

2022

Investigating the relations between youth sport participation and parental mental health

Jordan T. Sutcliffe

Follow this and additional works at: <https://ro.uow.edu.au/theses1>

University of Wollongong

Copyright Warning

You may print or download ONE copy of this document for the purpose of your own research or study. The University does not authorise you to copy, communicate or otherwise make available electronically to any other person any copyright material contained on this site.

You are reminded of the following: This work is copyright. Apart from any use permitted under the Copyright Act 1968, no part of this work may be reproduced by any process, nor may any other exclusive right be exercised, without the permission of the author. Copyright owners are entitled to take legal action against persons who infringe their copyright. A reproduction of material that is protected by copyright may be a copyright infringement. A court may impose penalties and award damages in relation to offences and infringements relating to copyright material.

Higher penalties may apply, and higher damages may be awarded, for offences and infringements involving the conversion of material into digital or electronic form.

Unless otherwise indicated, the views expressed in this thesis are those of the author and do not necessarily represent the views of the University of Wollongong.

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library: research-pubs@uow.edu.au



UNIVERSITY
OF WOLLONGONG
AUSTRALIA

Investigating the relations between youth sport participation and parental mental health

Jordan T. Sutcliffe

Supervisors:

A/Prof Stewart A. Vella, A/Prof Peter J. Kelly

This thesis is presented as part of the requirement for the conferral of the degree:
Doctor of Philosophy

This research has been conducted with the support of a University Postgraduate Award
(UPA) and the Social Sciences and Humanities Research Council of Canada (SSHRC)

University of Wollongong
School of Psychology

© October 2022

Abstract

Parents are active participants in their child's youth sport endeavours and can influence their athlete's experience through their parenting practices, styles, and interactions. However, parents experience their own range of outcomes as a result of their involvement in their child's sport activities. In fact, recent decades have brought forth a rich body of literature that point to the benefits and challenges of having a child involved in organised sport. Despite this, the mental health experiences of parents in youth sport have yet to be investigated explicitly. As such, the overarching purpose of this doctoral research was to further the understanding of the relationship between youth sport participation and parents' mental health and wellbeing. To achieve this aim, a five-study program of research was conducted.

Chapter 1 provides a review of the literature concerning parents' roles and associated outcomes in youth sport. Importantly, the literature review identifies definitions, conceptualisations, and theoretical frameworks that are relevant in sport parenting and mental health research domains. Following this, Chapter 2 sought to synthesise the current knowledge on parents' behavioural, affective, and emotional outcomes in youth sport, and therefore a systematic-review and qualitative meta-study were conducted (Study 1). As a result, a synthesis of 58 studies led to a descriptive model of the parental experience in youth sport. Among the outcomes highlighted in the review, mental health surfaced as an important, yet relatively unexplored outcome among sport parents.

Chapter 3 utilised a national sample of parents from the Longitudinal Study of Australian Children (LSAC) to explore the influence of contextual youth sport variables (e.g., days involved in sport per week) on parents' mental health (Study 2). Findings showed that parents of adolescent sport participants report higher life stress and time

pressure, yet lower psychological distress than parents of non-participating adolescents. To better understand this mixed symptom profile among sport parents, Chapter 4 utilised the LSAC to test the relationship between youth sport involvement and parents' perceptions of social support (Study 3). This study revealed that parents of adolescent sport participants report higher perceptions of social support than parents of non-participating individuals.

Chapter 5 (Study 4) consisted of a mediational study wherein parents' perceptions of social identity, social support, and parent-child relationship quality were tested as parallel mediators of the relationship between parents' perceived demands in sport and their mental health. Interestingly, parent-child relationship quality mediated both psychological distress and wellbeing, whereas social identity mediated wellbeing, and social support did not mediate any of the relationships.

Chapter 6 (Study 5) offered an in-depth qualitative examination of parents' mental health experiences in youth sport. This final study provided important clarity regarding how parents' roles, behaviours, and interactions in the youth sport environment led to positive and negative mental health experiences. As an example, parents reported that sport can be used as a platform for family unity, which was invaluable for parents' wellbeing.

Finally, Chapter 7 provides a detailed discussion of the overall program of research. More specifically, this chapter comments on the theoretical and practical implications of parental mental health in sport going forward and highlights the strengths and limitations of the current research program. Altogether, the findings from the five studies offer valuable insight for researchers and practitioners that aim to enhance the parental experience in organised youth sport.

Acknowledgements

I would first like to thank my supervisors for their endless support throughout my doctoral candidature. Stew, from the moment you came to Canada I knew we would work well together. You were the primary reason why I decided to uproot my life and do my doctorate in Australia. Thank you for the many lessons you taught me in academia and life more generally. Your generosity (especially with coffee) and passion for improving research standards in sport psychology are things I will never forget. Pete, I cannot express how fortunate I consider myself for having you as my secondary supervisor. From the time I arrived in Wollongong, you have been extremely supportive and kind. In addition to the invaluable clinical perspective you provided for my doctoral work, your leadership in the School of Psychology helped me develop practical research skills that I will apply throughout my life. I cannot thank you both enough for your tremendous supervision, and I look forward to meeting you on the tennis court in the near future.

Next, I would like to express my appreciation for my colleagues and friends in the Global Alliance for Mental Health and Sport (GAMeS). Matt, you were my first friend when I arrived in Australia and you likely don't realise how much you helped me feel comfortable in a completely new environment. In addition to being my tennis rival, gym partner, and best friend, you provided the blueprint for completing a strong and timely Ph.D. I have no doubt we will continue to be friends and colleagues for life. Furthermore, I want to extend thanks Dee, Caitlin, Angie, and Vanessa. It was a pleasure to work with you, and I hope to keep in touch for a long time.

I would like to thank my parents for their ongoing support throughout my studies and life more broadly. I know it wasn't easy being apart throughout my degree, so I truly appreciate you supporting my independence while completing my academic

dream. As sport parents, you always provide me with ample support without any associated pressure. I hope that my research efforts lead to more children and adolescents with sport experiences like mine – one with loving parents that only want the best for their children.

Finally, I would like to thank my partner, Daryl. From the moment we began dating during graduate school you have been my rock. You have always been willing to listen to me ramble about my thesis, validate my stress and frustrations, and help remind me about all that I have to be thankful for. Although you don't consider yourself an academic anymore, at some level I think I'm still trying to impress the smart girl in class (you). I can't wait to continue our life together visiting new parts of the world and helping each other achieve our respective dreams, None of this would have been possible without you.

Certification

I, Jordan Thomas Sutcliffe, declare that this thesis submitted in fulfilment of the requirements for the conferral of the degree Doctor of Philosophy, from the University of Wollongong, is wholly my own work unless otherwise referenced or acknowledged. This document has not been submitted for qualifications at any other academic institution.

Jordan Thomas Sutcliffe

Date: October 26,, 2022

Thesis Style

This thesis has been prepared in journal article compilation style format. A signed thesis style format agreement between the PhD candidate and primary supervisor can be found in Appendix A.

Publications from this Thesis

Chapter 2

Sutcliffe, J. T., Fernandez, D. K., Kelly, P. J., & Vella, S. A. (2021). The parental experience in youth sport: a systematic review and qualitative meta-study. *International Review of Sport and Exercise Psychology*, 1-28.
<https://doi.org/10.1080/1750984X.2021.1998576>

Chapter 3

Sutcliffe, J.T., Kelly, P.J., Vella, S.A. (2021). Youth sport participation and parental mental health. *Psychology of Sport and Exercise*, 52, 101832.
<https://doi.org/10.1016/j.psychsport.2020.101832>

Chapter 4

Sutcliffe, J.T., Kelly, P.J., Vella, S.A. (under review). Youth sport participation and parental social support. *International Journal of Sport and Exercise Psychology*.

Chapter 5

Sutcliffe, J.T., Kelly, P.J., Vella, S.A. (under review). Parental demands in sport and mental health: The parallel mediating roles of social identity, social support, and parent-child relationship quality. *The Sport Psychologist*.

Chapter 6

Sutcliffe, J.T., Kelly, P.J., Vella, S.A. (under review). A qualitative examination of parental mental health in youth sport. *International Journal of Sport and Exercise Psychology*.

Components of this thesis have also been presented at:

1. The International Society of Sport Psychology World Congress (ISSP), 2021, Taipei, Taiwan.
 - a. Sutcliffe, J.T., Kelly, P.J., Vella, S.A. (2021, September). *Exploring the relationship between youth sport participation and parental social support*. Paper presented at the International Society of Sport Psychology World Congress (ISSP), Taipei, Taiwan.

In all cases of work that has been published, presented, and admitted for publication, the greater part of the work is directly attributed to me, as a PhD candidate. Supervisors and co-authors have enacted their role in the formulation of research ideas and in editing manuscripts. All investigations, analyses and reporting have been carried out solely by me, in keeping with the requirements of my candidature. A signed statement of contribution can be found in Appendix B.

List of Definitions

Adolescent:	Individuals aged between 12 and 17 years.
Child-athlete:	Denotes parents' child or adolescent sport participant.
Children:	Individuals aged between 3 and 11 years.
Community Sport:	“Non-profit and voluntary organisations that have a primary mandate to provide recreational and competitive sport services to their members” (Misener & Doherty, 2014, p. 493).
Mental Health:	“A state of wellbeing in which the individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community” (World Health Organisation, 2004).
Organised Sport	Activities that include (a) physical exertion and/or a physical skill; (b) a structured or organised setting for training and/or competition; and (c) competition against others (Australian Bureau of Statistics, 2008; Khan et al., 2012).
Parent:	Caregiver of a child, which includes birth parents, stepparents, adopted parents, or anyone that is considered a legal guardian.
Parental Demands in Sport	The extent to which parents' life revolves around organised youth sport.
Parent-Child Relationship	The perceived quality of parents' relationship with their child, measured by the extent of conflict and closeness experienced by parents (Pianta, 1992).

Psychological Distress:	“The unique discomfoting, emotional state experienced by an individual in response to a specific stressor or demand that results in harm, either temporary or permanent, to the person” (Ridner, 2004, p. 539)
Social Identity:	“That part of an individual’s self-concept which derives from his/her knowledge of his/her membership of a social group (or groups) together with the value and emotional significance attached to that membership” (Tajfel, 1981, p. 255).
Social Support:	“The perceived comfort, caring, assistance, information that a person receives from others” (Lox et al., 2010, p. 102).
Wellbeing:	“The balance point between an individual’s resource pool and challenges faced” (i.e., physical, social, and psychological; Dodge et al. 2012, p. 230).
Youth:	Denotes children and adolescents if not specified.

Table of Contents

CHAPTER 1: BACKGROUND LITERATURE AND AIMS.....	17
1.1 INTRODUCTION	17
1.2 LITERATURE REVIEW	18
1.2.1 Parental Involvement in Sport	18
1.2.2 Contemporary Sport Parenting Research.....	22
1.2.3 The Influence of Youth Sport on Parents	26
1.2.4 Mental Health in Sport.....	31
1.2.5 Parental Mental Health in Youth Sport	32
1.3 THE CURRENT RESEARCH PROGRAM.....	33
CHAPTER 2: THE PARENTAL EXPERIENCE IN YOUTH SPORT: A SYSTEMATIC REVIEW AND QUALITATIVE META-STUDY.....	38
2.2 INTRODUCTION	38
2.2.1 THE PARENTAL EXPERIENCE IN YOUTH SPORT.....	39
2.3 METHODS	42
2.3.1 PROCEDURE	42
2.3.2 Inclusion and Exclusion Criteria	43
2.3.3 Search Process	44
2.3.4 Article Screening and Data Extraction	44
2.3.5 Analysis	46
2.4 RESULTS.....	48
2.4.1 Meta-Method Analysis	48
2.4.2 Meta-Theory Analysis	52
2.4.3 Meta-Data Analysis	53
2.4.4 Meta-Synthesis	68
2.5 DISCUSSION.....	71
2.5.1 Future Directions and Limitations	75
2.6 CONCLUSION.....	77
CHAPTER 3: YOUTH SPORT PARTICIPATION AND PARENTAL MENTAL HEALTH.....	78
3.1 FOREWORD	78

3.2 INTRODUCTION	78
3.2 METHODS	82
3.2.1 Participants	82
3.2.2 Procedures.....	83
3.2.3 Measures	84
3.2.4 Statistical Analyses	86
3.3 RESULTS	87
3.3.1 Sport Participation	87
3.3.2 Psychological Distress	89
3.3.3 Perceived Time Pressure.....	89
3.3.4 Perceived Life Stress	90
3.3.5 Moderation of Child Sex	92
3.3.6 Moderation of Neighbourhood Socioeconomic Position	93
3.4 DISCUSSION	94
3.4.1 Limitations and Future Directions	98
3.4.2 Practical Implications	100
3.5 CONCLUSION.....	101
CHAPTER 4: EXPLORING THE RELATIONS BETWEEN YOUTH SPORT PARTICIPATION AND PARENTAL SOCIAL SUPPORT.....	102
4.1 FOREWORD	102
4.2 INTRODUCTION	103
4.3 METHODS	107
4.3.1 Participants	107
4.3.2 Procedures.....	107
4.3.3 Measures	108
4.3.4 Statistical Analyses	110
4.4 RESULTS	111
4.4.1 Social Support Across Sport Participation Categories	113
4.4.2 Predictors of Parental Social Support	115
4.4.3 Moderation of Household Income	116
4.5 DISCUSSION	117
4.5.1 Applied Implications	120
4.5.2 Limitations and Future Directions	121

4.6 CONCLUSION.....	121
CHAPTER 5: PARENTAL DEMANDS IN SPORT AND MENTAL HEALTH: THE PARALLEL MEDIATING ROLES OF SOCIAL IDENTITY, SOCIAL SUPPORT, AND PARENT-CHILD RELATIONSHIP QUALITY	
5.1 FOREWORD	123
5.2 INTRODUCTION	123
5.3 METHOD.....	123
5.3.1 Participants	128
5.3.2 Procedure	128
5.3.3 Measures	130
5.3.4 Analysis	133
5.4 RESULTS.....	135
5.4.1 Parallel Mediation Models.....	137
5.4.2 Supplementary Analyses	141
5.5 DISCUSSION.....	141
5.5.1 Practical Implications	141
5.5.2 Limitations and Future Directions	146
5.6 CONCLUSION.....	146
CHAPTER 6: A QUALITATIVE EXAMINATION OF PARENTAL MENTAL HEALTH AND WELLBEING IN YOUTH SPORT.....	
6.1 FOREWORD	148
6.2 INTRODUCTION	148
6.2 METHODS.....	153
6.2.1 Participants	153
6.2.2 Qualitative Approach.....	153
6.2.3 Procedure	155
6.2.4 Data Analysis	156
6.2.5 Methodological Rigour	157
6.3 RESULTS.....	158
6.3.1 Sport as a Platform for Family Unity	158
6.3.2 Cohesion and Conflict Between Parents and Other Social Agents	162
6.3.3 Requirements of Youth Sport and Family Equity	166
6.3.4 Interconnectedness of Parent and Child Emotions in Sport	168

6.3.5 A Context for Self-improvement and Validation	171
6.4 DISCUSSION	174
6.4.1 Limitations and Future Directions	178
6.5 CONCLUSION	180
CHAPTER 7: GENERAL DISCUSSION	181
7.1 SUMMARY OF THE RESEARCH PROGRAM	181
7.2 AGGREGATE FINDINGS FROM THE RESEARCH PROGRAM	184
7.3 THEORETICAL IMPLICATIONS	186
7.4 PRACTICAL IMPLICATIONS	190
7.5 LIMITATIONS AND FUTURE DIRECTIONS	193
7.6 CONCLUSION	197
REFERENCES	197
APPENDIX A: THESIS FORMAT AGREEMENT	230
APPENDIX B: STATEMENT OF CONTRIBUTION OF OTHERS	231
APPENDIX C: SUMMARY OF META-METHOD AND META-THEORY ANALYSIS FROM CHAPTER 2	233
APPENDIX D: CONFIRMATION OF PROSPERO REGISTRATION	248
APPENDIX E: LIST OF VARIABLES USED FROM THE LSAC	249
APPENDIX F: ETHICAL APPROVAL FOR CHAPTERS 2 AND 3	250
APPENDIX G: APPROVAL FROM THE LSAC	251
APPENDIX H: ETHICAL APPROVAL FOR CHAPTERS 5 AND 6	252
APPENDIX I: PARENT INFORMATION LETTER (SURVEY COMPONENT)	252
APPENDIX J: STUDY QUESTIONNAIRE FROM CHAPTER 5	255
APPENDIX K: PARENT INFORMATION LETTER (INTERVIEW COMPONENT)	263
APPENDIX L: PARENTAL INFORMED CONSENT (INTERVIEW COMPONENT)	265
APPENDIX M: INTERVIEW SCHEDULE	266

List of Tables

Table 2.1. <i>Summary of Results from the Meta-Data Analysis</i>	52
Table 3.1. <i>Descriptive Statistics of Primary and Secondary Parents' Mental Health and Sport Participation Outcomes</i>	86
Table 3.2. <i>Linear Regression Models of Sport Participation Predicting Mental Health Outcomes</i>	89
Table 4.1. <i>Descriptive Statistics of Primary and Secondary Parents' Social Support</i>	109
Table 5.1. <i>Descriptive statistics and bivariate correlations</i>	132
Table 5.2. <i>Unstandardised results the two parallel mediation models linking parental demands in sport and mental health</i>	135

List of Figures

Figure 2.1. <i>PRISMA flow diagram illustrating the results from the systematic review</i>	44
Figure 2.2. <i>A descriptive illustration of the study results.</i>	68
Figure 5.1. <i>Conceptual model representing both parallel mediation pathways linking parental involvement in sport (i.e., via sport demands) and parental mental health</i>	130

Chapter 1: Background Literature and Aims

1.1 Introduction

Organised youth sport is among the most popular leisure activities in developed countries (e.g., Australia, Canada), with approximately 70 – 75% of youth participating in any given year (Aubert et al., 2018). This high prevalence has important implications for youth participants as sport participation has the potential to impact their developmental trajectory (Fraser-Thomas et al., 2005). Specifically, involvement in youth sport has the potential to foster positive outcomes that span physical, social, psychological, emotional, and intellectual development (see Bruner et al., 2021; Eime et al., 2013, Holt et al., 2017 for reviews). In contrast, a smaller body of literature exists that reports negative consequences of participation in youth sport such as modelling poor behaviours, increased injury-related anxiety, and compromised moral development (Hansen et al., 2003; Côté & Fraser-Thomas, 2007). As such, the contextual factors that foster a positive sport experience for young athletes have become of interest to researchers (Côté et al., 2014; Holt et al., 2017).

Contemporary frameworks in youth sport literature, such as the personal assets framework for sport (Côté et al., 2014) and newly developed integrated understanding of the youth sport system (Dorsch et al., 2022) position high-quality relationships with other social agents in youth sport (e.g., teammates, coaches, parents) as a key tenet for a positive youth sport experience. Among social agents, coaches and athletes have been subject to decades of inquiry concerning their influence on youth athletes (e.g., Jowett & Ntoumanis, 2004; Turnnidge et al., 2016; Vierimaa & Côté, 2016). For example, athletes report improved competence when their peer relations are perceived as positive (Vierimaa & Côté, 2016), whereas perceived support from coaches is associated with athlete interdependence and satisfaction (Jowett & Nezlak, 2012). Parents, however, have received relatively less

attention as social agents, and as a result, a recent escalation of research on parental involvement in youth sport has emerged (Dorsch et al., 2019).

For the purpose of the current thesis, parents are operationalised as youth caregivers, which can include birth parents, stepparents, adopted parents, or anyone who is considered a legal guardian for a child. In sport, parents are essential agents for youth participation, as they often support, administrate, coach, and provide as necessary for the benefit of their child (Knight et al., 2016). Parents provide financial (e.g., sport equipment), logistical (e.g., transportation), and emotional investment in youth sport activities (Dorsch et al., 2009; Green & Chalip, 1997; Kirk et al., 1997). In effect, the literature suggests that parental involvement can influence athletes' youth sport experience through distinctive channels, such as parenting style, parenting practices, and parental relationships and interactions within the youth sport environment (Harwood et al., 2019). Parenting style has been defined as "a constellation of attitudes toward the child that are communicated to the child and that, taken together, create an emotional climate in which the parents' behaviour is expressed" (Darling & Steinberg, 1993, p. 488). Parenting practices, in contrast, refer to the specific types of behaviours parents exude towards their child, which the youth sport literature often dichotomises as supportive or pressuring (Knight et al., 2017). Although considered distinct constructs, previous research has associated parenting styles and practices with important developmental outcomes among youth (e.g., self-esteem; O'Rourke et al., 2014). Thus, a review of the literature concerning parental involvement in youth sport is warranted.

