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8	Understanding parent stressors and coping experiences in elite sports contexts
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25 Abstract

The purpose of this study was two-fold. Firstly, to identify the stressors parents encounter when	
supporting their children performing within elite sports contexts. Secondly, to understand how	
parents cope with the stressors they encounter. A two-stage design was employed. First, 1299	
parents (fathers = 529, mothers = 761, stepfathers = 8, legal guardian = 1, and parent dyads =	
187) of adolescent athletes completed an open-ended survey to identify stressors associated	
with their child's sports involvement. Next, seventeen parents of adolescent athletes	
participated in semi-structured interviews. Data from both stages were analyzed using	
hierarchical content analysis. Stage one results indicated that parents encountered a variety of	
organizational, developmental, competitive, and parental personal stressors, including time,	
financial, logistical, health, and education concerns. Stage two results highlighted that parents	
utilize numerous coping experiences to manage their experiences, including: detaching from	
sport (e.g., sharing parental responsibilities and child's ability to cope), information seeking	
(e.g., information seeking in their current environment and drawing on past experiences),	
managing emotional reactions (e.g., emotional release strategies), avoidance (e.g., strategies	
uzed by parent or by the child), taking control (e.g., changing their own behaviors or others	
making changes), and parents providing support to their child (e.g., social support and be	
present). Overall, findings point to the importance of ensuring that interventions with parents,	
as well as the practices of sports organizations, need to expand account for a broader range of	
parental stressors and suggested coping strategies.	

Keywords: content analysis; parental involvement; stress; youth sport

Parents are highly important in an athlete's development. To help athletes achieve their potential, parents provide financial, organizational, and emotional support (Wolfenden & Holt, 2005). However, being a parent of a youth athlete can be challenging (Harwood & Knight, 2015) and not all parents engage in appropriate or optimal ways (Knight & Holt, 2014). Unfortunately, certain parental behaviors (e.g., pressure and directive behaviors) are associated with unfavorable outcomes for athletes including increased pre-competitive anxiety, and reduced enjoyment and perceived competence (Amado, Sánchez-Oliva, González-Ponce, Pulido-González, & Sánchez-Miguel, 2015; Boiché, Guillet-Descas, Bois, & Sarrazin, 2011; Bois, Lalanne, & Delforge, 2009).

It has been suggested that the demonstration of inappropriate parental behaviors may increase if parents are unable to effectively cope with the stressors they encounter in elite sports contexts (Harwood & Knight, 2009b). That is, if parents find themselves in situations which increase their feelings of strain, they may be more likely to engage in negative or punitive manners (e.g., Belsky, 1984). Thus, it has been suggested that understanding parents' stress experiences in sport is important (Harwood & Knight, 2015). In line with this call to understand parents' stress experiences, the current study sought to understanding the stress experiences of parents of French elite youth athletes, based on the transactional model of stress and coping (Lazarus, 1999).

Within this model, the term stressor refers an environmental demand encountered by individuals (Lazarus & Folkman, 1984). The threatening nature of the stressor arises from a perceived imbalance between environmental demands and an individual's coping resources (Lazarus & Folkman, 1984). Coping includes the conscious attempts individuals make to manage situations that they perceive as stressful or which worries them. To evaluate the threat, an individual uses two types of appraisals: primary and secondary (Lazarus, 1999). During the primary appraisal, the individual unearths the personal significance of a demand about his or

her own beliefs and values. For instance, one parent could appraise their child living at a training center from Monday to Friday with a fear that they are not able to support their child during moments of doubts. However, another parent may appraise the same situation as an excellent opportunity for their child to develop independence. Secondary appraisal is related to an individuals' exploration of their abilities to cope with stressors (Lazarus, 1999). For example, in the above example, one parent might think that he or she has the resources to cope with the fact that their child is living away from the family, whereas the other may not.

Within the sport parenting literature, research examining stressors has recently increased (e.g., Burgess, Knight, & Mellalieu, 2016; Harwood, Drew, & Knight, 2010; Harwood & Knight, 2009a, 2009b). Taken together, the findings of these studies indicate that British parents with children involved in tennis and gymnastics experience a large range of stressors (Burgess et al., 2016; Harwood & Knight, 2009a). Such stressors include; competitive stressors, which encompass demands related to their child's participation in competitions, including match preparation, issues with opponents, and their child's own performance and reaction; organizational stressors, which are demands associated with day-to-day logistics, personal investment, and the system/organization in which parents operate, such as the financial impact of sport upon the family, transporting the child to training and competition, and managing injuries, and; developmental stressors, which consist of demands associated with their child's future sporting, educational, and personal development.

In contrast to studies of stressors, fewer studies have focused on the coping strategies used by parents (Hayward, Knight, & Mellalieu, 2017). Coping is realized through on-going cognitive and behavioral efforts to manage the demands appraised as threatening (Nicholls & Polman, 2007). Parents of elite gymnasts and swimmers reported using several strategies to cope with the stressors they encountered. These coping strategies were broadly categorized into four themes: detaching from gymnastics, normalizing experiences, willingness to learn, and

managing emotional reactions. These strategies varied according to the stressor (e.g., time demands or watching their children compete), the situation (e.g., competitive stressors encountered by parents before, during, or following their children's performances), and the temporal period (e.g., at competition or training) at hand (Burgess et al., 2016; Hayward et al., 2017).

