consultation between students and teachers, allowing students to make more choices for themselves (Ha, Johns, & Shiu, 2003). Providing students with choices can help create meaningful experiences for participants, leading to a sense of empowerment, a willingness to take risks in their learning, continued participation, and a sense of ownership of the learning experience (Enright & O'Sullivan, 2010; Gibbons, 2009; Gibbons & Gaul, 2004; Haras, Bunting, & Witt, 2006; Leonard, 2014b; Skille, 2007; Smith & Parr, 2007). For example, a 3-year participatory action research study that involved positioning 41 Irish teenage girls as co-designers of a physical education curriculum resulted in participants being more inclined to come to class prepared, participate fully, and to encourage others to do so (Enright & O'Sullivan, 2010). Conversely, when teachers offer students little choice, their participation can be adversely affected. For instance, a survey of 360 adolescents participating in a high ropes course revealed that higher levels of anxiety were associated with lower levels of choice (Haras et al., 2006).

Personally relevant learning was consistently linked to meaningful physical education and youth sport experiences. Furthermore, helping students better understand through reflection what made experiences in the past and present meaningful provides a possible springboard to longer and more fruitful participation in the future. Reflection on experience was central to participants' meaning interpretations in Nilges's (2004) phenomenological research. We suggest that teachers and coaches assist students in clearly identifying the purposes of what they are doing by making connections between what they are learning, why it is of value, and how it applies to their lives beyond the classroom or youth sport setting. Providing students with opportunities to take ownership of their learning through being involved in making choices (with teachers and coaches) and reflecting on their experiences may strengthen the personal significance and therefore the meaningfulness derived from their experiences.

Discussion

In this review, we have synthesized empirical evidence to provide insight into the nature and quality of experiences that participants identify as meaningful in physical education and youth sport. Researchers in physical education and sport continue to report findings related to meaningful experiences as a positive outcome of their studies. However, many of these research projects did not explicitly develop research questions about young people's meaning-making or experiences of meaningfulness: of the

50 studies reviewed in this research, only 15 were designed to specifically focus on meaning or meaningful experiences. In many instances, findings related to meaning and meaningfulness were often a by-product or a single finding amongst many research outcomes. This suggests that while researchers report, and clearly value, outcomes

education and youth sport. The review indicates that a number of factors, such as sex/gender and family background, influence meaningful engagement in physical education and youth sport. Several patterns have been identified regarding meaningful participation. For example, many girls prefer to participate in individual, expressive activities, while there was support across participant categories (that is, SES, sex/gender, and cultural context) for providing learners with some choice in content and level of challenge. However, more research is needed on specific types of experiences that promote meaningfulness for individuals in particular groups. Such investigation will help in better understanding how several factors (such as sex/gender, age, race/ethnicity, or family structure) intersect to shape children's mean-

ingful engagement in physical education and youth sport.

reflecting meaningful engagement with physical education and youth sport, greater attention to the prioritization of meaningful engagement as a research focus is merited. Our review identifies gaps in the empirical research literature, providing a starting point for a clearer agenda focused on fostering meaningful experiences in physical

Our findings provide insight into and support for components of meaningful experiences in physical education and youth sport. Specifically, the synthesis of empirical evidence adds further weight to Kretchmar's (2001, 2006) proposals about what to prioritize to promote meaningful engagement in physical education and youth sport. Undoubtedly, engagement with research literature influenced the development of his criteria, so it is unsurprising that our findings share many commonalities with his, including a similar emphasis on social interaction, fun, challenge, and motor competence. However, these criteria have allowed us to identify ways in which criteria or elements of a meaningful experience are often connected. This is something few studies identified or were able to articulate. In particular, fun was frequently mentioned in combination with other themes. For example, although fun and social interaction were each identified separately as criteria that led to meaningful experiences in physical education settings, it was possible for one to either hinder or enhance the other. When social interactions were viewed negatively due to misbehaving or cheating, participants expressed a lack of fun (Dyson, 1995), while positive social interactions were often cited as contributing to fun (Jakobsson et al., 2014; Light, 2010a; Smith & Parr, 2007). Similarly, students connected fun and personally relevant learning, suggesting that physical education was more fun when they were able to make sense of their learning in relation to their lives outside of the classroom or youth sport setting (Garn et al., 2011). On the other hand, when the focus of the physical education lesson was centered almost exclusively on fun, it seems the lack of other important components of a meaningful experience was noticed (Quennerstedt, 2013). For example, students' experiences in physical education were better when they were more than "just a bit of fun" and included learning (Smith & Parr, 2007, p. 48). Additionally, motor competence and challenge were sometimes associated, with participants seeking challenges to improve their motor competence (Gillison et al., 2012). In sum, while each criterion contributed to the meaningfulness of participants' experiences, the interplay between criteria is of crucial importance, as are the particular cultural and

community values placed on physical activity in the contexts in which participants are

The lack of longitudinal studies focused on meaningful experiences makes it unsurprising that Kretchmar's criterion of delight did not appear prominently, given the deep and sustained experiences that delight demands (Kretchmar, 2005b, 2006). Furthermore, we acknowledge that delight may be a difficult concept for a child to articulate, and thus in some cases may have been present but not expressed by participants. The results of the review suggest that a meaningful physical education or youth sport experience is not necessarily dependent upon all criteria being present in an experience or reliant on any one of these criteria, but rather on the way they combine, intersect, are layered, and are interpreted by learners and teachers alike. Each of these criteria therefore merit further indepth study individually and in combination, and can be used to guide research agendas focused on meaningful participation.