1.2 Literature Review

1.2.1 Parental Involvement in Sport

To best understand parental involvement in youth sport it is important to review foundational work that brought the field to where it is today. Dorsch et al. (2021) have provided a historical scoping review of sport parenting research, wherein three distinct

periods of research are described: (a) the foundational period (1968 – 1981); (b) the transitional period (1982 – 1998); and (c) the contemporary period (1999 – Current). The foundational period of sport parenting research was inspired by work in educational psychology (e.g., Felker & Kay, 1971) and sport sociology (Snyder & Spreitzer, 1973), which resulted in several empirical studies grounded in social learning theory (Bandura & Walter, 1963). Social learning theory posits that humans, and children in particular, learn behaviours through observation, modelling, and imitation. As such, early sport parenting work sought to understand whether children's sport participation and self-perceptions (e.g., self-concept) was influenced by the sport-related preferences of their parents (e.g., Kay et al., 1972). When examining these early works together, it can be summarised that similarities between parent interests and those of their child-athletes are particularly important for male children and adolescents. Indeed, Kay et al. (1972) comment on the importance for parents and male child-athletes to participate in mutually engaging sport experiences. Although male-predominant research was considered the norm during the foundational period, such comments may have influenced the forthcoming overrepresentation of males in sport psychology research (Cowley et al., 2021).

Further along the foundational period, researchers interested in sport parenting continued to build the field by examining whether and how parents influenced child-athlete participation trends (Snyder & Spreitzer, 1973). For example, Spreitzer and Snyder (1976) showed that youth are more likely to engage in organised sport when their parents encourage them to participate in familiar sport activities. This was perhaps one of the first indications that sport participation is intergenerational, whereby many child-athletes follow in the sport-related footsteps of their parents. Interestingly, this investigation also found that fathers appeared more influential in sport participation among both male and female child-athletes, whereas encouragement from both male and female parents was more salient for female

child-athletes. These early reports were important because they were among the first to highlight gender differences when examining sport participation through a family-unit lens. With that said, later work found that although the family-unit was particularly influential for youth sport participation, the role of peers appeared more salient across all developmental periods (Greendorfer, 1997). This finding was invaluable for forthcoming work regarding the role of proximal socialisation agents in youth's participation in sport.

Toward the end of the foundational period, researchers adopted a shift toward the influence of organised youth sport on the parent-child relationship. This period coincided with a transition from free play to more organised sport activities wherein parents could measure improvements and achievement among their child-athletes (Vealey & Chase, 2016). As a result, scholars became interested in examining whether such shifts towards achievement contexts led to disruptions in the parent-child relationship. As an example, the first empirical study to examine parent-child relationships in a youth sport context found that family conflict can arise when child-athletes hold different perceptions of their sport-related ability in comparison to their parents' evaluations (McElroy & Kirkendall, 1981). More specifically, male child-athletes were particularly prone to decreased self-esteem in light of differences between parent-child ability judgements. Despite being methodologically limited, this study offered a novel understanding of family dynamics in youth sport.

Following foundational work in sport parenting research, the transitional phase marked the beginning of sport parenting as a distinct field of inquiry within sport psychology. Indeed, Hellstedt (1987) categorised parental involvement in sport as either under involved (i.e., insufficient investment in their child's sport), moderately involved (i.e., a balance between parental affirmation and child-athlete decision making), or over-involved (i.e., extreme involvement in their child's sport). At this time, and with more conceptual

attention, scholars began to conduct more robust studies that benefited from improved methods and theory. Therefore, although the beginning of the transitional period did not surface any novel lines of inquiry per se, studies did however offer further clarification regarding parents' influence on youth participation trends. For example, Lewko and Ewing (1980) found that highly-involved male athletes were more influenced by fathers compared to their mothers, whereas child-athletes engaged in more recreational sport received encouragement from mothers and fathers equally (Howard & Madrigal, 1990). With respect to young female athletes, having mothers and elder female siblings served as important markers for continued participation in organised sport (Wold & Anderssen, 1992). Building upon the gender differences found in the foundational period, these transitional works made it clear that mothers and fathers can have different levels of influence on child-athlete experiences. As such, the transitional period is attributed to the beginning of more specific research questions concerning how parents impact psychosocial and behavioural outcomes among youth athletes.

The influence of parents on athlete outcomes has been broadly dichotomised as supportive or pressuring (Leff & Hoyle, 1995). The earliest work to draw this differentiation found that athletes were more likely to dropout from sport if they perceived their parents to overemphasise performance outcomes through pressuring behaviours (Gould et al., 1982; Gould et al., 1985). In contrast, parents that were supportive of their child's sport endeavours and provided regular encouragement fostered a higher likelihood of continued participation among athletes. These important findings led to a plethora of studies examining the effect of parental support and pressure on athlete self-esteem (e.g., Hines & Groves, 1989), competitive stress and anxiety (Cohn, 1990; Lewthwaite & Scanlan, 1989), and sport enjoyment (Brustad, 1988). Leff and Hoyle (1995) would later operationalise parental involvement in sport as a two-dimension construct consisting of pressure (i.e.,

unrealistic expectations for their child-athletes) and support (i.e., facilitating their child-athletes' sport experiences). Similarly, the broad range of outcomes uncovered from investigating parental support and pressure led to novel motivational approaches in sport parenting literature.

Grounded in achievement goal theory (Nicholls, 1984), the first reports of a parent-initiated motivational climate in sport and its effect on athlete goal orientations were offered by White (1996). Notably, athletes with parents that promoted a climate of learning and enjoyment as opposed to winning were higher in task- and lower in ego-orientation. In a similar vein, Eccles et al. (1998) found that parents' communication patterns about their child's sport-related achievements had a meaningful effect on child-athlete competence beliefs. Such reports indicated that parents not only influence their child-athletes directly but also help shape the climate in which they operate. Furthermore, the transitional period also coincided with the inception of reciprocity in sport parenting research – whereby parents experience outcomes of their own as a result of their involvement in youth sport. A landmark study by Snyder and Purdy (1982) found that parents may experience competitive anxiety when observing their children compete. This burgeoned a new way of approaching sport parenting research, which would be amplified in the forthcoming contemporary period.

1.2.2 Contemporary Sport Parenting Research

One of the underlying themes of the contemporary period was the advancement of research methods that allowed for more nuanced investigations of parents in sport. As one example, Bloom (1985) described the shift of parental influence towards young athletes across developmental stages. More specifically, parents typically support their young athlete appropriately and allow them choice over their sport activities. This is followed by a period of increased dedication from parents and athletes through early adolescence, which then continues to the final period wherein parents become less involved, and their role is

predominantly financial (Bloom, 1985). Building off this work, Côte (1999) utilised qualitative methods to examine changes in family dynamics of highly talented athletes. Underpinned by Ericsson et al.'s (1993) theoretical framework of expert performance, the author outlines how families navigate their child's sport development through sampling years, specialising years, and investment years. Interviews revealed that parents occupy a leadership role for their child-athletes during the sampling years (6 – 13 years), which then shifted to a follower/supporter role in the specialising years and beyond (13 years and above). Additionally, Côte (1999) notes that parents invest meaningful amounts of time and money into their child's sport activities, which varies based on the developmental stage of the child. This study was particularly important because, in addition to uncovering important outcomes among parents in sport, the author gathered information from parents themselves as opposed to leaning on athlete perceptions. Nevertheless, from this point it became clearer that youth sport experiences carry implications for the entire family unit.

Inspired by the aforementioned works, the early 2000s brought forth important sociological work that highlighted parents' roles in youth sport in a way that was unseen to this point. More specifically, a series of studies (Coakley, 2006; Harrington, 2006; Kay, 2007) described how parents' involvement in organised sport is predicated on sport- and gender-related ideologies. Namely, sport represents a vehicle for fathers to enact important parent-related identities and connect with their children in ways that would be otherwise challenging outside of sport. It was this period in which the complexity of sport parenting began to surface, including the various roles parents assume in youth sport. For example, Fredericks and Eccles (2005) found that parents act as supporters, interpreters, and role models for their child-athletes. As a result of such roles, parents experience behavioural and emotional outcomes in the physical youth sport environment. The physical youth sport environment is a public space, which exposes athletes to immediate verbal and non-verbal

feedback from parents (Fredricks & Eccles, 2005). Parents may attempt to communicate the goals they have for their children, the salience they place on winning and effort, as well as their perceptions of their child's competence through different outlets of behaviour (Knight et al., 2011). Although parents are often attempting to convey support for their child-athletes in the physical youth sport environment, examining verbal behavioural patterns among parents has emerged as an important field of inquiry.

Parent behaviour in youth sport is not limited to the physical environment (e.g., soccer pitch) and may occur in private contexts such as during transportation to and from sport (Sutcliffe, Herbison et al., 2021; Tamminen et al., 2017). As one example, a narrative study with youth athletes and parents notes that parents may praise their child-athletes in public settings and reserve critical feedback for private settings (Tamminen et al., 2017). From the perspective of athletes, encouraging and supportive communication from parents during competition is welcomed, however, their interest in communication during the car ride home is dependent on their performance (Elliott & Drummond, 2017; Knight et al., 2010). Relatedly, some athletes have reported appreciation for their parents' assistance when coping with emotional experiences in sport (Tamminen & Holt, 2012). Parents assist in their child-athletes' emotional coping by creating a supportive environment and teaching them specific coping strategies (e.g., questioning, sharing experiences; Tamminen & Holt, 2012). Together, these studies demonstrate how the athlete experience is influenced by parent behaviour, and therefore the literature of parent behaviour in sport is worth summarising.

Examples of appropriate parent behaviour include providing respectful and supportive comments during competition and demonstrating understanding towards athletes, coaches, and other parents (Dorsch et al., 2015a). For some parents, this may come easy, as parents have reported sharing their child-athletes' emotional experiences through empathic concern (e.g., Holt et al., 2008). In the presence of appropriate behaviours, athletes report

increases in perceived competence, become more self-determined, and enjoy their sport experiences overall (Power & Woolger, 1994; Ulrich-French & Smith, 2006). It should be noted, however, that athlete experiences exist within a spectrum, and therefore even positively framed behaviours from parents can be misinterpreted by athletes (Kanters et al., 2008, Knight et al., 2011). Moving forward, negative parent behaviour is often described as inappropriate verbal exchanges with either child-athletes, parents, coaches, or officials. As a result, athletes experience more sport-related pressure, and in turn, report symptoms of competitive anxiety (Bois et al., 2009; Sagar & Lavalley, 2010). Although inappropriate parent behaviour is often overrepresented in media reports, empirical studies highlight that only a minority of comments made by parents are described as negative (i.e., 13-15%; Holt et al., 2008).

To illustrate incidences of negative parent behaviour, Kidman et al. (1999) reported that 34.5% of verbal feedback was considered negative remarks, which was replicated by Bowker et al. (2009) wherein 33% of all comments made by youth ice hockey parents were negative. More favourably, Dorsch et al. (2015) report only 12% of parent comments as negative. Nevertheless, other social agents such as coaches and officials have raised concerns about behaviour exhibited by parents (Holt et al., 2008; Ross et al., 2015; Teques et al., 2018). For example, Shields et al. (2005) revealed that 14% of American youth sport parents admitted to being verbally aggressive with an official, whereas 13% admitted to being aggressive with their child as a result of their performance. For this reason, researchers have begun investigating factors that may contribute to parent behaviour, such as identity perceptions tied to their child's sport team (e.g., Sutcliffe et al., 2022).

Parents' degree of investment in their child's sport team may lead them to develop a social identity that is tied to their child's team membership. Social identity can be defined as "that part of an individual's self-concept which derives from his/her knowledge of his/her

membership of a social group (or groups) together with the value and emotional significance attached to that membership” (Tajfel, 1981, p.255). Recent social identity work with sport parents has utilised Cameron’s (2004) multidimensional conceptualisation of social identity, which includes: (a) ingroup ties (perceptions of similarity, bonding, and belongingness with other members), (b) cognitive centrality (importance associated with being a group member), and (c) ingroup affect (positive feelings associated with group membership).

Among sport parents, Sutcliffe et al. (2020) found that stronger perceptions of social identity led to an increased likelihood to criticise a parent from the other team. Similarly, parents that recently experienced a loss (i.e., their child’s team) have reported weaker perceptions of cognitive centrality when compared to parents that experienced a win (Sutcliffe et al., 2022). As such, the relationship between parents’ identity perceptions and behaviour is but one example of how their involvement in youth sport leads to complex outcomes of their own. For that reason, a review of parent-specific outcomes in organised youth sport is warranted.

1.2.3 The Influence of Youth Sport on Parents

Parents with youth involved in organised youth sport may experience a range of behavioural, affective, and cognitive outcomes as a result of their involvement and interactions in the youth sport system (Dorsch et al., 2009; Dorsch et al., 2021). Early work highlights that parenting in youth sport is associated with increased attendance at sporting events (Snyder & Purdy, 1985) and greater overall interest and understanding of specific sport procedures (Weiss & Hayashi, 1995). Youth sport parents have also reported affective outcomes such as perceived stress, frustration, and disappointment in relation to their child’s involvement in sport (Stein et al., 1999). Additionally, parents’ interactions with other social agents in the various contexts that surround youth sport (e.g., physical youth sport environment, during transportation) can lead to improved or hindered relationships (Eccles & Harold, 1991). These early findings provided a foundation for a number of studies that

were conducted in the last two decades, wherein sport psychology researchers examined parent-specific experiences from the perspective of parents.

Perhaps the most discussed implications for parents in sport are the necessary investments to facilitate their child's participation. Financially, parents incur sport-related costs from the outset of participation, which often grow as children progress into more formal and competitive sport settings (Holt et al., 2011). For example, parents are expected to cover registration fees, purchase equipment and uniforms, and continuously account for daily food and transportation costs (e.g., Rafferty et al., 2018). Then, parents with child-athletes further along the developmental continuum are exposed to additional costs related to out-of-town tournaments and skill development (e.g., specialised coaching sessions; Harwood & Knight, 2009a; Knight et al., 2013). Such financial demands related to sport have led parents to refrain from taking family vacations, and in extreme cases, make essential purchases (e.g., healthy food; Todd & Edwards, 2020). Similar to financial demands, parents also experience meaningful time demands as a result of organised sport (e.g., Holt et al., 2011). Although some time pressure is expected among sport parents, empirical reports have uncovered undesirable indirect effects of such time pressures such as reduced time for leisure (Johansen & Green, 2019), social opportunities with parents outside of sport (Bean et al., 2019), and quality family time (Mirehie et al., 2019). To summarise, organised youth sport requires inevitable time and financial demands for parents, which in turn leads them to emotionally invest in the experience (Clarke & Harwood, 2014).

One primary avenue through which parents have unique experiences in youth sport is the effect it has on parents' family life. Indeed, several studies have pointed to improvements in family relationships due to time spent engaged in youth sport (e.g., Clarke et al., 2014; Knight et al., 2016; Stefansen et al., 2018; Tamminen et al., 2017). Parents become closer with their children by helping them manage difficult sport-related situations

(e.g., deselection; Neely et al., 2017) and by offering support and encouragement (Elliott & Drummond, 2013; Tamminen et al., 2017). In contrast, negative parent-child relationship outcomes typically result from discord regarding the child's effort and commitment, developmental outcomes, and sport-related goals (e.g., Newport et al., 2021). Parents in the study by Brown (2014) considered sport participation as beneficial for parent-child relationships, with both child-athletes and siblings. The time spent observing training sessions allowed parents to interact with the child-athlete's siblings while also providing direct support to the athlete. Further, parents have reported excitement from Sunday morning training routines, pride from the opportunity to provide feedback, and an overall feeling of satisfaction as a parent (Clarke et al., 2016; Dorsch et al., 2019; Trussell & Shaw, 2012).

Furthermore, there is some evidence that parents experience adaptations in their spousal relationships due to involvement in youth sport. In fact, having children involved in organised youth sport presents marital challenges (Lally & Kerr, 2008; Lauer et al., 2010). Indeed, some studies report that the time spent in their child's sport kept parent-couples from spending quality time with one another (Gottzen & Kremer-Sadik, 2012). Particularly in families with multiple child sport participants, parents often use a "divide and conquer" approach and were forced to be selective with their children's competitions (Newhouse-Bailey et al., 2015; Wolfenden & Holt, 2005). Additionally, spouses have spoken to relationship tensions that result from disagreements about resource allocation (e.g., time and money) to youth sport activities. Parents express the importance of being a dyad and sharing similar views on their child's sport experience (Lally & Kerr, 2008). Conversely, a smaller body of evidence highlights the benefit of youth sport for parent-couples, as the challenges present an opportunity to work together and appreciate each other's efforts (Dorsch et al., 2015b; Furusa et al., 2020). Nevertheless, it appears as though parent-couples' experiences

in organised sport are dependent on their ability to work together, which shines a light on the potential unique challenges for single-parents. More research on family dynamics through sport with single-parents is necessary (Knight et al., 2019).

Another category of outcomes that parents may experience during their involvement in youth sport is changes in their social networks. For example, previous studies have established sport as a vehicle for parents to create a sport-related community of individuals that they would otherwise never meet (Brown, 2014; Dorsch et al., 2009; Legg et al., 2015; Warner et al., 2015). Parents establish baseline relationships with other parents from their child's sport team, which are often expressed through friendly greetings before and after competition (Brown, 2014; Dorsch et al., 2019; Elliott & Drummond, 2013; Lally & Kerr, 2008). In some cases, parents progress beyond friendly greetings and develop close friendships (Brown, 2014; Neely et al., 2017). The formation of close relationships among mothers in sport is important because of the time constraints sport inevitably places on their social lives outside of sport (Bean et al., 2019; Hayward et al., 2017). Furthermore, as alluded to earlier, the time spent in sport can lead parents to develop group identities tied to their child's team membership. Although this body of work is in its infancy, it is nonetheless noteworthy considering the well-known ties between holding group identities and overall wellbeing. Unfortunately, however, organised sport does not always lead to positive social experiences for parents, and could even lead to hostility and conflict.

Some parents develop toxic relationships with other adults in the youth sport environment, primarily influenced by inappropriate behaviour (Harwood & Knight, 2009a). For example, conflict may arise from inappropriate comments directed at athletes, coaches, or officials (Elliott & Drummond, 2013). Furthermore, conflict among parents and coaches represents a repeated theme in the literature (Lienhart et al., 2020). Parents often report dissatisfaction with coaches' attitudes and behaviours related to competition, and have

specific attitudes towards those coaching their child-athletes (Omli & Lavoie, 2012). In a vignette study by Sutcliffe et al. (2019), parents rated coaches that were described as competent (e.g., hard-working, organised) to be more suitable for their child's team compared to a coach described with warmth characteristics (e.g., friendly, warm). Taken together, youth sport serves as an important context for parents' socialisation, and for that reason calls were made for more research on the psychosocial outcomes experienced by parents in sport (Lindstrom-Bremer, 2012).

In light of that call for more research on parents' psychosocial experiences in youth sport, Harwood and colleagues have provided the field with a series of empirical studies on the organisational, developmental, competitive, and personal stressors that parents may face in sport (Harwood & Knight, 2009a; Harwood et al., 2017; Harwood et al., 2019; Lienhart et al., 2020). For parents, organisational stressors include the daily burdens of having children enrolled in sport (e.g., transportation, covering high financial costs, and managing injuries; Dorsch et al., 2009; Garst et al., 2019; Harwood et al., 2019). Competitive stressors include demands that fall in and around competition, such as match preparation, managing interactions with others, and providing appropriate feedback to their child (Harwood & Knight, 2009a). Developmental stressors encompass the demands related to their child's personal development and future endeavours in sport (Harwood et al., 2019). Lastly, personal stressors pertain to emotional responses and interactions with other agents in the youth sport environment (Lienhart et al., 2020). In sum, the four aforementioned categories of outcomes highlight how the logistical, developmental, and personal responsibilities required of parents could lead to complex emotional experiences.

Despite such advancements in inquiry related to parental involvement in youth sport, there are nonetheless important limitations to highlight. For example, much of the foundational research, and some extent of contemporary research, include parents that self-

identify as Western (i.e., North American or European White) and middle- or upper-class (Dorsch et al., 2021). Additionally, a majority of studies only gather information from one parent, which either overlooks single-parent experiences or fails to capture the entire household parental experience in sport. These are important gaps to consider when studying experiences among parents as their cultural and social position will likely have a meaningful effect on their mental health. Conceptually, although there are differences between the type of stressors outlined by Harwood and Knight (2009) and symptoms of mental health problems, there is nonetheless rationale to consider sport as an important context to examine parental mental health.