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Although literature has provided a good understanding of parental stressors in sport, there is a need for further research in this area for three reasons. Firstly, research has focused exclusively on British parents, which may not be representative of other countries who have different structures, organizations, and cultural expectations of sport and parenting. Secondly, research has only been conducted in four sports (and only two when considering coping literature). Of these four sports, three of them have been individual sports (e.g., tennis, gymnastics, and swimming) all of which place specific demands on parents (e.g., registering and organizing children's involvement in competitions) which may not be shared in team/other sports. Consequently, it has been recognized that there is a need for further research examining sport parenting to be conducted in a broader range of sports and countries (Dorsch, Vierimaa, & Plucinik, 2019). Thirdly, it has been suggested that sport parenting expertise includes the ability to develop and deploy appropriate coping strategies to manage stressors that parents encounter in sports contexts (Harwood & Knight, 2015). If parents perceive the situation as non-threatening to their values or beliefs (i.e., primary appraisal) and/or feel able to manage stressors that are causing them concern, the situation is less likely to result in feelings of strain and parents would be more likely to adopt positive behaviors (e.g., support, praise, and understanding; Knight, Holt, & Tamminen, 2009). Parents' management and evaluation of situations could benefit for athletes since such behaviors as praise and understanding were positively associated with their enjoyment and intrinsic motivation (Boiché et al., 2011; Sánchez-Miguel, Leo, Sánchez-Olivia, Amado, & García-Calvo, 2013). Therefore, further

understanding parents' experiences, particularly the stressors and coping experiences, is essential to improve the experiences of both parents and athletes in elite sports contexts. To this end, the purpose of the current study was two-fold. Firstly, to identify the stressors parents encounter when supporting their children involved in intensive training centers in France. Secondly, to understand how parents cope with the stressors they encounter.

127 Method

Methodological and Philosophical Underpinning

This study adopted a qualitative description methodology (Sandelowski, 2010). This design was considered the most appropriate methodology because the researcher can stay close to the data and to the surface meaning of word and events, emphasizing description over interpretation (Sandelowski, 2000). Qualitative descriptive studies offer a comprehensive summary of an experience in the everyday terms of those experiences (Sandelowski, 2000), which was deemed important when seeking to understand the range of experiences that parents' encounter. Further, qualitative description is useful when seeking to conduct applied research, which will be used by practitioners (e.g., coaches, organizations). The aim of this study was always to produce findings which could easily understood and applied by a range of sports organizations, coaches, and clubs across France.

The study was approached from a post-positivist paradigm. In approaching this study from a post-positivist perspective, we sought to gain an insight into the parent-participants' realities, which were independent of our own thinking. However, we recognize that objectivity is fallible and that our past experiences, theories, and research will influence our interpretations. In line with a post-positivist and qualitative descriptive approach, we sought to drawn on a broad range of experiences, gained through different data collection methods, to increasing the opportunities of gaining greater insights into parents' experiences.

Participants

Stage 1. Overall, 1299 parents participated in this stage. The sample comprised 529 fathers, 8 stepfathers, 761 mothers, and one legal guardian. The parents' marital status was as follows: married (73%), divorced (8%), separated (6%), civil partnership (5%), domestic partnership (5%), single (2%), and widower (1%). With regards to their occupations, parents were classified as follows: intermediate occupation (33%), middle manager and higher intellectual professions/liberal profession (30%),employee/agent (19%),craftperson/shopkeeper/head of a company (8%), worker/driver (5%), unemployed (3%), farmers (1%), and retired (1%) (Institut National de la Statistique et des Études économiques, 2003). In most cases just one parent per family unit participated, however there were 187 parent dyads (i.e., both parents) included. Participants represented 1108 semi and competitive-elite athletes ($n_{\text{female}} = 382, 34\%$; M age = 16.01 years; SD age = 1.53; Swann, Moran, & Piggott, 2015) who attended intensive training centers. In France, the federations select the "best" athletes to join intensive training centers. Each sport federation selects athletes based on athletic performance and potential, academic achievement, and their overall behavior. Depending on the center, athletes either live in the center from Monday to Friday (returning home or to competitions at the weekend) or they live there full-time. The athletes trained for an average of 15.01 hours per week (SD = 5.34) and had been involved in competitive sports for an average of 8.33 years (SD = 2.89). They were from 34 different sports, both individual (46%) and team sports (54%)¹, and competed at either national (78%) or international level (22%).

Stage 2. Sixteen parents (nine mothers and seven fathers) from stage 1 participated in this stage. Fourteen were married, one was in a civil partnership, and one was single. Eight parents were middle managers or had a higher intellectual or liberal profession, six worked in intermediate occupations, one was a worker, and one was retired (Institut National de la

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¹ The 34 different sports were: American football, badminton, baseball, basketball, bowling, canoeing, climbing, cycling, fencing, field hockey, football, golf, gymnastics, handball, ice hockey, judo, kayaking, modern pentathlon, orienteering, rowing, rugby, sailing, skiing, softball, squash, surfing, swimming, table tennis, target shooting, tennis, track and field, triathlon, volleyball, and wrestling.