The individual nature of ascribing meaningfulness to physical education and youth sport experiences was influenced by various factors. Therefore, prioritizing meaningful experiences in physical education and youth sport requires greater attention to the accommodation of individual differences in both curricular and pedagogical approaches. Student-centered approaches that require listening and responding to students' ideas and interests can result in greater degrees of participation, enjoyment, and meaningfulness (Georgakis & Light, 2009; Wallhead & Ntoumanis, 2004). There is, therefore, a need to enact developmentally appropriate pedagogies that allow for differentiated levels of autonomy and decision-making as participants move through the grades. For example, while noting the role of challenge in meaningful engagement in physical education, Dismore and Bailey (2011) found that "the importance of challenge was highlighted most notably by secondary school children" (p. 509). While criteria for meaningful engagement are common across age groups, there is a need for different pedagogies and instructional strategies to implement these criteria for students in elementary, middle school, and high school physical education. To accommodate these differences, we do not envision a different version of physical education for each student in a class but rather the implementation of strategies that facilitate choice and involvement in decision-making about their learning experiences with and by the learner; for example, providing students with a variety of equipment to choose from to execute a skill or game situation might help address this issue by increasing success rates and thus enjoyment. Given the important differences identified due to sex/gender in the meaningfulness of experiences, teachers may employ various grouping arrangements. In some cases, sex-segregated classes may result in more meaningful experiences due to the types of choices students like to make or ways teachers can help facilitate student choice. However, Gibbons (2009) suggests it is often physical education teachers who express girls feeling more comfortable when segregated from boys, while female students rarely express this desire. Thus, teachers should employ a variety of grouping approaches to enhance the meaningfulness of experiences for students. Several studies reviewed showed how pedagogical models such as GCAs or SE might help teachers and coaches accommodate individual differences through small group approaches in a typical physical education class of 20 or more students, and this adds further weight to advocating the use of these models.

We struggled to identify specific pedagogies to promote meaningful physical education and youth sport experiences for participants. Specifically, the research to date provides

little empirical evidence to support and guide the implementation of teaching strategies to facilitate meaningful experiences. In some cases, pedagogical strategies could be extracted from the details of the research provided (Nilges, 2004), and SE and GCA models also offer some guidance. However, meaningful engagement tended to be an outcome of such pedagogies rather than a planned and explicit focus. Given the positive outcomes from meaningful experiences in physical education and youth sport, there is, therefore, an urgent need for research targeted at developing and examining pedagogies specifically designed to facilitate and support meaningful engagement in school and community programs. Developing pedagogies that support how teachers and coaches foster meaningful experiences for young people can offer an important and innovative vehicle for improving students' physical education and sport experiences that may promote lifelong physical activity participation.

Conclusion

Our review of 50 empirical studies provides a synthesis of evidence that provides preliminary insight into what a meaningful experience in physical education and youth sport entails. There is sufficient empirical evidence of the influence of meaningful engagement to suggest the value of paying greater attention to prioritizing the facilitation of such experiences for participants in physical activity settings. Overall, we recommend that a more concerted effort is needed to position meaningful experiences as a priority element of physical education and youth sport participation. A greater evidence base is needed, however, to inform this approach. It is time that compelling theoretical arguments in favor of meaningful engagement as an organizing concept in physical education and sport (Kretchmar, 2006, 2007) are taken up empirically and studied more systematically in practice.

Our findings also provide an initial direction on how such meaningful experiences might be facilitated for young people. We identified the importance of social interaction, fun, challenge, motor competence, and personally relevant learning in creating meaningful experiences for participants. These five criteria provide a useful framework to guide planning and delivery of physical education and sport experiences by teachers and coaches interested in promoting meaningful engagement. The review illustrates the importance of a balanced approach where criteria are considered in combination rather than the prioritization of any one criterion. Furthermore, our review highlights that the pedagogical approach of the physical education teacher or coach is critical in facilitating meaningful participation and should include determining needs and interests to make physical education experiences personally relevant and fun to the participants as well as facilitating choice and challenge to allow for "just right" learning experiences. In addition, the effectiveness of using the criteria is highly dependent on a teacher's or coach's awareness of and sensitivity to particular cultural and community values associated with physical education and youth sport participation in the contexts in which they work.

The value of this review is twofold. First, empirical support is provided on aspects of participation that are identified as meaningful to young people, which gives direction to teachers and coaches on the types of physical education and sport experiences they should facilitate to prioritize meaningful engagement. Second, while the synthesis of empirical evidence provides sufficient evidence to suggest the merits of prioritizing meaningful



engagement for participants, the identification of gaps in the literature provides a springboard for future research to extend support of prioritizing meaningful participation in physical education and youth sport settings.

Note

1. Cultural and community values that shape meaning may include, for example, religion, race/ ethnicity, geographical location, language, history, social class, education, family, and friendships.

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ORCID

Tim Fletcher http://orcid.org/0000-0002-7352-4775

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