1.2.4 Mental Health in Sport

Prior to reviewing the evidence on parental mental health in sport specifically, it is important to cover recent advancements in the field more broadly. Researchers are particularly interested sport as a vehicle for mental health promotion and intervention due to the inherent physical activity, the opportunity to foster social relationships, and the security and comfort athletes often perceive in sport groups (Ahn & Fedewa, 2011; Vella et al., 2021). In light of this interest, multiple reviews have become available on the relations between sport participation and mental health, including interventions in non-elite sport (Sutcliffe, Graupensperger et al., 2021), symptoms of depression and anxiety in youth sport (Panza et al., 2019); mental health problems among elite athletes (Rice et al., 2016); psychotherapy for mental health problems among elite athletes (Stillman et al., 2019); the management of mental health emergencies among elite athletes (Currie et al., 2019); mental health awareness interventions in sport (Breslin et al., 2017); and athlete experiences during the COVID-19 pandemic (Reardon et al., 2021). These reviews offer important insight with respect to how the youth sport system shapes mental health experiences for athletes.

In addition to empirical review, this recent attention has resulted in multiple position statements around athlete mental health through sport (e.g., International Olympic Committee, Reardon et al., 2019; International Society of Sport Psychology, Schinke et al., 2018). Although an important movement for athletes, youth sport may have implications for parents' mental health as well. Considering that over 70% of Australian families have at least one child enrolled in community sport, and 20% of Australian adults are suffering from a diagnosable mental disorder (Australian Institute of Health and Welfare, 2013), youth sport could serve as a vehicle to promote mental health and wellbeing in parents (see Vella et al., 2019 for a similar approach in adolescents).

1.2.5 Parental Mental Health in Youth Sport

Although the literature on parental mental health in sport is still in its infancy, previous qualitative work has discussed the relations between child participation in youth sports and parents' emotional health (e.g., Dorsch et al., 2009; Harwood et al., 2019). For example, a recent study found preliminary evidence for the relationship between parents' experiences in youth sport and perceptions of burnout (DeFreese et al., 2018). Moreover, Dorsch et al. (2009) reported that parents have experienced anxiety and embarrassment as a result of their child's performance. Similarly, Kaye et al. (2015) found that parents with mastery-oriented goals experienced higher levels of somatic anxiety (i.e., physical manifestation of anxiety) in relation to their child-athletes' performance. Finally, Peter (2011) notes that parental anxiety may arise when their child is the centre of attention, or experience embarrassment when conflict occurs between parents on the sideline. Thus, it appears as though different elements of the youth sport experience can provoke anxiety symptomology in parents and should therefore be further examined in future research. However, the series aforementioned studies did not take a conceptually grounded approach to study mental health, but rather report mental health symptoms in passing. In addition,

thus far parental mental health has often been measured in relation to competition (i.e., state-level competitive anxiety), and fails to address trait-level mental health outcomes.

The outcome of depression has yet to be investigated among youth sport parents. However, parents have experienced sadness and helplessness as a result of their child's deselection from a competitive team (Neely et al., 2017). Similarly, McFadden and colleagues (2016) found that parents reported more illbeing when their child specialised earlier (i.e., before the age of 12) compared to children who continued sport sampling (McFadden et al., 2016). As an extension to this study, Bean et al. (2019) investigated Canadian hockey mothers' mental health and life practices in relation to the demands of youth sport. Mothers highlighted the stress and psychological illbeing that can manifest from the time pressure and competing life demands that result from competitive youth sport (Bean et al., 2019). Altogether, qualitative literature on parents' mental health and wellbeing in sport highlights that symptoms of mental health problems may be facilitated by various contextual elements of their experience in youth sport.

In light of the conceptual limitations found in much of the research reporting on mental health experiences in sport parents, establishing formal definitions and describing a clear conceptualisation is imperative. In this thesis, mental health is defined as "a state of wellbeing in which the individual realises their own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to contribute to society" (WHO, 2014). Alongside this definition, Keyes (2002) mental health continuum (MHC) conceptually guided this thesis. In line with this conceptualisation, mental health includes two distinct constructs – mental illness and wellbeing. Good mental health, or flourishing, is operationalised as having low levels of mental illness or psychological distress, and high levels of wellbeing. However, as the two constructs are distinct continua, it is possible to be high on both psychological distress and wellbeing, or low on both. Wellbeing is further

operationalised as consisting of emotional, psychological, and social wellbeing (Keyes, 2005). Emotional wellbeing is characterised by the presence of positive affect and absence of negative affect. Among youth sport parents, the balance of positive and negative affect experienced during youth sport activities may weigh on their emotional wellbeing. Psychological wellbeing involves self-acceptance, positive relations with others, environmental mastery, autonomy, personal growth, and a sense of purpose in life (Ryff & Keyes, 1995). This may be reflected in parents' perceptions of the relationship with their child, or whether they perceive any involvement in their child's development. Finally, social wellbeing involves optimal functioning in social groups, which can be further operationalised as social acceptance, social integration, social contribution, social coherence, and social actualisation (Keyes, 1998). In youth sport, parents from the same team may cultivate a network of support, and whether individual parents feel connected to this group may have implications for their social wellbeing. Therefore, in an attempt to understand parental mental health and wellbeing in the context of youth sport, this thesis will examine a range of emotional, psychological, and social outcomes that fall within the aforementioned conceptualisation of mental health, as well as psychological distress

1.3 The Current Research Program

Parents' mental health experiences in organised youth sport have received some attention from researchers, yet explicit examinations on the topic are scarce. This is problematic because as the primary consumer of youth sport, sport parents face a broad range of situations that may help or hinder their mental health and wellbeing. Moreover, considering the high participation rates among youth, organised sport could serve as a platform to address existing mental health problems among parents, be used to protect mental health, or promote wellbeing. Mental health problems are not uncommon among parents, and therefore leveraging contexts in which parents already spend considerable time

may present a unique public health strategy. Nevertheless, it is important to first establish whether there are empirical links between parenting in youth sport and mental health. Despite some evidence on the stressors faced by parents in sport and the resulting emotional experiences, scholars and practitioners have little empirical foundation to make recommendations. For that reason, the overarching purpose of this research program is to further the understanding of parental mental health in organised youth sport. To achieve this larger aim, a series of five studies were conducted.

First, although the literature concerning parent-specific experiences has been summarised here, there has yet to be a systematic review and synthesis of this body of work. Such a synthesis would offer clarity with respect to the range of outcomes parents may experience in sport, and whether the field could benefit from theoretical or methodological improvements. As such, the first study of the research program sought to systematically review and meta-synthesise the qualitative literature pertaining to parental experiences in youth sport (Study 1). A focus on qualitative literature was chosen because of the predominance of qualitative reports concerning parents' experiences in sport, and including quantitative studies would have been unmanageable. For example, in a citation network analysis of parent-child interactions in sport (Dorsch et al., 2018), authors report that 60% of studies were quantitative, although the last decade has seen a rapid growth of qualitative inquiry. This review only represents studies involving parent-child interactions and does not include explicit studies on the parental experience in sport. In addition, the quality of studies published in this area was assessed. The resultant synthesis includes all currently available qualitative findings regarding parental mental health in sport, which will inform research questions going forward in the research program.

Following the meta-synthesis undertaken in Study 1, Study 2 investigated the relations between having a child involved in youth sport on primary (i.e., parent that knows

the child best) and secondary parents' mental health. Using data from the Longitudinal Study of Australian Children (LSAC), Study 2 utilised a large national sample of parents to explore associations between adolescent sport involvement and mental health among parents from the same household. As discussed in earlier sections of the literature review, two parents from the same household can have vastly different experiences in sport, and therefore examining primary and secondary parents in concert would provide novel insight from a mental health perspective. Moreover, Study 2 was the first to empirically link specific contextual sport variables (i.e., number of days involved in sport per week, number of hours involved per day) with measures of parental mental health. Finally, Study 2 explored whether parental mental health differs based on the type of sport engaged by youth (i.e., team sport, individual sport, or both). Taken together, Study 2 provides important, novel insight regarding parental mental health in organised youth sport.

Building upon Study 2, Study 3 again utilised the LSAC to explore a potential mechanism through which parenting in sport may be related to mental health and wellbeing – social support. Social support was chosen due to the breadth of studies identified in Study 1 highlighting the social implications for parents in sport, and because measures of social support were available in the LSAC. As such, the purpose of Study 3 was to test whether having children involved in organised sport is associated with increased social support among parents. This was a pivotal step in the research program as any robust understanding of mental health requires specific attention to both social determinants and potential causal mechanisms. Similar to Study 2, Study 3 tested whether sport type and sport-related contextual variables predict perceptions of social support among parents. At the conclusion of the third study, the research program benefited from added clarity around the parental experience in sport more broadly, and shed some light on whether involvement in youth sport is associated with mental health and social support.

The purpose of Study 4 was to examine the potential parallel mediating roles of social identity, social support, and parent-child relationship quality for the relationship between parents' perceived demands in youth sport and mental health (i.e., psychological distress and wellbeing). For the purpose of Study 4, parental demands was operationalised as the extent to which parents' home life revolves around their children's sport. This decision added depth to the range of predictors used in the current research program to represent parents' engagement in youth sport, and offered novel insight with respect to their mental health. Further, Study 4 examined three potential underlying mechanisms of mental health, which informed whether parents' familial or social exchanges in sport are more salient for mental health and wellbeing. Study 4 examined potential mechanisms using social identity theory (Tajfel, 1981), a relationship perspective to social support (Lakey & Cohen, 2000), and developmental literature that informs the parent-child relationship (e.g., Bowen, 1978). This was important because the resultant findings provided direction regarding potential interventions targeted at promoting parental mental health through organised youth sport.

Study 5 aimed to provide a deeper exploration of parental mental health in organised youth sport by qualitatively examining perceptions of mental health and wellbeing among parents in relation to their roles, interactions, and behaviours in organised youth sport. A qualitative study allowed parents to reflect on whether and how their experiences in the youth sport environment led to benefits or detriments to mental health and wellbeing. As such, Study 5 sought to understand what leads to mental health detriments or benefits in organised youth sport from the perspective of parents.

Collectively, the five-study research program: (a) offered a summary, synthesis, and novel descriptive model of parental experience in youth sport (Study 1); (b) explored associations between parenting in sport and their perceptions of mental health and social

support (Studies 2, 3, and 4); (c) tested three potential underlying mechanisms of parental mental health in sport (Study 4); and, (d) gathered rich accounts of parents' mental health experiences in sport to understand how the youth sport system can promote mental health and wellbeing (Study 5). As such, the research program adds a meaningful contribution to the literature while raising important new research questions for scholars going forward.

Chapter 2: The parental experience in youth sport: A systematic review and qualitative meta-study

2.1 Foreword

The literature covered in Chapter 1 provided conceptual and empirical foundation for the ensuing research program by reviewing research related to parental involvement more broadly, and the range of outcomes experienced by parents more specifically. Despite much research on the parental experience in organised youth sport, there had yet to be a systematic review and synthesis of parent-specific outcomes in youth sport. As such, the first aim of Chapter 2 was to systematically review the qualitative literature on parent-specific outcomes in organised youth sport, analytically evaluate the scope, content, and quality of the literature in the area via three-steps of analysis (i.e., meta-method, meta-theory, and meta-data analysis), and finally meta-synthesise the literature and propose a descriptive model of parent outcomes in sport.

The ensuing chapter has been published (excluding abstract and reference list) in the *International Review of Sport and Exercise Psychology* (Sutcliffe, Fernandez et al., 2021), and reformatted for this thesis.

2.2 Introduction

Organised youth sport represents one of the most popular leisure activities worldwide (Aubert et al., 2018). Indeed, developed countries (e.g., Australia, Canada, United Kingdom, and United States) report up to 70 – 75% of families have at least one

child enrolled in individual or team sport (Aubert et al., 2018). For that reason, several empirical studies highlight the benefits and challenges experienced by parents with children involved in sport (e.g., Burgess et al., 2016; Dorsch et al., 2009; Harwood & Knight, 2009a; Wiersma & Fifer, 2008). However, the literature exploring the positive and negative outcomes that result from being a parent with a child involved in sport has yet to be systematically reviewed and synthesised. Such a review would illustrate the range of parental experience in sport and inform novel research questions going forward. This study offers a systematic review and meta-synthesis of the qualitative literature pertaining to the parental experience in youth sport.

2.2.1 The Parental Experience in Youth Sport

Within the last decade, a series of empirical studies on the organisational, developmental, competitive, and personal stressors that parents may experience as a result of having a child in sport (Harwood & Knight, 2009a, Harwood & Knight, 2009b; Hayward et al., 2017; Harwood et al., 2019; Lienhart et al., 2020). Organisational stressors pertain to daily burdens of having children enrolled in sport, such as transportation, covering high financial costs, and managing injuries (Dorsch et al., 2009; Garst et al., 2019; Harwood et al., 2019). Competitive stressors include demands that fall in and around competition, such as match preparation and managing interactions with others (Harwood & Knight, 2009a). Developmental stressors encompass the demands related to their children's personal development and future endeavours in sport (Harwood et al., 2019). Lastly, personal stressors pertain to emotional responses and interactions with other agents in the youth sport environment (Lienhart et al., 2020). Altogether, the stressors experienced by parents with child-athletes must be addressed.

In contrast, recent research also points to the various positive experiences reported by parents within youth sport. For example, a recent qualitative study by Newport et al. (2021) offers novel insight with respect to the stages of parental experience across a youth football academy journey. The first stage (i.e., early academy years) points to the amazement, pride, and excitement parents experience from having their children initially register with the academy. The proceeding stages outline the roles and challenges that parents may experience as their children advances through youth sport, however, the authors comment on the enjoyment and satisfaction that is typically perceived by parents throughout their athlete's trajectory (Newport et al., 2021). Another very common finding pertains to the development and strengthening of relationships from parents' involvement in their children's sport (Dorsch et al., 2019; Knight & Holt, 2013a). In fact, the time spent engaged in youth sport activities can strengthen parents' familial bonds (e.g., Eriksen & Stefansen, 2021; Furusa et al., 2020) as well as extend peer networks (e.g., Knight & Holt, 2013b; Lienhart et al., 2020). As this work highlights, it would be helpful to take a holistic view of parental experiences in sport, including both positive and negative experiences.

Previous reviews have begun to synthesise components of the parental experience in sport. A narrative review by Lindstrom-Bremer (2012) explored family dynamics in sport through a family-systems lens. Although the primary focus of the review pertained to supporting and pressuring parental behaviours, the author reviewed studies that reported the family tension and allocation of resources common within 'athlete families' (e.g., Harwood & Knight, 2009a; Lally & Kerr, 2008; Wolfenden & Holt, 2005). The literature reviewed under the aforementioned two themes (i.e., family tension and resource allocation) suggests that parents sacrifice valuable personal time (e.g., physical activity, social activities), family time (e.g., family holidays), and

financial resources for their children's youth sport participation (Bean et al., 2019; Harwood & Knight, 2009a; Holt et al., 2008; Knoetze-Raper et al., 2016; Lauer et al., 2010; Wiersma & Fifer, 2008). In contrast, the review also illustrates positive elements of the parental experience in sport, whereby parents experience pride and enjoyment from observing their young athletes, and in turn, improved parent-child relationships (e.g., Clarke et al., 2016; Tamminen et al., 2017; Wiersma & Fifer, 2008). The review concludes with recommendations for methodological advancement in sport parenting research and the advantages of applying a family-systems approach (Lindstrom-Bremer, 2012).

Two years later, Bean and colleagues (2014) conducted a systematic literature review of articles on the negative effects of sport participation on individual family members. Pertinent to the current review, the authors highlight the little evidence available on the effect of youth sport on parents themselves (Bean et al., 2014). The authors also discuss the negative effect of sport on parents' financial security while noting the personal, social, and family sacrifices that accompany having a child in sport (e.g., Baxter-Jones & Maffulli, 2003; Harwood & Knight, 2009a; Holt et al., 2008; Kirk et al., 1997). Moreover, the review notes a robust negative effect of sport on parents' free time, which in turn, has negative implications for parents' physical and mental health (Lally & Kerr, 2008; Kay, 2000). Additionally, having multiple children enrolled in sport resulted in stress and tension among family members and ultimately devalued the family unit (Fraser-Thomas et al., 2013; Harwood & Knight, 2009b). Although this review provides rich quantitative and qualitative evidence of negative outcomes experienced by parents and in sport, the positive aspects were not considered.

In sum, it is clear that parents experience their own range of outcomes as a result of having a child involved in organised sport. However, there has been no systematic

review of the complete (i.e., positive and negative) parental experience in youth sport. For that reason, the first aim of the current study was to systematically review the qualitative literature on parent-specific outcomes in organised youth sport. We chose to focus our efforts on qualitative work as qualitative accounts are well positioned to capture the complex, interpretive nature of parental experience in sport. In addition, meta-synthesis has recently emerged as a valuable tool in bringing a field of qualitative research together and has been undertaken in sport to good effect (e.g., Holt et al., 2017; Ronkainen et al., 2021). A second aim of the review was to analytically evaluate the scope, content, and quality of the literature in the area via three-steps of analysis (i.e., meta-method, meta-theory, and meta-data analysis). Finally, a third aim, and our fourth step of the meta-study, was to meta-synthesise the literature and propose a descriptive model of parent outcomes in sport.

2.3 Methods

2.3.1 Procedure

The current meta-study appraised original peer-reviewed articles with the objective of synthesising previously published qualitative accounts of parents' experience in youth sport. The search process and reporting aligned with the Preferred Reporting Items for Systematic Reviews and Meta-Analysis guidelines (PRISMA; Moher et al., 2009). Databases were originally searched on 11 October 2019 and the search protocol was repeated on 25 July 2020 and 18 March 2021 to ensure no relevant studies were omitted. An overview of the process can be found in Figure 2.1. Details of the protocol for this systematic review were pre-registered on PROSPERO and can be accessed at: <https://www.crd.york.ac.uk/prospero/#recordDetails>

2.3.2 Inclusion and Exclusion Criteria

First, as a baseline criterion, studies must have included English-written qualitative data pertaining to parents' experience in organised youth sport. We operationalised organised sport as activities that include (a) physical exertion and/or a physical skill; (b) a structured or organised setting for training and/or competition; and (c) competition against others (Australian Bureau of Statistics, 2008; Khan et al., 2012).

Second, the research must have been conducted with parents of participants in organised and adult-supervised competitive or recreational sport (i.e., studies that recruited parents through school were not included). Specifically, included studies must have collected data directly from parents, and therefore any athlete or coach reports were not of interest. Additionally, although we were primarily interested in parents of youth athletes under the age of 18, we included studies wherein parents retrospectively reflected on their time as a parent with youth athletes (e.g., Lally & Kerr, 2008; Lauer et al., 2010a). Furthermore, once the design and context of articles met all other inclusion criteria, the final criteria for inclusion consisted of closely examining parent-reported data to ensure it was substantial enough to contribute to the meta-synthesis. For example, articles must have had at least one meaningful piece of data (e.g., higher or lower-order theme) that encompassed parents' experiences as a result of their involvement in their children's sport. This step was important because despite containing qualitative data from parents themselves, several studies were athlete-centered and only contained parents' perceptions of their young athlete's experience. Studies that were specifically tailored to parents' experiences following a child-related critical incident (e.g., concussion) were outside the scope of this review and therefore not included. Moreover, studies that collected data from multiple stakeholders (i.e., parents, athletes, and coaches) were only included if the parent data could be extracted

independently. For example, in cases where data from multiple stakeholders were amalgamated (e.g., aggregate story analysis; Lauer et al., 2010b), the article was not retained for analysis. Finally, literature reviews, methodological papers, conceptual/theoretical papers, conference abstracts, theses/dissertations, and non-profit organisation reports were excluded from the review, because they either did not contain original data or had not been subjected to peer review.

2.3.3 Search Process

The primary searches were conducted by the first author. A search strategy was developed over seven academic databases, including: PsycINFO, PsycARTICLES, SPORTDiscus, Scopus, CINAHL, Humanities International Complete, and MEDLINE. In line with previous reviews that have systematically searched for articles related to parents (e.g., Hurley et al., 2020), and youth sport (e.g., Holt et al., 2017) the final search terms were: parent* OR mother OR father OR famil* OR caregiv*; AND, sport* OR athlet* OR physical activ* OR exercise; AND, youth OR teen* OR adolescen* OR 'young adult*' OR 'young person' OR 'young people. Due to the wide range of qualitative and mixed-method designs used in sport parenting research, we did not include any search terms related to qualitative methodology to ensure no relevant studies were missed. Furthermore, we conducted two additional steps to assure no articles were missed. First, we closely reviewed the reference lists from each included study. As a second step, we reviewed the google scholar profiles of prominent authors included in this review (e.g., Knight, Dorsch, Harwood). All search returns were imported to Covidence for screening.