Statistique et des Études économiques, 2003). In most cases, just one parent per family unit was included, however the mother and father of one athlete participated. Participants represented fifteen semi and competitive-elite athletes (Swann et al., 2015) ($n_{\text{females}} = 6$; M age = 16.70; SD age = 1.13) attending intensive training centers. The athletes trained for an average of 13.07 hours per week (SD = 3.01) and had been involved in competitive sports for an average of 6.73 years (SD = 3.24). They participated in individual (n = 4; badminton, cycling, and judo) and team sports (n = 11; basketball, handball, rugby, and volleyball), and all competed at a national level.

Procedure

Institutional research ethics board approval was obtained and then the study proceeded in two stages. For stage 1, the researchers contacted sport federations to introduce the study and inquire into the possibility of using their center for data collection. If the federation agreed, they sent a study invitation to coaches, who then forwarded the invitation to parents of athletes at their center. The invitation included a link to an online survey. Participation was voluntary and participants provided informed consent at the start of the survey.

For stage two, following stratified random sampling, the lead researcher contacted participants via e-mail from the list of participants who took part in stage 1. Interested participants (response rate = 65%) voluntarily contacted the lead researcher who subsequently arranged a suitable time and location to conduct the individual interview. Semi-structured interviews were selected to provide an opportunity for participants to provide detailed information on the topic. Through semi-structured interviews, it was perceived that the participants would have an opportunity to share their interpretation of their own experience in semi- and competitive-elite sports contexts (Denzin & Lincoln, 2005).

Data Collection

Stage 1. Given the lack of previous research on this topic in France, it was important not to restrict participants to a pre-selected list of stressors. Rather, it was deemed necessary to allow participants to describe stressors and their experience of these stressors in their own words. Thus, an open-ended survey was selected. Following a request for select demographic information, the online survey incorporated three questions to explore primary appraisal of the stressors encountered by parents. First, they described the stressors associated with their child's sport involvement that they found easy to manage. Next, they described the stressors associated with their child's sport involvement that they found difficult to manage. At the end, parents detailed parts of their child's sport that caused them concern. After each question, there was a large space for parents to answer the questions at their own convenience and in as much detail as possible.

Stage 2. A semi-structured interviewed guide was developed based upon results of stage one and previous research conducted in this area (e.g., Burgess, Knight, & Mellalieu, 2016). The guide provided the interviewer with an order of questions to ask, with the semi-structured nature of the interview allowing for changes in response to emerging themes (Silverman, 2013). The first two authors conducted all individual interviews. They took place in a private room in either the participants' home or the researchers' university. The interviews lasted between 19 and 57 min (M = 29.44 min, SD = 11.55 min). Each interview began with introductory questions to establish rapport with the parents. Then, transition questions were used to lead the parents to the two main themes of the interview: (1) to detail the stressors participants had mentioned in stage one (e.g., "In survey, you mentioned that [names of each sub-themes] worry you, could worry you, or are difficult to manage. Do you agree with this summary?") and (2) to identify the strategies used to cope with each of stressor mentioned (e.g., "How do you cope with this particular stressor?"). Finally, parents answered summary questions (e.g., "Overall, what are

the main strategies you adopt to cope with each of these stressors?") and provided with an opportunity to make any final comments.

Data analysis

Data from stage one and two were analyzed through content analysis (Côté, Salmela, Baria, & Russell, 1993; Miles & Huberman, 1994) using the NVivo 11 software to facilitate data organization. For stage 1, the first question was analyzed to identify stressors perceived as being easy to manage, whereas the following two questions were analyzed to identify stressors perceived as being difficult to manage and causing concern about their child's sport involvement. To avoid duplication, answers to question two and three were coded together. Thus, an event mentioned in both question 2 and 3 was coded only once. The process of content analysis then occurred.

First, meaning units were created by identifying and paraphrasing the stressors and the coping experiences reported by parents in their survey responses. A frequency count of each meaning unit was conducted for later comparisons (e.g., Harwood & Knight, 2009b). Each independent mention of meaning units from a participant was only counted once. Each meaning unit was then coded into a first order thematic category that essentially represented a cluster of similar stressors or coping experiences (Maykut & Morehouse, 1994). This analytical process progressed to a higher thematic level (i.e., higher order themes) culminating in a final set of general dimensions that represented the phenomena of stressors and coping experiences.

After the competition of the analysis of stage one data, stage two interviews were conducted. These interviews were audio-recorded and transcribed verbatim. Pseudonyms were assigned to each participant to ensure confidentiality throughout the analysis process. Interviews were then analyzed in the same process as the surveys. Overall, the analysis of both the surveys and the interviews was abductive (Mayan, 2009). Initially the data were coded deductively using predetermined categories identified in previous research. Next, data that did

not fit into predetermined categories was analyzed inductively, as the data and their interpretation guided researchers towards additional themes and codes.

Methodological Rigor

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In line with recent suggestions, a relativist (rather than criterion) approach to enhancing and assessing methodological rigor were adopted in this study (Sparkes & Smith, 2009). Firstly, the research team ensured that appropriate individuals were participating in the study based on the research aims (Cresswell, 2007). Secondly, pilot interviews were conducted prior to stage two data collection, which allowed the two-lead researchers to check the coherency of the interview guide and ensure the questions would fully address the aims of the study. Thirdly, depth of description and understanding of the cases was facilitated by the same two interviewers conducting all the interviews, ensuring consistency in the delivery of interview questions. Moreover, the experience of the interviewers as an athlete and coach helped in establishing rapport with study participants. Such rapport was important to increase the potential for participants to share information and ensure the credibility (Tracy, 2010). The lead researcher conducted data analysis but data were also subjected to a prolonged and rigorous peer review whereby the lead researcher engaged in discussion with the second researcher (i.e., critical friends) to provide transparency (Tracy, 2010). Through this process, the development of meaning units, sub-themes, higher-order categories, and dimensions was facilitated and ensured that the experiences of all individuals were accounted for. Finally, to demonstrate coherence, we ensured continuity between the philosophical underpinning of the study, the research question, the data collection, data analysis, and presentation of the results (Smith & Sparkes, 2016).