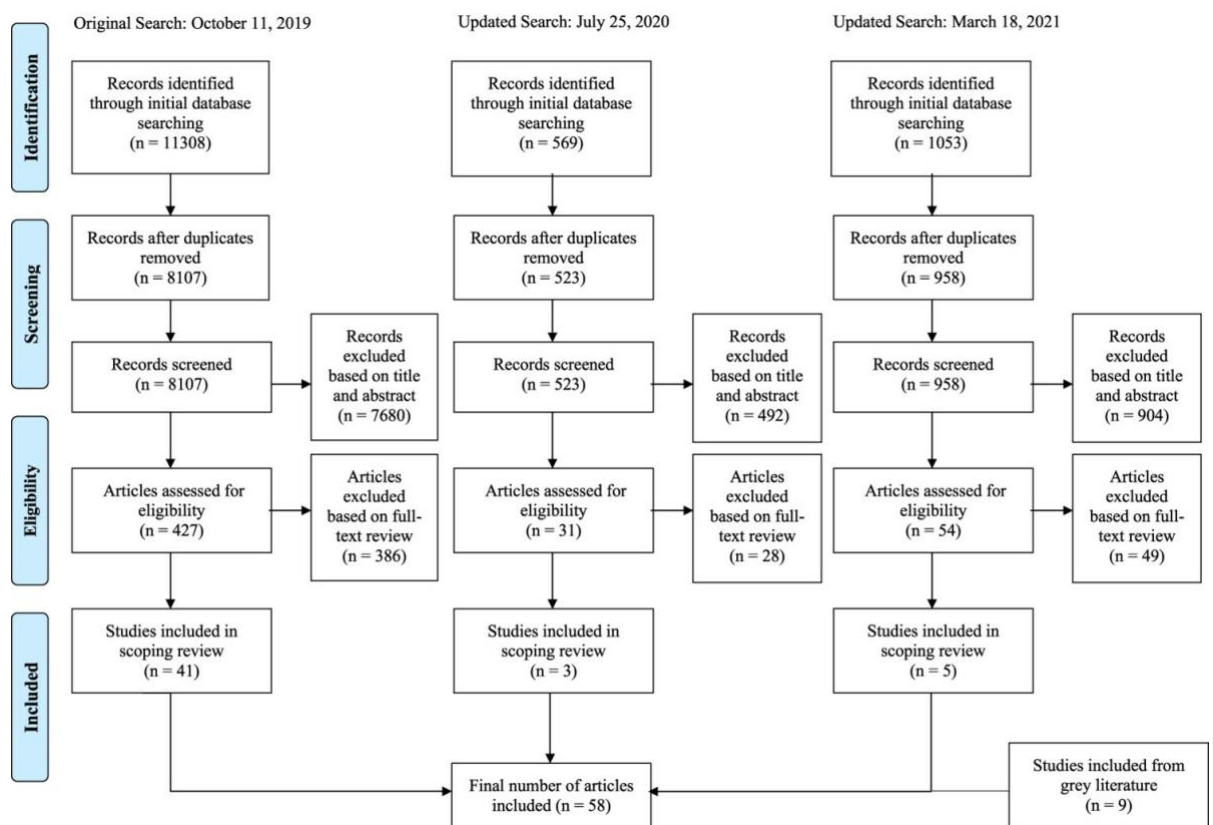
2.3.4 Article Screening and Data Extraction

The original search returned 11308 articles following the removal of duplicates. All studies were screened by two independent reviewers at the title and abstract level,

which resulted in a retention of 427 articles for full-text review. Then, screening at the full-text level yielded 41 relevant qualitative studies for extraction. Following identical procedures, the second search yielded 3 studies for extraction, and the third yielded additional five studies (see Figure 2.1). Finally, our additional steps (outlined above) returned an additional nine studies that fit our criteria. The final sample included 58 studies with qualitative data on parent-specific outcomes in organised sport. Guided by a data extraction spreadsheet, the first author extracted citation information, country and language of participants, details of the study sample, contextual elements of youth sport (e.g., sport type), study methodology, theoretical underpinning, philosophical approach, analytic strategy, and the findings from each included study (e.g., themes, codes, and quotes).

Figure 2.1.

PRISMA flow diagram illustrating the results from the systematic review.



2.3.5 Analysis

In line with our goal to synthesise parents' wide range of experiences in sport, a constructivist approach guided our analysis. This approach adopts a relativist ontology and subjective epistemology, which is appropriate to provide an interpretive account of previous research (Smith et al., 2012). Regarding author positionality, the first author has five years of experience examining parental involvement in sport and is trained in qualitative methods. The remaining three authors have ranging expertise in youth sport, mental health, and clinical psychology, and have previously published research using qualitative methods and meta-synthesis.

A four-step meta-study approach was undertaken, consisting of meta-method analysis, meta-theory analysis, meta-data analysis, followed by a final meta-synthesis (Paterson et al., 2001). To evaluate the methods used in qualitative youth sport parenting literature, a list of criteria guided the *meta-method analysis* (see Holt et al., 2017 for a similar approach). Specifically, the criteria included the study purpose, parent sample characteristics, sport context, sampling strategy, methodology, theoretical and philosophical underpinning, data analysis techniques, and rigour (Appendix C). These data were extracted for each study and tabulated accordingly. A general content analysis was then undertaken to gather frequencies for all aforementioned criteria. Further, we also applied the 10-item Qualitative Research Checklist (Critical Appraisal Skills Program, CASP, 2014) in order to gather an objective metric of study quality for each individual article.

As our third analytic step, *meta-theory analysis* involved assessing the philosophical and theoretical perspectives reported by the authors. Further, *meta-data analysis* was completed by extracting themes and quotes that pertained to parents' experiences in youth sport. The extracted themes and example quotes were then subject

to reflexive thematic analysis, which included initial open coding procedures (Braun & Clarke, 2019). Similar to typical analytic procedures used with interview data, we treated each extracted theme (i.e., with accompanying lower-level themes and example quotes) as independent pieces of data. Then, each piece of data (i.e., extracted theme or quote) was coded reflexively by highlighting specific, meaningful sections of text through an unstructured-coding process. Following this step, we generated new initial themes that were further refined by considering existing literature. Although the first author led the initial coding and thematic analysis, trustworthiness of the current study was enhanced by having other team members serve as critical friends and engage in regular peer debrief exercises by reviewing the coding sheet and challenging the findings. More specifically, our critical friend approach involved ongoing dialogue and deliberation among three authors throughout the analytic phase of the study. Example outcomes from this process include offering alternate thematic ideas and challenging the first authors decisions (Smith & McGannon, 2018). Finally, as recommended in Ronkainen et al. (2012), we contextualised quotes from primary studies to avoid generalisations.

Finally, *meta-synthesis* involved aggregating the findings from the meta-method analysis, meta-theory analysis, and meta-data analysis, and in turn, go beyond the results of the included studies to gather greater understandings of a phenomena (Paterson, 2012; Williams & Shaw, 2019). As such, the purpose of this meta-synthesis was to propose a descriptive model of parent outcomes in sport. The meta-synthesis involved a reflexive, inductive approach of interpretation and reflection on the results of the three previous analytic stages (Paterson, 2001). Graphical iterations of the resulting descriptive model were created and discussed among the authors. In addition, while formulating the model, we consulted currently available reviews and literature on

parenting in sport (e.g., Bean et al., 2014; Harwood et al., 2019; Knight et al., 2017; Lindstrom-Bremer, 2012) and models of athlete outcomes in sport (Personal Assets Framework, Côté et al., 2016; Vierimaa et al., 2017).

2.4 Results

2.4.1 Meta-Method Analysis

We encourage readers to consult our complete illustration of the meta-method and meta-theory analysis in Appendix C, where specific references can be found for each type of approach. For context, many studies offered exemplary alignment of method, analysis, and strategies to enhance rigour, which was difficult to convey in our results section. As such, Appendix C offers a more detailed depiction of methodological coherence found in sport parenting literature.

2.4.1.1 Setting

The qualitative literature investigating the parental experience in youth sport is predominantly drawn from the United States ($n = 19$), the United Kingdom ($n = 18$) and Canada ($n = 13$). Additionally, studies conducted in Australia ($n = 4$), South-Africa ($n = 1$), France ($n = 1$), and Norway ($n = 2$) also contributed. We acknowledge that our decision to focus solely on English-written publications may have impacted these results.

2.4.1.2 Methodology

Twenty-two studies did not provide an explicit description of their methodological approach. Among the remaining studies that did specify their approach, reported methodologies include: (a) phenomenological approach (e.g., descriptive, interpretive, existential; $n = 5$); (b) interpretive description ($n = 4$); (c) qualitative description ($n = 4$); (d) general interpretivist approach ($n = 3$); and (e) constructivist approaches ($n = 2$). Further, grounded-theory was reported five times, various forms of

case-study methodology were cited seven times, and ethnography was cited twice, Moreover, exploratory description was mentioned in two studies, mixed-method was used thrice, and a constant comparative approach was reported once.

2.4.1.3 Sample

Although one study did not detail the number of parent participants (Brown, 2014), we were capable of calculating a close estimate of the number of parents included in the current review ($N = 4014$). The reason this number is relatively high for a qualitative review is due to our inclusion of studies that applied qualitative analysis to open-ended survey questions (e.g., Harwood & Knight, 2009a; Lienhart et al., 2020; Mirehie et al., 2019; Omli & Lavoie, 2012). The seven studies that used open-ended questions accounted for 75% ($n = 2999$) of the total number of participants. Further, several studies did not report parents' mean age and therefore made it impossible to calculate a mean. Although eight studies did not report parent gender, mothers represented approximately 60% of included parents. This calculation accounts for 93% of the current sample ($N = 3728$ parents). Finally, athlete age ranged from 3 – 29 years, however, only four studies reported athletes over the age of 18 years (86% of studies involved athletes between 8 – 18 years).

2.4.1.4 Sampling Strategy

Twenty-one studies did not explicitly report a specific sampling approach. Among sampling strategies that were used, purposeful sampling (i.e., or referred to as criterion-based sampling) was used as the sole sampling technique in twenty-four articles. Other articles combined purposeful sampling with additional techniques snowball sampling ($n = 1$; Boneau et al., 2020), convenience sampling ($n = 1$; Charbonneau & Camiré, 2020), and theoretical sampling ($n = 2$; Knight & Holt, 2014; Thrower et al., 2016). Outside of the predominant purposeful approach, other sampling

strategies that were applied on their own include maximum variation (Clarke & Harwood, 2014; Furusa et al., 2020), theoretical (Holt et al., 2008; Snyder & Purdy, 1982), convenience (Kay, 2000; Rafferty et al., 2018), snowball or chain (Trussell & Shaw, 2012), naturalistic (Wiersma & Fifer, 2008), and stratified random sampling (Lienhart et al., 2020).

2.4.1.5 Data Collection

The majority of studies used a form of individual interview as the sole data collection method ($n = 35$). In addition, some authors chose to combine individual interviews with other collection techniques such as observation ($n = 7$ studies), open-ended survey's ($n = 3$ studies), and diaries ($n = 1$; Hayward et al., 2017). Further, focus groups were used as the sole data collection technique six times, and similarly open-ended survey questions were used five times. Finally, one autoethnographic study used reflexive journaling and emotional recall to gather data (Misener, 2020).

We also calculated mean sample sizes per data collection technique among studies that only applied one method. With regard to individual interviews with parents, the sport parenting literature averaged 17.7 participants per study, whereas focus group studies averaged 33.2 participants and open-ended survey designs averaged 309 participants. These calculations do not account for studies that used multiple methods.

2.4.1.6 Data Analysis

Although there was a high prevalence of thematic or content analysis ($n = 45$ studies), we encourage readers to consult supplementary file 1 for specific details and citations that accompany the various forms of reported analysis. Indeed, in certain cases authors described their specific coding and analytic techniques without formally labelling them “thematic analysis”, but nonetheless described their results as “themes”. Moreover, many authors used analytic techniques that were specifically appropriate for

their philosophical position which is better captured in supplementary file 1.

Nevertheless, other examples of analysis reported by authors include a grounded theory approach to open, axial, and theoretical integration (e.g., Holt et al., 2008; Knight & Holt, 2014), various forms of phenomenological analysis (e.g., interpretive, descriptive; Burgess et al., 2016; Clarke & Harwood, 2014), case comparison (e.g., Eriksen & Stefansen, 2021), and discourse analysis (e.g., Gottzen & Kremer-Sadik, 2012).

2.4.1.7 Rigour

Positively, many studies used multiple strategies to enhance the quality of their work that were informed by their philosophical positions and methodological approaches (see supplementary file 1). For summary purposes, the most common form of enhancing rigour was employing a multiple team member approach (i.e., critical friends, peer debrief; $n = 31$ studies). Further, other techniques to enhance rigour included member checking ($n = 16$), pilot interviews ($n = 8$), inter-coder reliability ($n = 3$), field notes or analysis logs ($n = 5$), and audit trail ($n = 2$).

2.4.1.8 Qualitative Research Checklist

CASP results for each study can be found in the supplemental materials. The CASP highlighted a generally high quality of evidence with regard to identifying study aims (100% of studies reported an explicit aim), appropriate use of qualitative methods (100 % of studies used qualitative methodologies appropriately), data collection techniques (100% of studies used appropriate techniques to address the aim), appropriate research designs (97% of studies justified their research design), ethical considerations (97% of studies reported ethical clearance and participant consent), data analysis (89% of studies applied sufficiently rigorous analysis), and reporting clear findings (97% of studies clearly reported their findings). Conversely, aligning recruitment strategy with study aims was either not present or unclear in several studies

(72% of studies described a specific recruitment strategy). Similarly, some studies could have provided more context surrounding how relationships among researchers and participants were considered (62% of studies discussed potential researcher bias).

2.4.2 Meta-Theory Analysis

2.4.2.1 Theoretical Framework

Most studies did not report a theoretical framework as part of their approach ($n = 46$). Among those that did, ecological systems theory was applied twice (Holt et al., 2008; Holt et al., 2011), and similarly the person-process-context-time model was applied once (Dorsch et al., 2015a). Additionally, family-systems theory (Newhouse-Bailey et al., 2015), social cognitive theory (i.e., reciprocal determinism; Dorsch et al., 2009), eudemonic wellbeing (Misener, 2020), basic psychological needs theory (Charbonneau & Camiré, 2020), sensemaking theory (Boneau et al., 2020) and feminist theory (Trussell & Shaw, 2012) also appeared in the literature. Finally, a social constructivist framework underpinned work by Elliott and Drummond (2013), phenomenology as a theoretical framework guided Todd and Edwards (2020), and a social-relational understanding of disability offered theoretical foundation to work by Bragg et al. (2020).

2.4.2.2 Philosophical Approach

We followed a categorisation approach similar to Poucher et al. (2020). Several included studies did not specify their philosophical approach ($n = 31$). The most commonly cited philosophical position was constructivism/interpretivism ($n = 13$), followed by constructionism ($n = 4$), post-positivism/critical realism ($n = 4$), pragmatism ($n = 3$), relativism ($n = 2$), and one study approached their work with a combination of post positivism and pragmatism (Garst et al., 2019).

2.4.3 Meta-Data Analysis

Meta-data analysis results can be found in Table 2.1. The results from the meta-data analysis were grouped within four higher-level themes of parental outcomes in youth sport, which include (a) personal resource investment from parents; (b) parental relationships in sport; (c) emotions and reactions; and (d) personal development. Lower-level themes are further described within each higher-level theme.

Table 2.1*Summary of Results from the Meta-Data Analysis*

Outcome Category	Theme	Description	Studies
Resource Investment from Parents	Financial Investment	Parent experiences related to their financial investment in their children's sport	Boneau et al., 2020; Burgess et al., 2017; Clark et al., 2019; Clarke & Harwood, 2014; Côté, 1999; Dorsch et al., 2009; Dorsch et al., 2019; Garst et al., 2019; Harwood & Knight, 2009a; Harwood & Knight, 2009b; Harwood et al., 2010; Harwood et al., 2019; Hayward et al., 2017; Holt et al., 2011; Johansen & Green, 2019; Kay, 2000; Kirk et al., 1997; Knight et al., 2013b; Knight et al., 2016; Lally & Kerr, 2008; Lauer et al., 2010; Lienhart et al., 2020; Mirehie et al., 2019; Newhouse-Bailey et al., 2015; Rafferty et al., 2018; Stefansen et al., 2018; Thrower et al., 2016; Todd & Edwards, 2020; Trussell & Shaw, 2012; Wiersma & Fifer, 2008; Wolfenden & Holt, 2005

Time Investment	Parent experiences related to the amount of time invested in their children's sport	<p>Bean et al., 2019; Boneau et al., 2020; Burgess et al., 2017; Clarke & Harwood, 2014; Côté, 1999; Dorsch et al., 2009; Dorsch et al., 2019; Eriksen & Stefansen, 2021; Furusa et al., 2020; Garst et al., 2019; Harwood & Knight, 2009a; Harwood & Knight, 2009b; Harwood et al., 2010; Harwood et al., 2019; Hayward et al., 2017; Holt et al., 2011; Jeanes & Magee, 2011; Johansen & Green, 2019; Kay, 2000; Kirk et al., 1997; Knight et al., 2016; Knoetze-Raper et al., 2016; Lally & Kerr, 2008; Lauer et al., 2010; Lienhart et al., 2020; Mirehie et al., 2019; Misener, 2020; Newhouse-Bailey et al., 2015; Newport et al., 2021; Rafferty et al., 2018; Swanson, 2009; Thrower et al., 2016; Trussell & Shaw, 2012; Wiersma & Fifer, 2008; Wolfenden & Holt, 2005</p>
Emotional Investment	Parent experiences related to their emotional investment in their children's sport	<p>Boneau et al., 2020; Bragg et al., 2020; Burgess et al., 2017; Clarke & Harwood, 2014; Clarke et al., 2016; Côté, 1999; Dorsch et al., 2009; Dorsch et al., 2015a; Dorsch et al., 2019; Furusa et al., 2020; Holt et al., 2008; Johansen & Green, 2019; Kay,</p>

			2000; Kirk et al., 1997; Knight & Holt, 2014; Knight et al., 2013; Knoetze-Raper et al., 2016; Lally & Kerr, 2008; Lauer et al., 2010; Lienhart et al., 2020; Neely et al., 2017; Newhouse-Bailey et al., 2015; Newport et al., 2021; Swanson, 2009; Todd & Edwards, 2020; Trussell & Shaw, 2012; Warner et al., 2015; Wiersma & Fifer, 2008; Wolfenden & Holt, 2005
Social Relationships	Parent-Child Relationship	Relationships between parents and their child-athletes	Bragg et al., 2020; Clark et al., 2019; Clarke et al., 2016; Dorsch et al., 2009; Dorsch et al., 2015a; Dorsch et al., 2019; Elliott & Drummond, 2013; Eriksen & Stefansen, 2021; Gottzen & Kremer-Sadik, 2012; Harrington, 2006; Jeanes & Magee, 2011; Kay, 2007; Kirk et al., 1997; Lally & Kerr, 2008; Lauer et al., 2010; Newhouse-Bailey et al., 2015; Newport et al., 2021; Stefansen et al., 2018; Tamminen et al., 2017; Wiersma & Fifer, 2008
	Spousal Relationships	Relationships between parent-couples	Bean et al., 2019; Dorsch et al., 2015a; Furusa et al., 2020; Gottzen & Kremer-Sadik, 2012; Kirk et al., 1997; Knoetze-Raper et al., 2016;

			Lally & Kerr, 2008; Lauer et al., 2010; Newhouse-Bailey et al., 2015;
	Parent-Peer Relationships	Relationships among parents from the same team or sport club	Bragg et al., 2020; Brown, 2014; Clark et al., 2019; Clarke & Harwood, 2014; Dorsch et al., 2009; Dorsch et al., 2015a; Dorsch et al., 2019; Elliott & Drummond, 2013; Eriksen & Stefansen, 2021; Furusa et al., 2020; Garst et al., 2019; Johansen & Green, 2019; Kirk et al., 1997; Knight et al., 2013a; Knight et al., 2013b; Lally & Kerr, 2008; Lienhart et al., 2020; Misener, 2020; Neely et al., 2017; Newport et al., 2021; Peter, 2011; Warner et al., 2015; Wiersma & Fifer, 2008
	Parent-Coach Relationship	Relationships between parents and coaches	Dorsch et al., 2019; Elliott & Drummond, 2013; Harwood & Knight, 2009a; Harwood & Knight, 2009b; Harwood et al., 2010; Harwood et al., 2019; Hayward et al., 2017; Newport et al., 2021; Omli & Lavoie, 2012; Peter, 2011; Wall et al., 2019; Wolfenden & Holt, 2005
Emotional Reactions	Positive Emotions	Positive emotional reactions in response to sport-related events	Bragg et al., 2020; Clarke et al., 2016; Dorsch et al., 2009; Dorsch et al., 2015a; Eriksen & Stefansen,

			2021; Harrington, 2006; Holt et al., 2008; Jeanes & Magee, 2011; Kirk et al., 1997; Knight & Holt, 2014; Knight et al., 2013; Newport et al., 2021; Peter, 2011; Stefansen et al., 2018; Wiersma & Fifer, 2008
	Negative Emotions	Negative emotional reactions in response to sport-related events	Dorsch et al., 2009; Dorsch et al., 2015a; Dorsch et al., 2019; Charbonneau & Camiré, 2020; Harwood & Knight, 2009a; Harwood & Knight, 2009b; Harwood et al., 2010; Harwood et al., 2019; Hayward et al., 2017; Holt et al., 2008; Jeanes & Magee, 2011; Knight & Holt, 2014; Knight et al., 2013; Lauer et al., 2010; Lienhart et al., 2020; Neely et al., 2017; Omli & Lavoie, 2012; Peter, 2011; Tamminen et al., 2017; Warner et al., 2015
Personal Development	Learned Traits and Behaviours	Traits and behaviours learned by parents in the youth sport environment	Burgess et al., 2017; Clarke & Harwood, 2014; Côté, 1999; Dorsch et al., 2009; Dorsch et al., 2015a; Dorsch et al., 2019; Harrington, 2006; Johansen & Green, 2019; Knight et al., 2013b; Knight et al., 2016; Knight & Holt, 2014; Knoetze-Raper et al., 2016; Snyder & Purdy

Health and Wellbeing	Relations between parents' involvement in youth sport and their health and wellbeing	Bean et al., 2019; Clark et al., 2019; Dorsch et al., 2009; Dorsch et al., 2015a; Harwood & Knight, 2009b; Harwood et al., 2019; Hayward et al., 2017; Johansen & Green, 2019; Lienhart et al., 2020; Misener, 2020
Identity Formation	Sport-related identities developed by parents	Boneau et al., 2020; Clarke & Harwood, 2014; Dorsch et al., 2015a; Eriksen & Stefansen, 2021; Garst et al., 2019; Harrington, 2006; Jeanes & Magee, 2011; Peter, 2011; Swanson, 2009; Trussell & Shaw, 2012; Warner et al., 2015
Parental Satisfaction	The parental satisfaction from enrolling a child in sport	Clark et al., 2019; Clarke et al., 2016; Eriksen & Stefansen, 2021; Gottzen & Kremer-Sadik, 2012; Kay, 2007; Trussell & Shaw, 2012; Wiersma & Fifer, 2008

2.4.3.1 Personal Resource Investment from Parents

Parents of athletes of all ages and competitive levels report the ongoing financial, temporal, and emotional costs of youth sport. As one outdoor climbing parent described in Garst and colleagues' pragmatic focus group study (2019), "We have a joke on our team. That [parents] are the credit card or the taxi." p. 9.

A robust finding that appeared in many studies ($n = 31$) was the financial implications of having a child in youth sport. Parents are expected to pay for initial registration and coaching fees, equipment and sport kits, and day to day competition-related costs (e.g., team snacks and sport drinks; Rafferty et al., 2018), thus highlighting the ongoing financial demands of youth sport. Additionally, parents with children engaged in more competitive sport often pay for out-of-town tournament fees (e.g., petrol, accommodation, food; Harwood & Knight, 2009a) and skill development opportunities (e.g., summer development camps). As such, the growing cost of youth sport has led parents to perceive sport-related expenses as a family investment, which in turn, decreases parents' ability to take family vacations (Bean et al., 2019), and in extreme cases, jeopardises some family's ability to purchase healthy food (e.g., Todd & Edwards, 2020). Despite the pervasiveness of this issue across studies, little research has explored means to reduce the cost of youth sport for families (Clark et al., 2019).

Parents continuously invest a great deal of time to facilitate sport experience for their children ($n = 35$ studies mentioned the time investment required for youth sport). Despite the variance between recreational and competitive sport, parents are the primary source of transportation to and from training and competition, launder uniforms and prepare meals, and tend to athletic injuries (i.e., physician and physiotherapy appointments). Unfortunately, much personal time is lost along the way, which results in less time for healthy behaviours (e.g., physical activity; Johansen & Green, 2019) and

socialising with peers outside of sport (e.g., Bean et al., 2019). In addition, youth sport impedes family mealtime (e.g., Mirehie et al., 2019), family holiday's (Todd & Edwards, 2020), and inevitably forces parents and children to miss out on opportunities outside of sport (e.g., Bean et al., 2019; Harwood & Knight, 2009a). It must be noted, however, that the time spent involved in youth sport activities offers parents ample opportunity to communicate and connect with their children, spouse, and other parents.

Parents' emotional investment throughout their young athlete's pursuit to improve and develop as an athlete was coded 28 times (e.g., Dorsch et al., 2019; Elliott & Drummond, 2013; Furusa et al., 2020). Enrolling a child in organised sport has resulted in heightened perceptions of responsibility (Clarke & Harwood, 2014), and overall emotional ties to their child's sport experience (Dorsch et al., 2015a). Parents often anticipate the emotional investment required for organised youth sport prior to enrolling their children as they accept the forthcoming missed opportunities to engage in other self-directed activities. For example, a high-performance tennis-mother in Knight and Holt (2014) expressed the emotional experiences of watching her daughter compete:

“It is difficult in matches especially... if they're having a bad day. I mean sometimes I've often been at the court and I've been in tears because I thought why does she put herself through this?” (Knight & Holt, 2014, p. 161).

2.4.3.2 Parental Relationships in Sport

Having children involved in youth sport impacts parents' relationship with their children, their spouse, other parents in the youth sport environment, and their children's coaches.

As reported in multiple studies ($n = 20$), having children involved in youth sport offers parents additional opportunities to interact and communicate with their children.

These sport-related interactions occur in the physical sport environment (e.g., training grounds; Elliot & Drummond, 2013), during transportation to and from sport (e.g., Tamminen et al., 2017), and in other public places (e.g., hotels, Bragg et al., 2020). In this way, the additional time spent together can foster stronger parent-child relationships (Clarke et al., 2016). Parents become closer with their children by helping them manage difficult sport-related situations (e.g., deselection; Neely et al., 2017) and offering support and encouragement (e.g., Elliott & Drummond, 2013; Tamminen et al., 2017). As an example, this football father from the United Kingdom commented on the additional communication and closeness that was fostered through mutual admiration for sport:

“It’s [football] made us become a lot closer. And because we both love football it’s like we both know what to talk about if you get what I mean so like we have a lot to talk about.” (Clarke et al., 2016, p. 16).

In contrast, negative parent-child relationship outcomes typically result from a lack of communication (Newport et al., 2020), disaccord regarding the child’s effort and commitment (Elliott & Drummond, 2013), or pressuring behaviours with regard to the child’s development and sport-related goals (Charbonneau & Camiré, 2020).

The impact of youth sport participation on spousal relationships was noted nine times (e.g., Bean et al., 2019; Lally & Kerr, 2008; Lauer et al., 2010a). Particularly in families with multiple child-athletes, parents are sometimes forced to divide the family in groups to accommodate multiple sport experiences (Newhouse-Bailey et al., 2015). Additionally, spouses have spoken to relationship tension that result from disagreements about resource allocation (e.g., time and money), and prioritising sport over other parental responsibilities (e.g., paid work; Gottzen & Kremer-Sadik, 2012).

The following quote highlights marital stress voiced from the mother of a former elite gymnast:

“It was mostly my husband and I who paid the price in our relationship. It actually put some strain on our relationship. It’s hard enough for couples with kids to find time together and then you add training six days a week.” (Lally & Kerr, 2008, p. 47).

Alternatively, some studies noted benefits on spousal relationships due to the necessity to work together to facilitate youth sport experiences (e.g., Furusa et al., 2020). For example, observing one’s partner commit to the child’s development through sport led to perceptions of admiration:

“Sometimes he skips meetings and cancels them [to watch their child’s sport], I don’t know exactly, but it makes me feel good when he comes to watch.”

(American youth sport mother; Dorsch et al., 2015a, p. 12)

The impact of youth sport participation on peer relationships was noted 23 times (e.g., Clarke & Harwood, 2014; Garst et al., 2019; Johansen & Green, 2019). Indeed, having children involved in sport can result in peer relationships for parents, and in some cases long-lasting friendships (Brown, 2014; Clark et al., 2019). Parents have discussed a sense of parent community among their children’s team (e.g., Peter, 2011), and these parents ultimately serve as outlets of support (Knight & Holt, 2013b; Neely et al., 2017). Conversely, some parents develop toxic peer relationships, primarily influenced by the inappropriate behaviour of selective parents in the immediate youth sport environment (e.g., Elliott & Drummond, 2013). For example, conflict may arise from inappropriate comments directed at athletes, coaches, or officials. Taken together, youth sport serves as an important context for parents’ socialisation with other adults.

Relationships among parents and coaches were discussed in 12 studies (e.g., Elliott & Drummond, 2013; Harwood & Knight, 2009a, Lienhart et al., 2020). Parents often report dissatisfaction with coaches' attitudes and behaviours related to competition and team expectations. In addition, multiple studies have suggested that coach behaviour (e.g., in-game decisions) is a common source of subjective anger for parents (Omli & Lavoie, 2012). For example, a mother from Wall et al. (2019) expressed frustrations due to a lack of collaboration and transparency from the coach:

“it's hard, it's almost like you're losing that control, and that was really hard for all of us, as a family, because now it's like they communicate through the kid, not through us.” (Wall et al., 2019, p. 7).

A smaller body of literature has reported on parents' appreciation and kindness towards the dedication exhibited by their children's coaches (e.g., Peter, 2011).

2.4.3.3 Emotional Reactions

Parents often react emotionally in response to competition-related events, and therefore this represents an overarching theme of the current review. We dichotomise the acute positive and negative emotions parents may experience within the immediate youth sport environment.

Parents experience a range of positive emotions in direct response to observing their children compete, have fun, and develop in their sport endeavours ($n = 15$ studies coded for positive emotional reactions). Specifically, parents have experienced feelings of pride (e.g., Dorsch et al., 2009), excitement (e.g., Clarke et al., 2016; Newport et al., 2020), enjoyment (e.g., Knight & Holt, 2014), and satisfaction (e.g., Trussell & Shaw, 2012) as a result of observing their children compete and engage with other social agents (i.e., teammates and coaches). These emotions are often amplified by observing their child's improvement and success as an athlete (e.g., Kay, 2007). One football

parent from the United Kingdom put it in the following way: “The sense of pride it [observing their children] does give on occasion is wonderful.” (Kay, 2007, p. 75).

In contrast to the previous theme, parents may also experience negative emotions while observing competition ($n = 20$ studies coded for negative emotional reactions). These acute negative experiences have been described as anger (e.g., Omli & Lavoie, 2012), aggressiveness (e.g., Jeanes & Magee, 2011), frustration (e.g., Warner et al., 2015), sadness (e.g., Peter, 2011), and resentment (e.g., Dorsch et al., 2009). The reported sources of the aforementioned outcomes are predominantly related to behaviour exhibited by coaches, athletes, officials, or other parents. More specific examples include parents’ dissatisfaction of their children’s performance (e.g., Charbonneau & Camiré, 2020), unmet expectations (e.g., Holt et al., 2008), and sadness from the anticipated end of a particular competitive event or season (e.g., Lally & Kerr, 2008). The following quote highlights the shared emotions experienced by a Canadian soccer mother:

“When they are expecting to do well and they don’t, you feel the pain they feel. When they’re disappointed, you’re disappointed.” (Holt et al., 2008, p. 676).

2.4.3.4 Personal Development

As with athletes, this review supports the notion that having children involved in organised sport can lead to positive developmental outcomes in parents. We report these developmental outcomes as learned behaviours, health and wellbeing, parental satisfaction, and identities related to their children’s sport involvement.

Parents report a number of learned traits and behaviours as a result of their time spent in the physical youth sport environment and surrounding contexts ($n = 13$ studies fell under this theme). While watching their children compete, parents learn appropriate spectator behaviours that correspond with team norms (e.g., Knight et al., 2016).

Additionally, having children in sport has led parents to increase their sport-specific competencies and competitiveness (e.g., Snyder & Purdy, 1982), and were forced to be adaptable through difficult transitions related to their children's development in sport (Knight & Holt, 2014).

Relative to other lower-order themes, the consideration of parents' physical and mental health as a function of their children's sport participation is in its infancy ($n = 10$ studies reported health implications). To be specific, there has been little research that has explicitly examined parents' mental health as a function of their child's sport-related commitments, however the emotional cost experienced by parents has been reliably reported. For example, a number of studies have explored the stressors experienced by parents (Harwood & Knight, 2009; b; Harwood et al., 2019; Hayward et al., 2017), whereas other studies have reported specific indications of anxiety and embarrassment (e.g., Dorsch et al., 2009), perceived decline in wellbeing (e.g., Bean et al., 2019), and distress from being distant from a child-athlete (e.g., Lienhart et al., 2020). Moreover, some studies have noted that parents' physical activity decreased during a youth sport season (e.g., Johansen & Green, 2019).

In contrast, other studies have found the youth sport experience to be promotive of physical and mental wellbeing (e.g., Dorsch et al., 2015a, Schneider et al., 2016; Sutcliffe, Kelly, et al., 2021). It should be noted, though, that the potential positive effects of having children in youth sport on parents' physical and mental health has been seldomly explored. The following quote illustrates the need to further examine the concept of parental health in youth sport:

“I don't think it's a coincidence that I've been more physically active than I had been before . . . I think that that's probably been a part of having sports become more a part of our life as a family.” (Dorsch et al., 2015a, p. 12).

There is evidence that suggests parents identify with their child's sport group (Sutcliffe et al., 2020). Indeed, parents from multiple studies spoke to a shared sense of identity among parents ($n = 11$ studies) related to their involvement in their child's team or sports club (Boneau et al., 2020; Clarke & Harwood, 2014; Swanson, 2009). Similarly, parents have described their child's sport team as a distinct community with common goals and attributes (Garst et al., 2019; Peter, 2011; Warner et al., 2015). In addition to the group identities parents may form, some studies have also provided insight into the potential personal identities (i.e., role identity; Burke & Stets, 2000) that may develop as a result of being a parent with child-athletes (Dorsch et al., 2015a). For example, parents may identify as a "sport parent", which can be amplified by their child's success in sport:

"You want to be in the in crowd. You want to be popular. So, I want him to do good because it makes me look good . . . and that feels kind of obnoxious to me."

(American youth sport parent; Dorsch et al., 2015a, p. 9).

Finally, seven studies noted the genuine satisfaction that parents perceive from providing their children with sport-related opportunities (Coakley, 2006; Trussel & Shaw, 2012). Similar to sociological research on this topic (see Coakley, 2006), our findings confirmed that enrolling child-athletes in sport, and subsequently observing them compete, cooperate with others, and develop as an athlete and person can lead to a sincere perception of satisfaction and moral worth among parents (Gottzen & Kremer-Sadik, 2012; Kay, 2007; Trussell & Shaw, 2012; Wiersma & Fifer, 2008). In particular, fathers noted that sport provides them with opportunities to display competencies and interact with their children outside of the home (Coakley, 2006; Gottzen & Kremer-Sadik, 2012; Kay, 2007).

2.4.4 Meta-Synthesis

This meta-synthesis represents data from 58 studies and over 4000 parents. In order to aggregate the findings from the meta-method, meta-theory, and meta-data analyses, and in line with recommendations for meta-study (Paterson, 2001), we have synthesised the findings and provided a descriptive model of parent-specific outcomes that result from their child's participation in youth sport (see Figure 2.2). This descriptive model represents a graphical illustration of the current meta-synthesis. It should be noted that there remains a lack of clarity surrounding the direction of relationships within our model, as many themes of parental involvement in sport fall within a spectrum of experience. For example, the time investment required from parents was often voiced as an ongoing challenge, however, other studies highlight that the additional time spent in sport strengthened their family relationships. Thus, although this model does not capture the full complexity of being a parent with a child involved in sport, it nonetheless highlights the false dichotomy of positive or negative parental experiences in sport. Indeed, there are many situational (e.g., family structure; household income) and contextual (level of sport) factors that could lead any one family or individual parent to experience an outcome within the wide spectrum of parental experience in sport (Furusa et al., 2020).

Parent participants from the included studies represented a diverse, global sample of parents with child-athletes that ranged in age, sport, competition, and experience. Therefore, as depicted in the first section of the proposed model, there are contextual elements that may impact parental outcomes, such as individual attributes (e.g., gender, ethnicity, socio-economic status), the child's sport context (i.e., type, competitive level, developmental status; Côté, 1999), the social climate of the youth sport environment (i.e., interactions with athletes, parents, coaches), and the contexts in

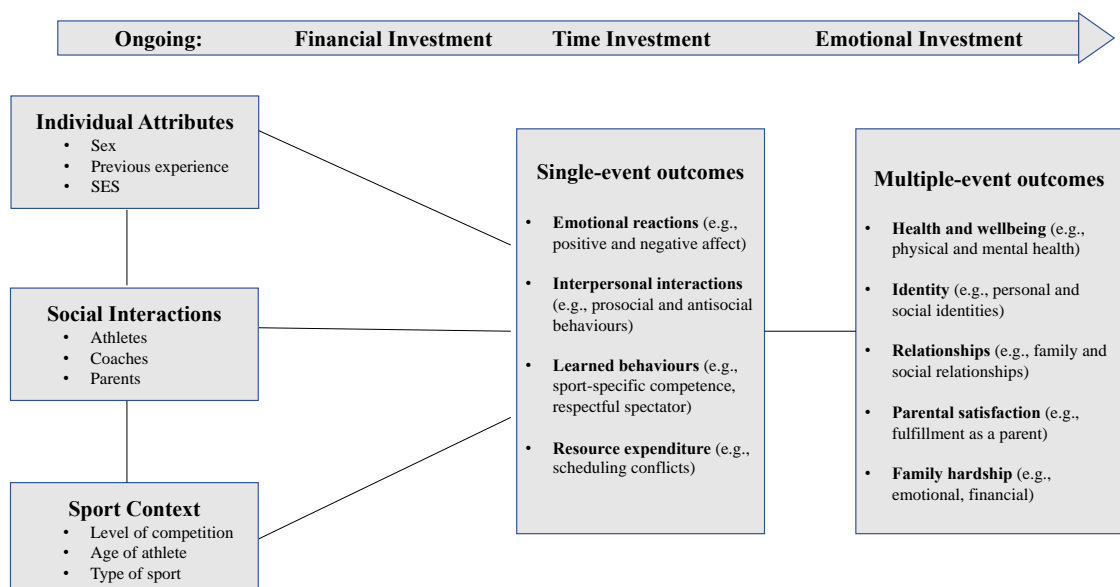
which they appear (i.e., sport-related interactions in the immediate sport environment, in the car, or at home). Additionally, youth sport participation requires ongoing financial, temporal, and emotional investment from parents. Indeed, these particular investments require attention throughout the sport experience and may lead to secondary outcomes of their own (e.g., financial hardship, scheduling conflicts). Taken together, the dynamic elements of youth sport and the investments parents put forth for their child's participation will ultimately lead to a range of outcomes across single and multiple sport-related events. As a final point, although we label outcomes as the result of either single or multiple events, we encourage caution here as it is possible that circumstances could lead to perceptions of a multiple-event outcomes following a single event, and vice versa.

As the first level of potential outcomes in the proposed model, parents experience outcomes as a result of their observations, interactions and behaviours in the immediate sport environment and surrounding contexts. For example, competition-related events (e.g., child's performance), and daily interactions with other agents (e.g., other parents, coaches, and athletes) can result in emotional reactions from parents. Further, parents' interactions with other social agents in sport can lead to engagement in prosocial behaviours (i.e., friendly acts and exchanged intended to benefit others) or antisocial behaviours (i.e., acts and exchanged aimed at harming or disadvantaging someone). Finally, parents appear to adopt new behaviours as a result of their involvement and engagement with their child's sport endeavours (e.g., increased competitiveness, respectful spectator behaviours). These outcomes appear to apply before, during, and after a single youth sport event (i.e., training session or competition).