265 Results

Analysis of each survey question resulted in the identification of four general dimensions of parental stressors: organizational, developmental, competitive, and parental

personal stressors. Interview data indicated that parents encountered stressors across each of these categories and reported a wide range of coping experiences to manage these. Parents indicated that they often used several coping approaches to manage one stressor and/or managed different stressors with one coping strategy. In the following sections, a brief summary of the findings from stage one are provided followed by a detailed examination of the stage two data because stressors are enumerated with examples in supplementary files.

Stressors

The analysis resulted in the identification of four general dimensions of parental stressors: organizational, developmental, competitive, and parent-personal. Within each dimension, following the primary appraisal, some stressors were perceived as easy to manage while others were perceived as difficult to manage. Overall, participants listed substantially more stressors that were difficult to manage compared to easy to manage (a ratio of three to one). The vast majority of parents provided answers to all three questions, however 16 parents did not answer the first question and one parent did not answer the second and third question.

Organizational stressors. Organizational stressors involved demands related to health (e.g., doping and injuries), sport systems (e.g., scheduling, quality of training and coach, and communication), logistics (e.g., domestics tasks and organization), and personal investments (e.g., time and finance). Overall, parents cited 734 times a type of organizational stressor as being easy to manage while they mentioned 2028 times a type of organizational stressor as difficult to manage. For more details, see Supplementary file, Table S1.

Developmental stressors. Developmental stressors consisted of demands arising in relation to their child's future, their holistic development, engagement in education, motivation, and their interactions. Parents identified 906 times a type of developmental stressor as difficult to manage, while they only reported 366 times a type of developmental stressor as being easy to manage. For more details, see Supplementary file, Table S2.

Competitive stressors. Competitive stressors encompassed emotional and outcome demands associated with competitions. Parents reported 451 times a type of competitive stressors as being difficult to manage and causing concern, while they only identified 88 times a type of competitive stressors as being easy to manage. For more details, see Supplementary file, Table S3.

Parent-personal stressors. Parental personal stressors involved demands related to their distance from their child (i.e., their child living away from home) and parents' provision of support and their interactions with other parents. This dimension was the least reported, with 147 quotes for these stressors as being easy to manage and 341 quotes for parental personal stressors as being difficult to manage. For more details, see Supplementary file, Table S4.

Coping experiences

Parents reported using several experiences to cope with the different stressors they encountered in elite sports contexts. These coping experiences were classified into six dimensions: (a) detaching from sport, (b) information seeking, (c) managing emotional reactions, (d) avoidance, (e) taking control, and (f) and parents providing support. Parents utilized strategies that they themselves had put in place or that their child or sport center implemented. The link between stressors encountered by the parents and their coping experiences appear in Table 1 for detaching from sport, in Table 2 for information seeking, in Table 3 for managing emotional reactions, in Table 4 for avoidance, in Table 5 for taking control, and in Table 6 for parents providing support.

Detaching from sport. Parents detached themselves from their child's sport to cope with the stressors they encountered. Specifically, they attempted to take a step back from their child's sport experience to minimize the impact it may have on them. Parents' attempts to

detach from their child's sport was facilitated by (a) sharing parental responsibilities and (b) child's ability to cope.

Sharing parental responsibilities. One of the main strategies parents used to cope with the stressors was relying on the expertise of professionals from their child's sport center. For example, one mother relied on the expertise of center's dietician to manage her nutrition concerns. However, if there was not access to support or appropriate expertise available at the sport center, parents sought help from other sources. For instance, one mother explained that she worked with a psychologist from outside of the sport center because, as she said, "At the mental level, we were present, so it was ... But, at some point, when I knew she was not well, I had to take her to a psychologist in town". Less frequently, parents also worked with other parents or relied on the expertise of other family members to cope with organizational and competitive demands, such as transporting their child to training and competitions or managing poorly organized competitions. Parents also relied on the hospitality of their child's friends, which helped them to manage stressors related to their child living away from the family home.

Child's ability to cope. Parents relied on their child's own abilities to cope in different settings and under different demands to facilitate their own abilities to detach from the sport. For instance, several parents recognized that child's independence helped them to manage or reduce their own stressors, as one mother explained in relation to managing the time stressors associated with competitions:

He knew enough people to manage his schedule and accommodation/transport to competitions. He finds it easy to develop relationships; he is doing a lot to relieve us.

He is contacting the members of the association and asking if he can have a lift.

Similarly, several parents indicated that their ability to manage organizational stressors was due to their child's ability to find their own accommodation, as one father explained, "She regularly asks her teammates to accommodate her for the weekend. She can be accommodated by her

teammates and school friends." Finally, parents also explained that the trusting relationship they had with their child allowed them to develop their own autonomy and thus reduce developmental stressors associated with balancing sport, school, social and personal demands.