Furthermore, outcomes that appeared to emerge following more than one event include the impact of having a child-athlete on parents' health and wellbeing (e.g., less time to be physically active, increased wellbeing and purpose from providing sport opportunities), the development of new identities (e.g., family-centered and team-centered social identities), and the relationship implications of youth sport participation (i.e., family and peer networks). Moreover, some parents make personal sacrifices in order for their children to participate in their desired sport, which can lead to lasting family hardship (e.g., emotional, financial). Unfortunately, such circumstances can result in parents seeking return on their investment, and ultimately living vicariously through their children with unrealistic expectations (Dorsch et al., 2019). Altogether, the current findings showcase the range of outcomes experienced by parents in one or multiple organised sport events.

Figure 2.2.

A descriptive illustration of the study results.



2.5 Discussion

The first aim of the current study was to systematically review the qualitative literature on parent-specific outcomes in organised youth sport. A second aim of the review was to analytically evaluate the scope, content, and quality of the literature in the area (i.e., via meta-method, meta-theory, and meta-data analysis). Finally, a third aim was to meta-synthesise the literature and propose a descriptive model of parent outcomes in sport. Our meta-method analysis revealed a relatively high standard of methodological coherence in qualitative youth sport parenting research. Meta-theory analysis revealed that several studies were approached through a particular philosophical lens (i.e., approximately half), however, were seldomly underpinned by existing theoretical frameworks. Further, as depicted in our descriptive model, ensuing meta-synthesis uncovered the complex reality of having children involved in organised youth sport.

To our surprise, the current review gathered evidence from an unexpectedly high number of qualitative articles that include reports from parents themselves (i.e., 58 peer-reviewed qualitative studies). As such, the current review adds validity to research from the last decade (e.g., Dorsch et al., 2009; Harwood & Knight, 2009a; b; Knight & Holt, 2013a) that suggests parents experience their own range of outcomes as a result of having children enrolled in organised sport. Indeed, although each categorical theme in this review was represented by many studies, at no point was there any uniformity with respect to whether such themes led to positive or negative outcomes. One key takeaway from the current review is the need for more contextual and situational data to further unpack parental involvement in sport beyond their influence on the child-athlete experience (e.g., Harwood et al., 2019; Knight et al., 2017). With that said, the scarcity of research underpinned by theory was a gap which needs to be addressed in future

research concerning family involvement in youth sport (e.g., family systems theory Rouquette et al., 2020).

Among the findings of the current study, the personal and family resources (i.e., time, money, and emotions) parents invest in organised sport was noteworthy. Although this is not a novel finding in and of itself, the robustness of these reports and the subsequent outcomes that resulted from sport-related resource expenditure illustrates a problematic side of youth sport for families (Holt et al., 2011). Indeed, recent reports indicate that parents with child-athletes typically report higher household income than national averages, thus highlighting a potential underrepresentation of lower-income family experiences in sport (Holt et al., 2011). Therefore, the financial implications of youth sport directly impact parents that are already involved in the experience and may be a barrier to entry for those who are unable to afford initial registration. Moreover, the increasingly high time demands that sport-related activities place on parents has been positioned as a notable barrier on personal, spousal, and family life (Harwood & Knight, 2009b). Despite these trends, only few studies have sought to explore novel approaches to make youth sport more affordable and time-efficient for parents (see Clark et al., 2019; Holt et al., 2011; Tamminen et al., 2021). Designing interventions that inform parents on available financial resources may therefore be a fruitful avenue to increasing sport participation among young people.

Another notable finding of the current meta-study was that the youth sport environment offers a central space for parents to socially engage with other adults. In fact, previous studies have reported perceptions of group identities (e.g., Sutcliffe et al., 2020) and a sense of community (e.g., Garst et al., 2019; Warner et al., 2015) among parents with children on the same sports team. In line with findings from the current review, it appears as though sport offers an indispensable context for fulfilling a basic

human need for parents – social belonging (Baumeister & Leary, 1995). This is not a trivial finding considering the previously mentioned barriers that sport participation can place on parents' personal lives, and therefore more research on the effects of organised sport on parental social support is warranted. For example, do certain types of sport (i.e., individual or team sport) lend greater perceptions of social support among parents? And are parents required to spend a certain amount of time interacting with other parents to receive meaningful social support benefits (e.g., at least one day a week of interaction)? As articulate by a retired youth sport parent:

“The other thing I miss is the friends at the [gymnastics] gym. I made some great friendships with the other parents at the gym. All that time watching and waiting for our kids gives you a good chance to get to know people. And we have something in common. When we sit together at a competition, it feels like a big family. It was surprising to me that even though our daughters were competing against each other, we were never jealous of each other's kid.” (Lally & Kerr, 2008, p. 48).

The implications for sport on family relationships was apparent in the current study. Previous work has dichotomised the behaviours parents express towards their children in sport as either supportive or pressuring (Dorsch et al., 2015b). Although an important body of work, this dichotomy is largely formed by reports from athletes in the context of sport-related communication, and more specifically, performance-related feedback (Harwood et al., 2019). Based on the aggregate findings of this study, we consider sport participation to be a vehicle for strengthening family relationships. Specifically, sport provides parents a context to display dedication to their children through investment and sacrifice and offer social support during the many additional opportunities to communicate (e.g., during transportation; Sutcliffe, Herbison, et al., 2021; Tamminen et

al., 2017). As such, considering the family bonding that can be achieved through sport participation (Clarke et al., 2016; Stefansen et al., 2018), parents may utilise such opportunities to fulfil parenting duties that go beyond sport, such as monitoring their child's wellbeing (Hurley et al., 2018). In sum, we consider the opportunities for improved parent-child attachment and closeness through sport as far more complex and meaningful than currently understood. Cross-discipline collaboration between sport psychology and family psychology researchers may consider examining sport as a context to address family issues. Such an approach aligns with Dorsch et al.'s (2020) recent push for a systemic and interdisciplinary understanding of youth sport through an integrated systems lens. For example, considering the number of emotional experiences that arise in youth sport, sport and developmental psychologists may collaborate to better understand how emotion regulation strategies used by families in sport transfer to everyday life.

Furthermore, parents' personal development that resulted from their child's involvement in youth sport represents an important development for sport psychology researchers to consider. For decades, researchers have studied how involvement in youth sport can lead to positive developmental outcomes among child participants (see Bruner et al., 2021; Holt et al., 2017 for reviews). However, what if the same is true for parents? Current conceptualisations of youth sport position athlete development as the central tenet of the experience, but fail to recognise the possibility that developmental outcomes can be experienced by secondary agents (i.e., parents). In addition to the aforementioned social and relational benefits parents experience in youth sport, the current study highlights cases of increased perceptions of competence (e.g., Clarke et al., 2016), healthy behaviours (e.g., Johansen et al., 2019), group identities (e.g., Boneau et al., 2020), and parental satisfaction (e.g., Kremer-Sadik, 2012). Scholars that

study parental involvement in youth sport may consider examining accepted developmental outcomes (e.g., 5C's; Lerner et al., 2009) in parents.

2.5.1 Future Directions and Limitations

Based on the findings of the current study and our understanding of the broader parental involvement in youth sport literature, we offer the following suggestions for future research. First, as noted in a recent literature review (Bean et al., 2016), quantitative and mixed-method investigations of psychosocial constructs in youth sport parents would further benefit the field. Considering recent advancements in quantitative dyadic inquiry (e.g., Lee et al., 2021), such approaches would complement the existing qualitative work. Further, the results of this review highlight the importance of considering youth sport participation as a vital context for parents' socialisation and basic needs for belonging (Dorsch et al., 2009; Dorsch et al., 2015a). Indeed, parents with children on the same sport team form social ties that grow into stable peer networks, which presents an opportunity for group dynamics researchers to investigate the intricacies of parent-parent interactions in the youth sport environment. More evidence is needed to understand what leads to a socialised network of youth sport parents, and therefore methodological techniques such as social network analysis may help this pursuit. Furthermore, recent interventions have shown that young adults' mental health can be improved through membership to a social group (Haslam et al., 2017), and therefore a similar approach should be considered in organised sport for parents. Given the well-documented stressors that parents face in sport (e.g., Harwood et al., 2019), we argue that organised sport offers a promising context for the socialisation and mental health of adults with child sport participants.

Another endeavour worth consideration in future research is the development of novel interventions targeted at parental involvement in youth sport (Knight et al., 2017).

Current articles on parents' perceptions of educational programs (e.g., Clark et al., 2019; Lyons et al., 2021) and delivered interventions (e.g., Dorsch et al., 2019; Lafferty & Triggs, 2014; Thrower et al., 2017; Thrower et al., 2019; Vincent & Christensen, 2015) are primarily focused on educating parents on their roles, responsibilities, and behaviour in an attempt to protect and support child-athletes. However, considering the amount of personal time parents sacrifice for their child's youth sport activities, team-level interventions may attempt to utilise the time spent in the physical youth sport environment (e.g., during training) to meet parents' needs. For example, dependent on available space, parents could engage in cost-efficient physical activity (e.g., running group, peer-lead circuits) or social activities (e.g., parent gatherings at a nearby café) during their children's training sessions. Although the following example speaks to parental involvement in a tournament setting, it nonetheless highlights the appetite for social experiences among sport parents:

“Have a little social aspect... set up something to take the parents away from the court and have social aspects as well to relax them... (quote 1). Maybe hold some functions, maybe, from time to time events in between the tournament, or before the tournament, or after the tournament, make parents feel part of the community (quote 2).” (to review the original two quotes from the same parent, see Knight & Holt, 2013, p. 183).

With respect to the current study's limitations, our adherence to ethical guidelines and procedures should be considered when evaluating its quality. We utilised numerous databases and reviewed studies from multiple disciplines (e.g., sport psychology, sociology of sport, sport management, leisure studies). Nonetheless, common limitations specific to systematic reviews do apply (e.g., unintended excluded studies). Furthermore, this review is limited in the fact that it only analysed qualitative responses

from parents themselves. As such, the current meta-synthesis depicts the parental experience in youth sport as experienced by the parent, and not by other surrounding agents. Similarly, although most of the included studies were primarily focused on understanding parents' experiences in youth sport, some studies were athlete-centered yet still contained applicable data based on specific interview questions posed by researchers (approximately five studies). This represents a limitation as some parents may have not had the opportunity to communicate depth to their perceptions of being a parent in sport.

2.6 Conclusion

This review and meta-study provides a starting point for researchers that are interested in the available qualitative literature concerning parents' experience in youth sport. We highlight the spectrum of experience that pertain to parents' allocation of resources to their child's sport participation, their social relationships in sport, emotional reactions, and personal development. As highlighted in the current meta-synthesis, parents' experiences in sport are contextually dependent on sport- and family-level variables, and therefore we encourage scholars in this space to remain open to a wide spectrum of experience. Altogether, this novel review and qualitative meta-study affirms that parents represent an important referent group who need to be investigated both independently and in concert with other social agents in youth sport.

Chapter 3: Youth sport participation and parental mental health

3.1 Foreword

Results from Chapter 2 revealed that parents experience a wide range of behavioural, cognitive, and emotional outcomes as a result of their involvement in youth sport. Meta-synthesis indicated that parent-specific outcomes exist within a spectrum, and therefore a dichotomy of positive and negative experiences is likely unhelpful moving forward in sport parenting research. Among the outcomes, parental mental health surfaced as an important yet relatively unexplored topic in sport psychology research. Importantly, there were minimal studies that posed specific research questions regarding parental mental health in sport. Therefore, the purpose of Chapter 3 was to investigate the relations of having a child involved in youth sport and primary and secondary parents' mental health. A broad conceptualisation of parental mental health relating to mental illness, wellbeing and sub-clinical issues such as stress was applied. I therefore explored outcomes of psychological distress, perceived life stress, and time pressure.

Institutional ethics approval for Chapters 3 and 4 are provided in Appendix F. The following research (excluding abstract and reference list) has been published in the *Psychology of Sport and Exercise* (Sutcliffe, Kelly et al., 2021) and reformatted for the thesis.

3.2 Introduction

Youth sport is among the most popular leisure activities worldwide (Aubert et al., 2018). For that reason, researchers in the field of positive youth development (PYD; Lerner et al., 2009) have sought to understand how sport participation can foster positive developmental outcomes among participants. Until now, PYD researchers have focused on the relations between youth sport and physical, social, psychological, and

academic outcomes among athletes (see Eime et al., 2013; Holt et al., 2017). More recently, however, mental health has become one of the primary outcomes of concern to youth sport researchers (Vella, 2019). Indeed, this recent attention has resulted in multiple position statements around athlete mental health through sport (e.g., International Olympic Committee, Reardon et al., 2019; International Society of Sport Psychology, Schinke et al., 2018). We argue that equal attention should be paid to the mental health of parents in youth sport, as they assume many roles in youth sport, including supporter, provider, coach, and administrator (Knight et al., 2016).

As a result of the demands of having a child in youth sport, parents may experience a range of organisational, competitive, and developmental stressors (Harwood & Knight, 2009b; Hayward et al., 2017; Harwood et al., 2019; Lienhart et al., 2019). Organisational stressors include the daily logistical demands of having children enrolled in sport, such as being the primary method of transportation, covering the increasingly high financial costs, and managing their child's injuries (Dorsch et al., 2009; Garst et al., 2019; Harwood et al., 2019). For example, Canadian ice-hockey mothers highlighted the stress and psychological ill-being that can manifest from the time pressure and competing life demands (e.g., family meals, physical activity) that result from participation in competitive youth sport (Bean et al., 2019). Competitive stressors include demands that fall in and around competition, such as match preparation, managing interactions with others, and providing appropriate feedback to their child (Harwood & Knight, 2009a). In fact, parents have experienced anxiety and embarrassment as a result of their child's performance (Dorsch et al., 2009) and their child being the centre of attention (Peter, 2011). Developmental stressors encompass the demands related to their child's personal development and future endeavours in sport (Harwood et al., 2019). As an example, McFadden and colleagues (2016) found that

parents reported more ill-being when their child specialised earlier (i.e., before the age of 12) compared to children who continued sport sampling. Similarly, Harwood and Knight (2009a) found that parents experience more time and family-related stress with children in the specialising stage due to the additional competition and training sessions. In sum, this body of literature is important because negative parental experiences in sport can manifest further negative outcomes in parents, athletes, and coaches (e.g., Anderson et al., 2003; Jowett & Timson-Katchis, 2008).

In contrast, parents have also reported benefits as a result of their child's participation in youth sport (Wiersma & Fifer, 2008). Parents with children in sport often extend their social networks (Legg et al., 2015), strengthen relationships with their children and their spouse (Clarke et al., 2016; Stefansen et al., 2018), experience pride and enjoyment from watching their child compete (Peter, 2011), and even experience improvements with time management (Dorsch et al., 2009) and motivation to exercise (Eriksson et al., 2008). Specific to peer relationships, parents that are involved in the same sport team hold baseline levels of trust, cooperation, and willingness to help one another (Brown, 2014). In fact, parents have reported sport as one of their only opportunities to interact with others outside of the family unit, highlighting the salience of peer interactions for parents' mental health (Bean et al., 2019). Despite the mixed evidence regarding parents' emotional experiences in youth sport, it is clear that youth sport impacts the wellbeing of parents.

Furthermore, noteworthy findings have been documented with respect to how parents' roles and level of involvement influence their experience in sport (Clarke et al., 2016). From a role perspective, parents that serve as the primary source of sport preparation (e.g., meals, sports kit laundering) and transportation may experience more stress and time pressure (Bean et al., 2019), although may also appreciate the additional

opportunities to interact and connect with their child (Clarke et al., 2016; Stefansen et al., 2018). With regard to differences in involvement, parents in Wolfenden & Holt (2005) discussed a ‘divide-and-conquer’ approach for sport activities, whereby one parent focused on one child’s sport participation while the other parent managed the remaining children. Moreover, some highly involved parents have reported attending most if not all of their child’s practices and games and consider sport as the primary context for interacting with their child (Stefansen et al., 2018). As such, the nature and scope of parents’ individual involvement and assumed roles may have important implications for their experience, and in turn, their mental health.

As it stands, the evidence is mixed with respect to the parental experience in youth sport and has been predominantly driven by qualitative inquiry. Quantitative investigation would complement the existing evidence by allowing an investigation of correlates of parent well- and ill-being in sport. For example, quantitative contextual variables such as sport dose (e.g., number of days and hours dedicated to youth sport per week) or differences in sport type (i.e., individual or team sport) may serve to be important predictors of parental wellbeing. Lastly, considering that parents differ with respect to their roles and subsequent involvement in youth sport, exploring outcome differences among primary and secondary parents is critical. A quantitative investigation of this sort will open the door for researchers interested in parental mental health in sport.

The purpose of this exploratory study was to investigate the relations of having a child involved in youth sport and primary and secondary parents’ mental health. We define mental health as “a state of wellbeing in which the individual realises their own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to contribute to society” (WHO, 2014). In line with this definition, Keyes

(2002) further conceptualises mental health as a dual continuum of psychological distress and wellbeing. Further, wellbeing includes emotional (i.e., positive and negative affect), psychological (i.e., autonomy and purpose), and social (i.e., positive relations in groups) components. We therefore explore outcomes of mental health problems (e.g., psychological distress), emotional wellbeing (e.g., perceived life stress), and psychological wellbeing (e.g., time pressure). Further, we will explore whether child sex and parents' neighbourhood socioeconomic position moderates the relationship between their involvement in their child's sport and mental health outcomes. Considering the exploratory nature of the current study, and lack of quantitative evidence regarding youth sport parents' mental health, we did not propose specific a priori hypotheses.

3.2 Methods

3.2.1 Participants

All data were drawn from Wave 7 of the Birth cohort (B-cohort) of the Longitudinal Study of Australian Children (LSAC). Participants were stratified and then randomly selected and invited to participate from the nation's largest database (the Medicare database). Beginning in 2004, LSAC has collected data regarding children and parents' health from birth (Wave 1, B-cohort), with follow-up data collected every two years. The current study includes data from 9367 participants (3381 adolescents, 5986 parents). Adolescents in the current study were between the ages of 12 – 14 years ($M = 12.48$ years, $SD = 0.51$) and were nearly equal across males and females ($N = 3381; 1734$ males, 1647 females). With respect to parents, the LSAC collects data from the study child's primary and secondary parent. Primary parents are defined as the

guardian that knows the study child best¹. In the current study, 94% of primary parents were mothers ($N = 3192$; $M = 43.04$ years, $SD = 8.75$). Secondary parents were 96% male and 4% female ($N = 2794$; $M = 46.13$ years, $SD = 6.16$). The primary and secondary parent lived together with the study child in 82.6% of cases. Finally, biological mothers lived in the same household as their child in 96% of cases, whereas biological fathers lived with the study child in 76.2% of cases.

3.2.2 Procedures

Data were collected by trained data collectors² using parental self-report questionnaires from both primary and secondary parents from the same family. Although the LSAC is well-conducted national research project, the authors of the current study had no control over what research instruments were used. We were granted access to utilise data from the LSAC following our application to investigate the relationship between youth sport participation and parental health and wellbeing. As such, we chose to utilise Wave 7 due to the range of available variables regarding parental mental health. Additionally, Wave 7 represented a period in which the study child was in adolescence (i.e., 12 – 14 years). We chose to sample parents of adolescents as this stage typically represents a period whereby sport participation begins to demand more effort and commitment from parents (Côté, 1999; Harwood & Knight, 2009b). The research methodology and survey content of Growing Up in Australia is reviewed and approved by the Australian Institute of Family Studies Ethics Committee,

¹ Definitions provided for ‘primary parent’ and ‘secondary parent’ was taken directly from the LSAC. Parents’ degree of involvement in youth sport activities was not a primary interest within the LSAC, and therefore these definitions are limited as such. Parents self-identified as either the primary or secondary caregiver.

² Trained data collectors refer to research personnel hired within the LSAC, and not the authors of the current study. More information on the LSAC can be found at <https://growingupinaustralia.gov.au/>

which is a Human Research Ethics Committee registered with the National Health and Medical Research Council. Informed consent was obtained from all participants.