[Insert Table 1 here]

Information seeking. The parents searched themselves information to facilitate coping in their child's sports project. Parents enhanced their knowledge by asking advice from others or by reflecting on their own experiences. Thus, the dimension of information seeking contains two higher order category: (a) information seeking in their current environment and (b) drawing on past experiences.

Information seeking in their current environment. When coping experiences were not available within the environment (e.g., sport center, child, other parents), parents sought to expand their knowledge by asking for advice from the sport center, their child, and other parents or by searching information in the literature and internet. Specifically, when they found a lack of information or feedback from the sport center or had concerns about their child's future, they sought further advice from a variety of sources. For instance, one mother called the federation to cope with the lack of information she had access to:

The most difficult, this at the federation level, to have clear information from the coaches to go to a competition abroad in [name of country] with the French team. We would like to know a little more, we did not know if ... there was an individual tournament or a team tournament.

Drawing on past experiences. In addition to learning from others, parents also used their own experiences and knowledge to cope with certain stressors (e.g., appropriate support, competitive outcomes, and quality of training and coaching). For instance, one father explain that he used this sports knowledge to manage the behaviors of his child's opponents during competition:

There may be stressors when on a field, your child is targeted because he is the youngest, he is the worst, he is playing in front of a person who's older than he is. So, I play volleyball too and when we play against young people, we put pressure on them because we know we have encounter, that's how, we have psychological influence ... Thus, sometimes on the field, it can be complicated, complicated to live. To do sports, I am cool with this, it's good war. As long as it stays in the field.

[Insert Table 2 here]

Managing emotions. To cope with the negative emotions that parents' encountered as a result of their child's sporting involvement, parents used emotional release strategies and attempted to normalize their experiences.

Emotional release. Parents reported using emotional release strategies to cope with the stressors they encountered due to time and competitions stressors, issues with coaches, and their distance from their child. For instance, one mother explained that the only way she would cope with the distance from her son was by "crying".

Normalizing parents' experiences. Parents explained that reappraising demands as normal in the context of their life histories allowed them to cope with their stressors. For example, one mother was able to cope with the stressors associated with watching her child compete by reappraising stress as normal, "I am always stressed when I go to see my son but stress is my nature!". Parents also normalized their experiences to those of other parents in order to reduce the intensity of stressors including time and distance with their child.

[Insert Table 3 here]

Avoidance. Parents sparingly used avoidance and distraction strategies. Parents avoided situations that resulted in negative emotions or they encouraged their children to avoid situations that were difficult for them to manage, such as the quality of training and coaching.

Avoidance strategies used by parents. Parents chose not to go to competitions to avoid the negative emotions that can arise when watching their child compete. For example, one mother did not go with her husband to their son's tournament because she could not emotionally support his behavior, "We are not going together to the competition, because it is too much to manage."

Avoidance strategies used by the child. Parents encouraged their children to avoid certain situations that might result in them or their parents experiencing stress. For example, one father explained that he encouraged his son to stop attending his sport center because the quality of coach was causing him concern:

I intervened I said now leave him alone. I will quietly return to high school in [name of city] and in his club ... We will say that by mutual agreement, we said we will stop here, we will go back to a club structure.

By using this strategy this athlete and father could avoid the situation and subsequently cope with the stressor.

[Insert table 4 here]

Taking control. In some cases, parents tried to change the situation that caused them concern by taking control of the situation. Parents asked people in the environment to change their behaviors or parents provided themselves with a solution to manage the situation. Parents tried to take control by: (a) requiring adaptation from others or (b) adapting themselves.

Adaptation from others. Parents asked for different people involved in the elite sports contexts to change their behaviors or practices to cope with several stressors (e.g., lack of information, engagement in education, and time). Most often, they requested a change from school or sport center staff. For instance, one mother requested a change in their child's training schedule to reduce her travel on Friday evenings (i.e., return home):

If we had the opportunity to stop training at the same time for everybody, we would never have problems with train. The problem is that we cannot. The coach makes sure the younger athletes leave before to keep the older athletes to work a little harder, and we have this train problem ... We asked for a change.

Parents also requested changes from their child. They asked them to communicate more about their current performance levels or they told to their child to complete certain behaviors. One mother reported, "Clément, we had to tell him, go to rest, go and lie on your bed, put your phone away, we have to be behind him". These strategies allowed parents to manage stressors related to health concerns, health practices, lack of communication from the sport organization, and parent-child communication.

Adaptation by parents. Many parents tried to take the control of the situation by changing their own behaviors. Either parents organized their family and professional life differently or they found another solution to manage stressors (e.g., buying a car, renting a flat, finding a billet family, etc.). For example, one mother explained how she adapted to the distance that separated her from her child, "we organized our life differently without him, and we managed our family life with 3 instead of 4." In order to be present at competitions and manage the distance from their child, several parents also rented flats at the weekend in the town where their child's sport center was located, as one father shared, "We got a flat, a tiny little studio in the town where he is".

[Insert Table 5 here]

Parents providing support. The final dimension details how parents coped by helping their child to better manage difficult moments. Parents used strategies to improve their child's morale and thus indirectly managed the stressors they encountered. These strategies also allowed them to spend more time with their child to cope with distance-related stressors. The dimension contains two higher order categories: (a) social support and (b) being present.

Social support. In response to a multitude of stressors, some parents chose to increase the support they provided to their child during difficult times. One father explained how he supported his son after a defeat to manage his stressor associated with the competition outcomes:

What I have always learned and what I try to teach him is that a defeat is only a step in the progression. It is not an end in itself. I always try to find positive in what he has done. You have done good things. I as a parent, I am his only support. I am more in a positive approach and I try to bring him, always more, never less.

This support helped their child to feel more positive in various situation (e.g., defeat, injustice, or injury) and as a result, parents were less worried about their child and their stressors reduced.

Being present. Finally, parents developed strategies to help them stay in touch with their child to cope with stressors arising as a result of living away from their child, perceiving that their child was experiencing injustice, and managing to keep up and progress in education. For instance, to resolve the problem that she did not see a lot their child, one mother used competitions to have some vacation days with the family, "We organize to pack up all the family to [name of country], it is far away, we take advantage to bring all family and leave for 3-4 days of vacation." Another mother lived far away from her daughter and regularly made the trip to see her. She explained that she "made the choice to stay home and come and go." Such strategies allowed parents to spend time with their children, and similarly helped them to check in on their child and ensure they were engaging with their education.

[Insert Table 6 here]

461 Discussion

The purpose of this study was two-fold. Firstly, to identify the stressors parents encounter when supporting their children involved in intensive training centers in France. Secondly, to understand how parents cope with the stressors they encounter. Overall, findings

suggest that parents encountered a variety of organizational, developmental, competitive, and parent-personal stressors. Within each general dimension, some parents perceived stressors as being easy to manage while other parents perceived them as difficult to manage and causing concern. To manage stressors, parents employed numerous coping experiences including: detaching from sport, information seeking, managing emotional reactions, avoidance, taking control, and providing support.

Results of stage one showed that parents encountered considerably more stressors that were difficult to manage than easy to manage. In addition, different stressors were appraised by parents as threatening or as non-threatening to their beliefs and values. For example, when considering developmental stressors, the fact that athletes were very busy with their sport involvement was experienced positively by some parents because they perceived their child had purpose. However, others parents were worried that such a large investment would ultimately result in their child being limited in their engagement with other activities.

Results also show that parents encountered many common stressors such as health concerns, time and finance demands, sport organization issues, and engagement in education. However, not all parents encountered identical stressors. Further, parents did not always report the same coping experiences when faced with the same stressors. For example, to manage the balance between school and sport, one parent relied on the expertise of professionals outside of their child's sport center (i.e., working with a private tutor) whereas another parent relied on their child's independence to manage this demand. The inter-individual differences highlighted in the parents' stressor and coping experiences may result from a range of reasons, including parents' previous stress experiences and their child's response and subsequently through emotional contagion effect (e.g., Hayward et al., 2017). Given such differences it is clear that parents should be considered as individuals rather than groups when sport parent initiatives are developed and delivered (Knight et al., 2016). The teaching of new coping strategies, the

appropriation of actual coping strategies, and the orientation toward coping resources should be individualized during parent education programs.

The stressors reported by parents in this study are similar to those reported by British parents (Burgess et al., 2016; Harwood & Knight, 2009b; Hayward et al., 2017). The similarities between parental stressors could be are result of the commonalities within the different youth sport environments. However, the differences identified with British parents could have arisen due to differences in the children's competitive level, parents' experience of competitions, and the organization of each federation's sporting excellence program. For example, in France, athlete live at their training centers between Monday and Friday, but this is not the case for the British athletes who have been studied (e.g., Burgess et al., 2016; Hayward et al., 2017). Consequently, the stressors associated with their child's living arrangements were, understandably, only experienced in France.

The findings indicated that parents used several approaches to try and manage the stressors they encountered in elite sports contexts. Parents' coping approaches varied according to the stressor and the situation (Burgess et al., 2016). Further, similar to findings from elite athletes (e.g., Nicholls, Holt, Polman, & James, 2005) and aligned with transactional model (Lazarus, 1999), parents often employed multiple experiences simultaneously to cope with one stressor. The coping approaches used by parents were grouped into six dimensions, the most frequently reported being sharing parental responsibilities (Knight & Holt, 2013) and child's ability to manage. These approaches helped parents to take a step back from their child's investment in a dual project (i.e., sport and school) and manage some of stressors that caused them strain. These results extend our understanding of parents' coping, particularly how reliant parents are on their children's ability to cope (cf. Burgess et al., 2016). Consequently increasing athletes' abilities to cope and also teaching parents similar coping strategies (e.g., anticipating what coping strategies to use in response to various stressors and practicing strategies), could

be employed to improve parental coping in sport (Lazarus & Folkman, 1984; Tamminen & Holt, 2010).

A novel result was that parents also used sought to take control of the situation to cope with their stressors that caused them strain. Parents tried to make changes in the environment (e.g., requesting change from sport center related staff, spouse, and child) or make changes themselves. For example, parents modified their family and professional schedule, found billet families, bought a car, rented a flat, managed their children's medical appointments, or deleted some of their activities to reduce the stressors they encountered. This result shows that parents are able to manage some of the sport-related stressors themselves, but they also rely upon others within their child's support network making changes as needed.