3.2.3 Measures

3.2.3.1 Sport Participation

Sport participation was measured using self-reported items pertaining to a child's regular participation in organised extracurricular team and individual sports. Parents were asked "In the last 12 months, has (your) child regularly participated in team sport (e.g., football, cricket or netball)?", and subsequently, "In the last 12 months, has (your) child regularly participated in individual sport (e.g., tennis, karate or gymnastics)?" Parents could answer either "yes" or "no" for each item. Using these data, parents were categorised as belonging to one of four groups regarding their sport participation status. We categorised sport participation involvement as either: 1) parents with adolescents that are not involved in any extracurricular sport ('no sport'); 2) parents with adolescents participating in individual sport only ('individual-only'); 3) parents with adolescents participating in team sport only ('team-only'); and, 4) parents with adolescents participating in both individual and team sport ('both').

Furthermore, parents also self-reported how many days per week they were involved in team or individual sport, "How many days is (the) study child involved in team sport in a typical week?" In addition, parents were asked how many hours they allocated to sport during a typical day "On this day/these days, about how many hours did study child spend going to team sport?" and could choose between 0.5 (*up to one hour a day*), 1.5 (*more than one hour but less than 2 hours a day*), or 2.5 (*more than 2 hours a day*). For those with adolescents involved in both team and individual sport, responses for hours involved in team and individual sport per day were summed to

obtain a value for total number of hours per day (i.e., parents could score up to 5; for a similar approach, see Vella et al., 2017).

3.2.3.2 Psychological Distress

We measured primary and secondary parents' psychological distress based on a mean of the six items. The Kessler-6 (K6; Kessler et al., 2005) is a six-item measure of psychological distress that contains items regarding anxiety and depressive symptomology. Participants were asked to rate how often they have felt, for example, "restless or fidgety" or that "everything felt like an effort" in the past 30 days from 1 (*none of the time*) to 5 (*all of the time*). The K6 has excellent internal consistency and test-retest reliability and is suitable for use with different demographic adult samples (Kessler et al., 2005; Hurley et al., 2018).

3.2.3.3 Perceived Time Pressure

Parents responded to a single item assessing their subjective feelings of being rushed or pressed for time, "How often do you feel rushed or pressed for time?" ranging from 1 (*never*) to 5 (*always*). This single item has been previously used in adult-spousal populations (Craig & Brown, 2017).

3.2.3.4 Perceived Life Stress

Parents were asked to rate how stressful they perceived their life was at present. The single item read "How difficult do you feel your life is at present?" from 1 (*no problems or stress*) to 5 (*very many problems and stresses*). This item has been applied to previous parent investigations (e.g., Craike et al., 2010).

3.2.3.5 Covariates

The following covariates were included independently for primary and secondary parents: sex; indigenous status; neighbourhood socio-economic position (SEP); household-level SEP; and, language spoken at home. Indigenous status was

categorised as “Aboriginal”, “Torres Strait Islander”, “Both”, or “None”. A measure of neighbourhood SEP (derived from postcode of residence) was determined according to the Socio-Economic Indexes for Areas (SEIFA) Index of Relative Socio-Economic Disadvantage. Household-level SEP was measured using standardised household income. Household income was self-reported by the primary parent in dollars per week and was standardised to household size by dividing by the square root of the number of people residing in the household (Australian Bureau of Statistics, 2005).

3.2.4 Statistical Analyses

After confirming that assumptions of normality were met, univariate ANCOVA's were used to examine the association between sports participation groups (i.e., no sport, individual only, team only, and both) and measures of parental mental health. In the event of a significant main effect, pairwise comparisons with a Bonferroni correction were performed post-hoc using the estimated marginal means of mental health measures, adjusted for all covariates, to determine the source of potential differences. Data were analysed using SPSS statistical software (version 26, IBM, New York, United States).

Additionally, linear regression models were used to explore whether 1) the number of days involved in sport per week, and 2) the number of hours involved in sport during a typical participation day predicted outcomes of mental health. All regression models accounted for the aforementioned covariates.

Finally, moderation models were conducted using PROCESS (Hayes, 2015) to examine whether (a) child sex; and (b) neighbourhood socioeconomic position moderated the relationship between sport participation categories and our dependent variables. The pick-a-point method (i.e., -1 or +1 SD) was used in the presence of a significant interaction effect ($p < .05$).

3.3 Results

3.3.1 Sport Participation

Descriptive statistics across sport participation groups can be found in Table 3.1. Sport participation data were collected from the primary parent. Thirty-eight percent of parents in the current study did not have adolescents involved in organised youth sport ($n = 1299$). For sport parents, 34% had adolescents that were involved in team sport only ($n = 1181$), 13% were involved in individual sport only ($n = 442$), and an additional 13% had adolescents that were enrolled in both team and individual sport ($n = 430$). There were significant differences with regard to the number of days per week parents' adolescents were involved in organised sport $F(2, 2049) = 368.53, p < .001, \eta^2_p = 0.26$. Parents with adolescents involved in both team and individual sport reported their adolescents spending more days per week involved in sport than parents of team sport athletes ($p < .001$), and parents of individual sport athletes ($p < .001$). Similar differences emerged for number of hours spent in a typical sport participation day $F(2, 2050) = 552.70, p < .001, \eta^2_p = 0.35$. Parents with adolescents involved in both types of sport reported their children spending more hours per day involved in sport than parents of team only athletes ($p < .001$), and parents of individual sport athletes ($p < .001$). Descriptively, parents with adolescents involved in both types of sport were engaged in approximately three hours of sport activities per day ($M = 2.90$), whereas team only ($M = 1.53$) and individual only ($M = 1.46$) athletes spent approximately one and a half hours engaged in sport per day. In light of the medium to high variance accounted for in the models, it appears as though child-athletes' sport profile has meaningful effects on the amount of time parents are engaged in sport-related activities.

Table 3.1.*Descriptive Statistics of Primary and Secondary Parents' Mental Health and Sport Participation Outcomes*

Mental Health	Primary Parents				Secondary Parents			
	No Sport	Individual Sport	Team Sport	Both	No Sport	Individual sport	Team sport	Both
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Psychological Distress	1.54 (0.61)*	1.55 (0.65)	1.40 (0.56)	1.43 (0.55)*	1.43 (0.50)	1.46 (0.53)	1.41 (0.49)	1.40 (0.51)
Time Pressure	3.20 (2.12)*	3.47 (1.71)*	3.30 (2.26)*	3.42 (1.96)*	3.27 (0.90)	3.29 (0.92)	3.31 (0.91)	3.25 (0.95)
Life Stress	2.40 (1.07)	2.31 (1.55)	2.41 (1.24)	2.53 (0.74)	3.45 (0.82)	3.47 (0.84)	3.51 (0.77)	3.51 (0.80)
Days/Week in Sport	-	2.12 (1.40)*	2.54 (1.26)*	4.52 (1.89)*				
Hours/Day in Sport	-	1.46 (0.74)*	1.53 (0.63)*	2.90 (1.09)*				

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. Sport participation variables were only reported by primary parents.

3.3.2 Psychological Distress

After controlling for covariates and excluding incomplete cases, there were small significant differences with primary parents' psychological distress in relation to sport participation categories $F(3, 2580) = 3.27, p = .020, \eta^2_p = 0.004$. Sport participation was associated with lower psychological distress, whereby primary parents with adolescents involved in both types of sport reported lower level of psychological distress than non-sport primary parents ($p = .042$). With regard to secondary parents, there were no significant differences with respect to psychological distress $F(3, 1249) = 0.20, p = .90, \eta^2_p = 0.001$. As reported in Table 1, means for psychological distress were generally low, and therefore significant differences should be interpreted with this in mind.

We used linear regressions to explore whether the number of days per week and number of hours per day parents' children allocated to youth sport predicted psychological distress (see Table 3.2 for all regression results across primary and secondary parents). The overall regression model was significant ($p < .001$). With regard to the primary parent, total days in sport significantly predicted psychological distress ($p < .001$), whereby more days involved in sport resulted in lower reports of psychological distress. In contrast, total hours of sport in a typical participation day did not significantly predict psychological distress ($p = .057$). Furthermore, number of days per week ($p = .47$) and number of hours per day ($p = .15$) did not predict secondary parents' psychological distress.

3.3.3 Perceived Time Pressure

There were marginal significant differences regarding primary parents' perceptions of time pressure across sport participation categories $F(3, 2648) = 6.80, p < .001, \eta^2_p = 0.01$. Specifically, non-sport primary parents perceived significantly less

time pressure than individual sport only primary parents ($p = .002$), team sport only primary parents ($p = .002$), and primary parents with adolescents involved in both types of sport ($p = .03$). In contrast, sport participation categories did not have an effect on secondary parents' perceived time pressure $F(3, 1262) = 0.26, p = .86, \eta^2_p = 0.001$. Means reported in Table 1 illustrate that time pressure variance was low across sport participation groups.

The overall regression model was significant ($p < .001$). The number of weekly days parents' children spent in sport was a significant predictor of primary parents' perceptions of being rushed ($p = .042$). Conversely, the number of daily hours primary parents' children spent in youth sport did not significantly predict these perceptions ($p = .10$). Further, number of days per week ($p = .74$) and number of hours per day ($p = .72$) did not predict secondary parents' perceptions of feeling rushed.

3.3.4 Perceived Life Stress

No significant differences emerged with respect to sport participation categories and primary parents' life stress $F(3, 2652) = 2.29, p = .08, \eta^2_p = 0.003$. Similarly, secondary parents' perceived life stress was not impacted by their sport participation category $F(3, 1265) = 0.39, p = .76, \eta^2_p = 0.001$.

In terms of sport participation predicting life stress, the overall regression model was significant ($p < .001$). Total days spent in sport per week did not significantly predict primary parents' perceptions of life stress ($p = .95$). The number of hours parents' children spent in sport per day did positively predict life stress in primary parents ($p = .049$). Conversely, number of days per week ($p = .40$) and number of hours per day ($p = .28$) did not predict secondary parents' life stress.

Table 3.2.*Linear Regression Models of Sport Participation Predicting Mental Health Outcomes*

	Primary Parents			Secondary Parents		
	Psychological Distress	Time Pressure	Life stress	Psychological Distress	Time Pressure	Life stress
	<i>b (SE)</i>	<i>b (SE)</i>	<i>b (SE)</i>	<i>b (SE)</i>	<i>b (SE)</i>	<i>b (SE)</i>
Days/Week in Sport	-0.04 (0.01)***	0.04 (0.02)*	-0.001 (0.02)	-0.01 (0.01)	0.01 (0.02)	0.01 (0.02)
Hours/Day in Sport	0.03 (0.01)	0.06 (0.04)	0.07 (0.03)*	0.02 (0.02)	0.01 (0.02)	-0.03 (0.03)
<i>R</i> ²	0.01	0.55	0.53	0.01	0.01	0.01

Note. *b* = unstandardised regression coefficient. *SE* = standard error. **p* < .05, ***p* < .01, ****p* < .001.

3.3.5 Moderation of Child Sex

The overall moderation model for child sex on primary parents' psychological distress was significant $F(3, 3359) = 4.12, p = .006$. Conversely, the effect of child sex $B = 0.002, 95\% \text{ CI}[-.91, .95]$ and the interaction $B = -.006, 95\% \text{ CI}[-.04, .32]$ were not significant. With regard to secondary parents' psychological distress, the overall model for child sex $(1, 1952) = 9.68, p = .002$ and the effect of child sex $B = .16, 95\% \text{ CI} [.06, .26]$ were significant. Notably, the interaction effect for child sex was significant $B = -.06, 95\% \text{ CI}[-.10, -.03]$, whereby for secondary parents with female child-athletes, there was a significant negative relationship between sport participation and psychological distress $B = -.04, p = .006, 95\% \text{ CI} [-.07, -.01]$.

With regard to primary parents' perceived time pressure, the overall moderation model for child sex was not significant $F(3, 3342) = .71, p = .54$. Similarly, the effect of child sex $B = -.07, 95\% \text{ CI}[-.39, .25]$ and the interaction $B = .006, 95\% \text{ CI}[-.12, .13]$ were not significant. Furthermore, the overall moderation model for child sex on secondary parents' perceived time pressure $F(3, 1973) = 1.25, p = .29$, the effect of child sex $B = -.02, 95\% \text{ CI} [-.10, .06]$, and the interaction effect $B = -.07, 95\% \text{ CI} [-.14, .01]$ were not significant.

With regard to primary parents' perceived life stress, the overall moderation model for child sex was not significant $F(3, 3348) = .72, p = .54$. Similarly, the effect of child sex $B = .16, 95\% \text{ CI}[-.16, .48]$ and the interaction $B = -.07, 95\% \text{ CI}[-.20, .06]$ were not significant. With regard to secondary parents' perceived life stress, the overall model for child sex $(1, 1976) = 1.90, p = .13$, and the effect of child sex $B = -.03, 95\% \text{ CI}[-.10, .05]$ were not significant. However, the interaction effect for child sex was significant $B = -.07, 95\% \text{ CI} [.00, .13]$, whereby for secondary parents with female

child-athletes, there was a significant negative relationship between sport participation and perceived life stress $B = -.05, p = .03, 95\% \text{ CI } [.01, .10]$.

3.3.6 Moderation of Neighbourhood Socioeconomic Position

Moderation models revealed that for primary parents, the model for SEP $F(3, 3258) = 13.08, p < .001$, the effect of SEP $B = .03, 95\% \text{ CI } [.01, .05]$ and the interaction $B = -.05, 95\% \text{ CI } [-.06, -.02]$ were significant. In fact, the pick a point method revealed that SEP had a significant negative moderation effect on psychological distress for primary parents at the mean value $B = -.03, p < .001, 95\% \text{ CI } [-.05, -.02]$ and above the mean $B = -.08, p < .001, 95\% \text{ CI } [-.10, -.05]$. With respect to secondary parents psychological distress, the overall moderation model for SEP was not significant $F(3, 1952) = 1.58, p = .19$. Similarly, the effect of SEP $B = -.02, 95\% \text{ CI } [-.04, .00]$ and the interaction $B = -.01, 95\% \text{ CI } [-.03, .01]$ were not significant.

With regard to primary parents perceived time pressure, the overall moderation model for SEP $F(3, 3341) = 1.08, p = .36$, the effect of SEP $B = -.02, 95\% \text{ CI } [-.09, .05]$, and the interaction effect $B = .04, 95\% \text{ CI } [-.03, .10]$ were not significant. Further, the overall model for SEP on secondary parents' perceived life stress was not significant $F(3, 1973) = 1.73, p = .16$, however, the effect of SEP was significant $B = .04, 95\% \text{ CI } [.00, .08]$. Conversely, the interaction effect was not significant $B = .02, 95\% \text{ CI } [-.02, .06]$.

With regard to primary parents perceived life stress, the overall model for SEP $F(3, 3347) = 5.70, p = .001$ and the effect of SEP $B = -.13, 95\% \text{ CI } [-.20, -.06]$ were significant., however, the interaction was not $B = -.06, 95\% \text{ CI } [-.12, .01]$. Finally, the overall model for SEP on secondary parents' perceived life stress $F(3, 1976) = 1.76, p = .15$, the effect of SEP $B = .02, 95\% \text{ CI } [-.02, .05]$ and the interaction $B = -.31, 95\% \text{ CI } [-.06, .00]$ were not significant.

3.4 Discussion

The purpose of this exploratory study was to explore the relations of having a child in youth sport and primary and secondary parents' mental health. We explored mental health outcomes of both primary and secondary parents who were the parents of either non-sport participants, team sport participants only, individual sport participants only, or participants of both team and individual sport. We also explored whether contextual variables (i.e., number of days per week and hours per day in sport) predicted parents' mental health. Finally, we explored whether the study child's sex and neighbourhood SEP moderated these effects. As a result, primary parents of non-sport participants reported marginally less time pressure than all three other sport participation categories. In contrast, parents of adolescent sport participants reported lower psychological distress than non-sport participants. Specifically, participants that reported less distress were parents of adolescents involved in both team and individual sport. Further, number of days per week and number of hours per day served as salient predictors of primary parents' perceptions of time pressure and life stress. Moreover, a robust finding across all variables was that the effects discussed herein were more prominent in primary parents, suggesting that some mental health outcomes may be dependent on the nature of parents' involvement. Lastly, child sex and neighbourhood SEP moderated some of the aforementioned relationships for both primary and secondary parents.

Among the findings of the current study, the relations between sport participation categories and parental mental health were noteworthy. In fact, primary parents (i.e., largely mothers) with adolescents involved in both types of sport (i.e., team and individual) reported less psychological distress than primary parents of non-sport participants. As such, the current findings support previous work that highlights that the

increased time and financial pressure of having a child in youth sport are offset by some of the potential protective factors (e.g., improved family and peer relationships) of participation (Dorsch et al., 2009; Clarke et al., 2016; Tamminen et al., 2017; Wiersma & Fifer, 2008). Parents often report that despite the financial and logistical challenges of having a child in sport, they experience meaningful benefits based on their interactions with others and the satisfaction they experience from observing their child compete (Johansen & Green, 2019; Knight & Holt, 2014; Wiersma & Fifer, 2008). Notably, observing their child develop life skills through sport reinforced the perceived value of sport participation, and therefore “made it all worth it” (Wiersma & Fifer, 2008). Overall, the results of this study may lend support to the notion that the benefits outweigh the detriments associated with youth sport participation for parents who enact the primary parent role. It should be noted, however, that the magnitude of effects for our primary models were low, and therefore caution is advised when interpreting the strength of the reported effects.

One potential explanation for the benefit of sport participation on primary parents’ psychological distress is the opportunity to expand social networks (e.g., Legg et al., 2015). A number of empirical studies report the positive relations between social support and mental health (Kessler & McLeod, 1985; Wang et al., 2018). In the current study, primary parents were predominantly the female caregiver, and therefore the expansion of social networks that results from having a child in youth sport may be particularly salient for mothers. Previous studies have established sport as a vehicle for parents to create a sport-related community of individuals that they would otherwise never meet (Brown, 2014; Dorsch et al., 2009; Legg et al., 2015; Warner et al., 2015). Parents establish baseline relationships with other parents from their child’s sport team, which are often expressed through friendly greetings before and after competition

(Brown, 2014; Dorsch et al., 2019; Elliott & Drummond, 2013; Lally & Kerr, 2008). In some cases, parents progress beyond friendly greetings and develop close relationships (Brown, 2014; Neely et al., 2017). The formation of close relationships among mothers in sport is important because of the time constraints sport inevitably places on their social lives outside of sport (Bean et al., 2019; Hayward et al., 2017).

The improved familial relationships as a result their child's sport participation may also have had a role in the lower reports of psychological distress among primary parents. For example, the improvements parents perceive with regard to their relationship and communication with their child may have a moderating effect between sport participation and parental mental health (Clarke et al., 2016; Tamminen et al., 2017; Wiersma & Fifer, 2008). Parents in the study by Brown (2014) considered sport participation as beneficial for parent-child relationships, with both child-athletes and siblings. The time spent observing training sessions allowed parents to interact with the child-athlete's siblings while also providing direct support to the athlete. It is however important to consider that mentally healthy parents are more likely to spend time observing training and receiving the associated benefits. Further, parents have reported excitement from Sunday morning training routines, pride from the opportunity to provide feedback, and an overall feeling of satisfaction as a parent (Clarke et al., 2016; Dorsch et al., 2019; Trussell & Shaw, 2012). As such, considering the positive associations between a strong parent-child relationship and parents' psychological distress (e.g., Yuan, 2016), involvement in organised youth sport may amplify these effects.

Time constraints are among the most highly discussed outcomes of being a parent in youth sport (e.g., Bean et al., 2019; Holt et al., 2008; Knight et al., 2016; Thrower et al., 2016). Parents have identified a lack of time as the primary constraint

for their mental and relationship health (Bean et al., 2019; Thrower et al., 2016).

Parents' ongoing scheduling demands often result in the inability to make time for peers outside of the sport environment, neglecting their own physical activity needs, and decrease time spent with family (Bean et al., 2019). However, the findings of the current study revealed number of days involved in sport per week was a more salient predictor than the number of hours spent in sport during a participation day.

Specifically, when weekly sport activities were spread out across more days, primary parents (i.e., mostly mothers) experienced less psychological distress and increased perceptions of feeling rushed. Although a somewhat surprising finding, we acknowledge that the current study could not account for all potential factors that may relate to parents' psychological distress. Nonetheless, future researchers in the field may consider paying close attention to how the structure of youth sport activities (i.e., weekly days and hours) impact parents' mental health.

Another finding that warrants discussion are the contrasting effects with regard to primary and secondary parents' mental health. Primary parents were operationalised as the parent that knows the child the best, and were predominately mothers (i.e., 94%). In the current study, sport participation categories or time spent in sport had little to no effect on secondary parents' mental health outcomes. Speculatively, primary parents may assume more organisational responsibilities (e.g., transportation, meal preparation) than secondary parents, which may in part explain the stronger effects seen in primary parents with regard to life stress and time pressure. Keeping this in mind, however, sport participation favoured primary parents' psychological distress more so than secondary parents, and therefore a primary parental role also comes with its benefits. These differences may in part be explained by the varying roles (e.g., supporter, administrator, coach, Knight et al., 2016) and involvement (e.g., parenting styles,

parenting practices, interactions with others; Harwood et al., 2019) parents undertake in youth sport, however, more research is warranted.