Based on these results, from an applied perspective, it seems appropriate to intervene not only with parents to help them to cope with their stressors but also with children, medical, school, and sports staff. Considering that coping is a skill that can be learned or acquired with experience (Tamminen & Holt, 2010),-parents could benefit from learning to manage their emotions, trusting their child, and offering activities other than sport. Parents could also benefit from interventions carried out with the sport centers. For instance, sports centers could help parents by providing more information and by placing more emphasis on education over sport. The provision of information could also have a positive impact on coping resources because parents rely on the expertise of professionals at sport centers. Finally, parents rely on other parents for support (Burgess et al., 2016; Knight & Holt, 2013) and thus, it is important to help parents learn to work together to reduce feelings of exclusion and anxiety at competitions (Knight & Holt, 2013).

Limitations and future directions

Although this study offers an expanded understanding of parents stress and coping experiences, several limitations should be taken into account. Firstly, stressors are dynamic. As

a result, approaches used to cope with them are also dynamic, but this study did not measure the dynamic nature due to one off interviews and survey data. Researchers would benefit from using longitudinal approaches to gain a greater understanding of these elements. As the environmental demands experienced by parents change over time, future research could also focus on their evolution over the course of a season and at different stages of development. Secondly, a selection bias may have been present in this study. Parents who were experiencing the most stressors and/or were not coping effectively with the stressors that cause them strain may be less likely to participate in the research. Thirdly, content analysis used verbatim reports to understand the experiences of individual. Parents who participated may have omitted particular narratives from their experiences because they were unwilling or unable to verbalize them. Finally, due to the use of surveys and limited interviews, the sharing of parental experiences may be limited in detail. Including observations may provide useful and interesting information.

Conclusion

The present study highlights the individual, dynamic, and complex nature of sport parents' stress and coping experiences. Parents reported encountering a wide variety of organizational, developmental, competitive, and parental personal stressors in elite sports contexts. To cope with the difficult to manage stressors, parents used several strategies including detaching from sport, information seeking, managing emotional reactions, avoidance, taking control, and providing support. The study highlights that educational interventions among parents, children, and sport organizations should be expanded to increase the use of effectiveness strategies, improve the effectiveness of other strategies, and reduced the presence of stressors. The benefits could be multiple as it could enhance the experiences of parents, children, and sport staff in elite sports contexts.

All authors declare that they have no conflict of interest.

566	References
567	Amado, D., Sánchez-Oliva, D., González-Ponce, I., Pulido-González, J. J., & Sánchez-Miguel,
568	P. A. (2015). Incidence of parental support and pressure on their children's motivational
569	processes towards sport practice regarding gender. PloS One, 10(6), 1-14.
570	https://doi.org/10.1371/journal.pone.0128015
571	Belsky, J. (1984). The determinants of parenting: A process model. <i>Child development</i> , 55,
572	83-96. https://doi.org/10.2307/1129836
573	Boiché, J., Guillet-Descas, E., Bois, J., & Sarrazin, P. (2011). Antecedents, accuracy and
574	consequences of parents' behaviors. A cross sectional study based on Eccles
575	Expectancy Value model. International Journal of Sport Psychology, 42, 368–389.
576	Bois, J. E., Lalanne, J., & Delforge, C. (2009). The influence of parenting practices and parental
577	presence on children's and adolescents' pre-competitive anxiety. Journal of Sports
578	Sciences, 27, 995–1005. http://dx.doi.org/10.1080/02640410903062001
579	Burgess, N., Knight, C. J., & Mellalieu, S. D. (2016). Parental stress and coping in elite youth
580	gymnastics: An interpretative phenomenological analysis. Qualitative Research in
581	Sport, Exercise and Health, 8, 237–256.
582	https://doi.org/10.1080/2159676X.2015.1134633
583	Côté, J., Salmela, J. H., Baria, A., & Russell, S. J. (1993). Organizing and interpreting
584	unstructured qualitative data. The Sport Psychologist, 7, 127–137.
585	https://doi.org/10.1123/tsp.7.2.127
586	Cresswell, J. W. (2007). Qualitative inquiry & research design: Choosing from five
587	approaches. Thousand Oaks, CA: Sage.
588	Denzin, N. K., & Lincoln, Y. S. (2005). The SAGE handbook of qualitative research (3rd ed.)

(Sage). London, UK.

Dorsch, T. E., Vierimaa, M., & Plucinik, J. M. (2019). A citation network analysis of research 590 on parent-child interactions in youth sport. Sport, Exercise, and Performance 591 Psychology, 8, 145-162. http://dx.doi.org/10.1037/spy0000140 592 593 Harwood, C. G., Drew, A., & Knight, C. J. (2010). Parental stressors in professional youth football academies: A qualitative investigation of specialising stage parents. *Qualitative* 594 Research in Sport and Exercise, 2, 39–55. https://doi.org/10.1080/19398440903510152 595 Harwood, C. G., & Knight, C. J. (2009a). Stress in youth sport: A developmental investigation 596 Psychology of Sport 597 of tennis parents. and Exercise, 10. 447–456. https://doi.org/10.1016/j.psychsport.2009.01.005 598 599 Harwood, C. G., & Knight, C. J. (2009b). Understanding parental stressors: An investigation 600 of **British** tennis-parents. Journal of **Sports** Sciences, 27, 339–351. 601 https://doi.org/10.1080/02640410802603871 602 Harwood, C. G., & Knight, C. J. (2015). Parenting in youth sport: A position paper on parenting expertise. **Psychology** 24–35. 603 ofSport Exercise, 16, and 604 https://doi.org/10.1016/j.psychsport.2014.03.001 Hayward, F. P. I., Knight, C. J., & Mellalieu, S. D. (2017). A longitudinal examination of 605 stressors, appraisals, and coping in youth swimming. Psychology of Sport and Exercise, 606 29, 56–68. https://doi.org/10.1016/j.psychsport.2016.12.002 607 Knight, C. J., Dorsch, T. E., Osai, K. V., Haderlie, K. L., & Sellars, P. A. (2016). Influences on 608 parental involvement in youth sport. Sport, Exercise, and Performance Psychology, 5, 609 161-178. https://dx.doi.org/10.1037/spy0000053 610 Knight, C. J., & Holt, N. L. (2013). Strategies used and assistance required to facilitate 611 children's involvement in tennis: Parents' perspectives. The Sport Psychologist, 27, 612 281–291. https://doi.org/10.1123/tsp.27.3.281 613

- Knight, C. J., & Holt, N. L. (2014). Parenting in youth tennis: Understanding and enhancing
- children's experiences. Psychology of Sport and Exercise, 15, 155-164.
- https://doi.org/10. 1016/j.psychsport.2013.10.010
- Knight, C. J., Holt, N. L., & Tamminen, K. A. (2009). Stress and coping among youth sport
- parents. In *Handbook of sports psychology*, (C. H. Chang, pp. 347–359). Hauppauge,
- NY: Nova Science.
- Institut National de la Statistique et des Études économiques. (2003). Présentation du guide
- analytique. Retrieved from https://www.insee.fr/fr/information/2400059
- Lazarus, R. S. (1999). Stress and emotion: A new synthesis. London, UK: Free Association
- Press.
- Lazarus, R. S., & Folkman, S. C. (1984). Stress, appraisal, and coping. New York, NY:
- Springer.
- 626 Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.
- Mayan, M. J. (2016). Essentials of qualitative inquiry. NY: Routledge.
- Maykut, P., & Morehouse, R. (1994). Beginning qualitative research: A philosophic and
- 629 *practical approach.* Lewes, UK: Falmer.
- 630 Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis*. London, UK: Sage.
- Nicholls, A. R., Holt, N. L., & Polman, R. C. J. (2005). A phenomenological analysis of coping
- effectiveness in golf. The Sport Psychologist, 19, 111–130.
- https://doi.org/10.1123/tsp.19.2.111
- Nicholls, A. R., Holt, N. L., Polman, R. C. J., & James, D. W. G. (2005). Stress and Coping
- Among International Adolescent Golfers. Journal of Applied Sport Psychology, 17,
- 636 333–340. https://doi.org/10.1080/10413200500313644
- Nicholls, A. R., & Polman, R. C. J. (2007). Coping in sport: A systematic review. *Journal of*
- 638 Sports Sciences, 25, 11–31. https://doi.org/10.1080/02640410600630654

Sánchez-Miguel, P. A., Leo, F. M., Sánchez-Oliva, D., Amado, D., & García-Calvo, T. (2013). 639 The importance of parents' behavior in their children's enjoyment and amotivation in 640 sports. Journal of Human Kinetics, 36(1), 171-179. https://doi.org/10.2478/hukin-641 2013-0017 642 Sandelowski, M. (2000). Whatever happened to qualitative description? Research in Nursing 643 & Health, 23, 334–340. https://doi.org/10.1002/1098-240X(200008)23:4<334::AID-644 NUR9>3.0.CO;2-G 645 Sandelowski, M. (2010). What's in a name? Qualitative description revisited. Research in 646 *Nursing & Health*, *33*, 77–84. https://doi.org/10.1002/nur.20362 647 648 Silverman, D. (2013). Doing qualitative research: A practical handbook. London, UK: Sage. Smith, B., & Sparkes, A. C. (2016). Routledge handbook of qualitative research in sport and 649 exercise. New York, NY: Routledge. 650 651 Sparkes, A. C., & Smith, B. (2009). Judging the quality of qualitative inquiry: Criteriology and Psychology of Sport and Exercise, 25, relativism in action. 491–497. 652 https://doi.org/10.1016/j.psychsport.2009.02.006 653 Swann, C., Moran, A., & Piggott, D. (2015). Defining elite athletes: Issues in the study of expert 654 performance in sport psychology. Psychology of Sport and Exercise, 16, 3-14. 655 https://doi.org/10.1016/j.psychsport.2014.07.004 656 Tamminen, K. A., & Holt, N. L. (2010). A meta-study of qualitative research examining 657 stressor appraisals and coping among adolescents in sport. Journal of Sports Sciences, 658 28, 1563–1580. https://doi.org/10.1080/02640414.2010.512642 659 Tracy, S. J. (2010). Qualitative quality: Eight "big-tent" criteria for excellent qualitative 660 research. Qualitative Inquiry, 16, 837–851. https://doi.org/10.1177/1077800410383121 661

Wolfenden, L. E., & Holt, N. L. (2005). Talent development in elite junior tennis: Perceptions
of players, parents, and coaches. *Journal of Applied Sport Psychology*, 17, 108–126.
https://doi.org/10.1080/10413200590932416