As a final point of discussion, child sex and neighbourhood socioeconomic position appeared to be salient moderating variables with respect to parental mental health. Interestingly, secondary parents (i.e., largely fathers) with female child-athletes reported lower psychological distress and perceived life stress in relation to their child's participation in sport. This aligns with previous research that suggests differences with regard to parent-specific outcomes based on their child's gender (Dorsch et al., 2009). Furthermore, the positive associations between primary parents' psychological distress and youth sport participation favoured parents that fell around or above the neighbourhood socioeconomic position mean. Speculatively, parents who fell below the mean with regard to socioeconomic position may experience more daily stressors related to sport compared to financially secure parents.

3.4.1 Limitations and Future Directions

As with any study, there are important limitations to address and future directions to discuss. First, the current study analysed data from the LSAC. Although the LSAC is an impressive research endeavour that has collected data with thousands of participants over two decades, researchers using the existing data have no control over what research instruments were used. For example, we analysed parents' psychological distress – a measure of depression and anxiety symptomology that falls within a broad conceptualisation of mental health (Kessler et al., 2005). Future scholars may consider utilising more specific mental health instruments with youth sport parents to drill down into more specific relations with mental health constructs, such as the Depression, Anxiety and Stress Scale (DASS; Lovibond & Lovibond, 1996). Furthermore, we explored differences in primary and secondary parents', although this distinction was

solely based on definitions provided by the LSAC (i.e., primary parents were those who knew the child the best). Considering the different roles that mothers and fathers assume in youth sport, being the ‘primary parent’ may not align with being the primary facilitator of youth sport. We encourage scholars to consider more appropriate definitions to better compare parent dyads’ level of youth sport engagement (i.e., who takes the lead in youth sport activities) as an antecedent to their respective wellbeing. For example, a highly engaged parent may spend more time in transportation to and from sport, interacting with other parents and coaches, and spectating competition. In a similar vein, the inability to analyse LSAC data from a within-family approach represents another limitation of the current study. We therefore encourage researchers to consider a within-family approach when comparing two youth sport parents from the same household.

Furthermore, it is important to address the potential variability with regard to interpreting the current findings. Specifically, we were solely interested in exploring the relations between having a child involved in sport and reports of parental mental health. Alternatively, it is possible that parents with better mental health are more likely to enrol their children in sports, be more available and supportive with their participation, and thereby facilitate better outcomes for the child. Subsequently, parents of children who participate in sport may be more likely to further strengthen their mental health (i.e., due to increased family and social connections; Wang et al., 2018). As such, the relationship between parental mental health and child sport participation may be complex, and bidirectional in nature. To add further complexity, similar to athletes, additional variables (e.g., socioeconomic status, access to facilities) may moderate the relationship between parental mental health and child sport participation (Vella et al., 2014). In addition, there is a need to explore potential moderators of the relationship

between sport participation and parents' mental health. Specifically, understanding how sport facilitates new outlets of support for parents, or rather how it may enhance the parent-child relationship would be a fruitful avenue of research to pursue. Relevant theories of human development that has been previously applied to youth sport parenting research (e.g., PPCT framework; Bronfenbrenner, 2005; Holt et al., 2008; Dorsch et al., 2016) may benefit this endeavour. Further, this study only focused on the sport participation of one child, and therefore parents may have had other children engaged in extracurricular activities that could have impacted their perceptions of mental health (Harwood & Knight, 2009b). Future work may consider a whole-family approach and collect cases of athletes, siblings, and parents. Finally, this study is limited by the cross-sectional design. As such, causal relations cannot be inferred and therefore controlled studies examining parents' mental health in youth sport would benefit the field.

3.4.2 Practical Implications

The current study raises practical implications for youth sport stakeholders to consider. First, although there are many factors that may influence psychological distress, the current findings highlight the benefit of having a child in youth sport for parents. Although it is well documented that sport provides both positive and negative experiences for parents (Wiersma & Fifer, 2008), the current findings revealed that primary parents' psychological distress decreases in association with the number of weekly days spent in sport. It should be noted, however, that parents with less psychological distress may also be more willing to facilitate youth sport. Nonetheless, there appears to be meaningful benefits in parents' daily sport engagements. Whether these benefits are explained by the interactions with their children or other parents, physically observing their child compete, or the greater sense of responsibility and

fulfilment as a parent (Clarke & Harwood, 2014; Coakley, 2006), this information is important to consider for interventions and educational workshops with parents. Once a sound understanding is reached with respect to parental involvement and sustained wellbeing, interventions may apply family approaches to address athlete and parental mental health. Current mental health interventions in sport (e.g., Vella et al., 2018) may help guide this pursuit.

3.5 Conclusion

The current study provides a novel perspective with regard to parents' mental health in youth sport. Indeed, the evidence herein suggests benefits of sport participation on primary parents' mental health. Keeping in mind, however, that sport participation variables predicted increased time pressure and life stress, and were particularly salient for primary parents (i.e., largely mothers). As such, there remains much to learn with respect to the antecedents of sport parents' mental health. The goal of such research will provide the necessary evidence for future interventions with youth sport parents to maximise the benefits of having a child in youth sport on mental health. Taken together, the current study provides novel understanding with respect to the relations of having a child involved in youth sport and parental mental health.

Chapter 4: Exploring the relations between youth sport participation and parental social support

4.1 Foreword

Findings from Chapter 3 indicated that associations between parenting in youth sport and mental health do in fact exist. Indeed, primary parents of adolescent sport participants experienced a mixed-symptom profile of mental health, wherein they reported more time pressure and life stress, yet lower psychological distress than parents of non-participating adolescents. This highlights that parents can subjectively experience mental health outcomes at varying ends of the spectrum simultaneously. At this stage of the research program, it became clear that there are likely underlying mechanisms of parental mental health in sport to be discovered. In support of this chapter, mental health is defined as “a state of wellbeing in which the individual realises their own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to contribute to society” (WHO, 2014). Aligned with this definition, we further conceptualise mental health as a continuum of psychological distress, along with emotional, psychological, and social wellbeing (Keyes, 2002). In this study, we examine youth sport parents’ perceptions of social support available to them, which falls under the purview of social wellbeing. The purpose of Chapter 4 was to investigate the types and levels of perceived social support among parents in relation to the child’s sport participation.

The following research (excluding abstract and reference list) has been submitted to the *International Journal of Sport and Exercise Psychology*, and reformatted for the thesis.

4.2 Introduction

Organised youth sport is one of the highest participated leisure activities worldwide (Aubert et al., 2021). For that reason, scholars have studied the effects of youth sport participation on youth development extensively (Bruner et al., 2021; Holt et al., 2017). Through such efforts it has been discovered that in addition to athletes, other family members (e.g., siblings, parents) also serve to benefit from their involvement in youth sport. With respect to parents, ongoing financial, temporal, and emotional investment is required to facilitate their child's sport endeavours, and the resulting experiences associated with such investments are becoming well understood (for a review, see Sutcliffe, Fernandez et al., 2021). Therefore, it is imperative to further examine the relations between organised sport participation and positive outcomes in parents.

Parents often spend considerable time and effort enabling positive sport experiences for their children, and in this regard are often labelled supporters, coaches, facilitators, and administrators (Knight et al., 2016). Specifically, in addition to attending training and competition, parents transport their child to and from sport (e.g., Garst et al., 2019; Tamminen et al., 2017) and assume preparatory tasks related to sport (e.g., preparing meals, laundering uniforms; Sutcliffe, Herbison et al., 2021). Although parents' involvement in their child's various sport activities is likely to provide positive emotions throughout the experience (e.g., Holt et al., 2008; Newport et al., 2020), the time commitment also poses challenges for parents (Wiersma & Fifer, 2008). Therefore, the sacrifices made by parents to facilitate youth sport participation may have a meaningful influence on their quality of life. As such, sport organisations must work to assure that youth sport environments account for the needs of parents.

Among the many outcomes that parents may derive from involvement in their child's sport, the social relationships that can be gained are particularly noteworthy. For example, parents can experience a greater sense of closeness and attachment with their child as a result of the additional time spent together in youth sport activities (Clarke et al., 2016). In this way, parents are positioned to provide support and encouragement to their child (e.g., Elliott & Drummond, 2013) and help navigate difficult situations, such as deselection from sport (Neely et al., 2017). Moreover, parents from two-parent households may experience spousal benefits from working together to provide meaningful experiences for their adolescents (Furusa et al., 2020). However, some parents (i.e., particularly single-parent households) do not receive additional support from other family members, and are therefore left to facilitate their child's sport experiences on their own. For that reason, it is important for parents to connect with other parents in sport to extend their social networks and subsequent support.

Youth sport provides parents with numerous opportunities to interact and connect with other adults. In the physical sport environment (e.g., soccer pitch), parents collectively act as spectators and often engage in common behaviours (e.g., cheering for the same team). As a result, parents can form group identities related to their perceived membership within their child's team (Sutcliffe et al., 2022). Moreover, numerous qualitative reports from the last decade highlight that parents experience social support from other parents in the same team or sports club (e.g., Clarke et al., 2016; Dorsch et al., 2009; Knight & Holt, 2013). For example, studies have reported that parents from the same team form perceptions of community and reciprocity within the parent network (Brown et al., 2014; Dorsch et al., 2019). Therefore, understanding how to promote positive social interactions among parents is an important pursuit (Furusa et al.,

2020). Examining perceptions of social support among parents in sport may be a useful place to start.

Social support can be defined as “the perceived comfort, caring, assistance, information that a person receives from others” (Lox et al., 2010, p. 102). In sport, a wealth of research has investigated the social support athletes receive from teammates, coaches, and parents (for a review, see Sheridan et al., 2014). However, less work has examined perceptions of social support among sport parents. Within Sherbourne and Stewart’s (1991) conceptualisation of social support, sub-dimensions include emotional/informational support, affectionate support, tangible support, and positive social interactions. Emotional/informational support is centered around providing emotional support and advice or guidance to the recipient. As an example, parents may engage in emotional discussions with other parents regarding options for their child-athlete’s future in sport. Tangible support pertains to concrete assistance with day-to-day tasks, such as a parent offering to transport another child to sport. Finally, affectionate support pertains to expressing love and affection, and positive social interactions involved the extent to which one passes enjoyable time with others. Taken together, involvement in organised sport may offer perceptions of social support for parents, however, more research is necessary to understand this relationship.

The aforementioned literature illustrates the value in studying social support among parents in youth sport. However, there remain several unanswered questions regarding what may predict perceptions of social support for parents. For example, do parents with child-athletes report more social support than parents with non-participants? Further, can parents of individual and team sport child-athletes expect similar experiences of social support from other parents? Additionally, does the time commitment of parents to youth sport predict perceptions of social support? Finally, do

the relationships between youth sport participation and parental perceived social support differ by parent type? Answers to such questions would provide important foundation for researchers and practitioners that aim to provide positive social experiences for all family members. This aligns with the behavioural epidemiology framework (Sallis et al., 2000) whereby the first phase of health research involves testing associations between a health behaviour (e.g., sport) and outcome (e.g., social support).

Additionally, considering currently available evidence of social support among parents in sport are predominantly qualitative (e.g., Clark et al., 2019; Dorsch et al., 2019; Knight et al., 2013), quantitative exploration would offer a complimentary perspective.

Therefore, the purpose of this study was to investigate the types and levels of perceived social support among parents in relation to the child's sport participation. Based on the qualitative literature on social support among sport parents, we hypothesise that parents with adolescents involved in sport of any kind (i.e., individual-sport athletes, team-sport athletes, or involved in both) will report stronger perceptions of social support than parents with non-participating adolescents (H1). We do not have sufficient evidence to hypothesise specific differences between team and individual sports regarding parental social support. Moreover, we hypothesise that more days per week (H2A) and more hours per sport participation day (H2B) will predict stronger perceptions of social support among parents. Further, although we propose no a priori hypotheses, we will explore household income as a moderator of the relationship between sport participation categories and perceptions of social support among primary and secondary parents. Socioeconomic status has been shown to moderate other parent related outcomes (Hoff et al., 2002), and such moderation analyses will shed light on for whom social support in sport may be particularly useful.

4.3 Methods

4.3.1 Participants

This study analysed data from Wave 7 of the Birth cohort (B-cohort) of the Longitudinal Study of Australian Children (LSAC). These data were also used in Sutcliffe, Kelly et al. (2021) wherein the LSAC was used to explore the relationship between sport participation and parental mental health. In light of the findings, further exploration of these relationships was warranted, and social support emerged as an important construct to examine next as a potential mechanism through which parental wellbeing is manifested through sport. The LSAC has collected data from children and parents every two years since 2004. The total sample of the current study includes 3381 adolescents ($M = 12.48$ years, $SD = 0.51$), 3381 primary parents ($M = 43.04$ years, $SD = 8.75$), and 2794 secondary parents ($N = 2794$; $M = 46.13$ years, $SD = 6.16$). Primary parents are defined as the guardian that knows the study child best³. In this study, 94% of primary parents were mothers, and secondary parents were 96% male. The primary and secondary parent lived together with the study child in 82.6% of cases.

4.3.2 Procedures

Trained research assistants within the LSAC collected self-report data from both primary and secondary parents within the same family unit. Wave 7 data was used in the current study due to the range and quality of data regarding sport participation and parental social support. We chose to sample parents of adolescents (i.e., Wave 7; 12 – 14 years old) as this period represents a time when the parent-child relationship becomes more horizontal and peer relationships become more salient for both parties

³ Definitions provided for ‘primary parent’ and ‘secondary parent’ was taken directly from the LSAC. Parents’ degree of involvement in youth sport activities was not a primary interest within the LSAC, and therefore these definitions are limited as such. Parents self-identified as either the primary or secondary caregiver.

(Gao & Cummings, 2019). Additionally, Wave 7 coincides with a period of peak sport participation for Australian youth, which overlaps with an important transition period according to the developmental model of sport participation (Côté & Vierimaa, 2014). Indeed, transitioning from a sampling trajectory to either a recreational or specialising pathway often results in varying degrees of time commitments for parents depending on their child's choice (Côté, 1999). The research methodology and survey content of Growing Up in Australia is reviewed and approved by the Australian Institute of Family Studies Ethics Committee, which is a Human Research Ethics Committee registered with the National Health and Medical Research Council. Informed consent was obtained from all participants. The current study was also approved by the ethics committee at the first author's institution.

4.3.3 Measures

4.3.3.1 Sport Participation

Parents reported their child's participation in organised extracurricular team and individual sports. Parents were asked "In the last 12 months, has (your) child regularly participated in team sport (e.g., football, cricket or netball)?", and subsequently, "In the last 12 months, has (your) child regularly participated in individual sport (e.g., tennis, karate or gymnastics)?" Parents could answer either "yes" or "no" for each item. Using these data, parents were categorised as belonging to one of four groups regarding their sport participation status. We categorised sport participation involvement as either: 1) parents with adolescents that are not involved in any extracurricular sport ('no sport'); 2) parents with adolescents participating in individual sport only ('individual-only'); 3) parents with adolescents participating in team sport only ('team-only'); and 4) parents with adolescents participating in both individual and team sport ('both').

Furthermore, parents also reported the number of days per week they were involved in team or individual sport, “How many days is (the) study child involved in team sport in a typical week?” In addition, parents were asked how many hours they allocated to sport during a typical day “On this day/these days, about how many hours did study child spend going to team sport?” and could choose between 0.5 (*up to one hour a day*), 1.5 (*more than one hour but less than 2 hours a day*), or 2.5 (*more than 2 hours a day*). We assigned these values to the three response options to account for parents with adolescents involved in both team and individual sport. For example, the number of hours involved in team and individual sport per day were summed to obtain a value for total number of hours per day (i.e., parents could score up to 5; for a similar approach, see Sutcliffe, Kelly et al., 2021).

4.3.3.2 Parental Social Support

Social support was measured using the 15-item Medical Outcome Study (MOS) social support survey (Sherbourne & Stewart, 1991). This instrument measures perceptions of received support along dimensions of emotional/informational support, tangible support, affectionate support, and positive social interactions. Parents were asked the extent to which each of the various forms of support were available to them at the time of the survey. Example items include “someone you can count on to listen to you when you need to talk” (emotional/informational); “someone to help with daily chores if you were sick” (tangible support); “someone who hugs you” (affectionate support); and “someone to have a good time with” (positive social interactions). All items ranged from 1 (*none of the time*) to 5 (*all of the time*).

4.3.3.3 Covariates

The following covariates were included independently for primary and secondary parents: sex; indigenous status; neighbourhood socio-economic position

(SEP); and, language spoken at home. Indigenous status was categorised as “Aboriginal”, “Torres Strait Islander”, “Both”, or “None”. Household-level SEP was measured using standardised household income. Household income was self-reported by the primary parent in dollars per week and was standardised to household size by dividing by the square root of the number of people residing in the household (Australian Bureau of Statistics, 2005).

4.3.4 Statistical Analyses

After assessing assumptions of normality, multivariate analyses of covariance (MANCOVA) were used to examine the association between sports participation groups (i.e., no sport, individual only, team only, and both) and parental social support. We included the four dimensions of social support along with total social support as dependent variables in our model. In the event of a significant main effect, pairwise comparisons with a Bonferroni correction were performed post-hoc using the estimated marginal means of social support dimensions, adjusted for all covariates, to determine the source of potential differences. Data were analysed using SPSS statistical software (version 26, IBM, New York, United States).

Additionally, linear regression models were used to explore whether 1) the number of days involved in sport per week, and 2) the number of hours involved in sport during a typical participation predicted social support among parents. Covariates were included in all regression models. Finally, moderation models were conducted using PROCESS (Hayes, 2015) to examine whether household income moderated the relationship between sport participation groups and parental social support. We used total social support as our primary outcome for moderation analysis, and further probed into the four dimensions in the presence of a significant interaction effect (Hayes,

2015). In such circumstances, the Johnson-Neyman technique (Aiken & West, 1991) was used to determine the threshold of significance.

4.4 Results

Descriptive statistics across sport participation groups can be found in Table 4.1. Tangible support, affectionate support, and total social support violated assumptions of equality of error variances (i.e., significant Levene's test), and therefore an alpha value of $p = .01$ was set for determining significance among these dimensions. After controlling for incomplete cases, 1195 primary parents (38%) did not have adolescents involved in organised sport. Among primary parents with child-athletes, 1089 participated in team sport only (34%), 418 were involved in individual sport only (13%), and 403 had adolescents that were enrolled in both team and individual sport (13%). Descriptively, means of social support across primary and secondary parents ranged from 3.84 – 4.48, indicating that parents generally perceived high support. Primary and secondary parents perceived similar levels of social support.

Table 4.1.*Descriptive Statistics of Primary and Secondary Parents' Social Support*

Social Support	Primary Parents				Secondary Parents			
	No Sport	Individual Sport	Team Sport	Both	No Sport	Individual sport	Team sport	Both
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Informational Support	3.99 (1.00)	4.12 (0.93)	4.11 (0.93)	4.17 (0.93)	3.87 (1.07)	3.90 (1.02)	3.84 (1.08)	3.94 (1.08)
Tangible Support	3.96 (1.06)	4.13 (0.98)	4.12 (0.95)	4.09 (1.03)	4.41 (0.82)	4.35 (0.87)	4.45 (0.76)	4.48 (0.74)
Affectionate Support	4.12 (1.10)	4.26 (1.02)	4.27 (0.91)	4.22 (1.08)	4.30 (0.95)	4.38 (0.94)	4.33 (0.90)	4.42 (0.86)
Positive Social Interactions	4.04 (1.00)	4.11 (0.95)	4.19 (0.87)	4.17 (0.94)	4.22 (0.91)	4.25 (0.95)	4.24 (0.91)	4.33 (0.84)
Total Social Support	4.02 (0.90)	4.14 (0.85)	4.16 (0.80)	4.15 (0.83)	4.19 (0.81)	4.20 (0.82)	4.20 (0.79)	4.28 (0.77)

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

4.4.1 Social Support Across Sport Participation Categories

We hypothesised that parents with adolescents involved in team sport, individual sport, or both would report stronger social support among primary and secondary parents (H1). We found partial support for H1. Multivariate tests indicated small significant differences in dimensions of social support based on primary parents' sport participation group $F(15, 9279) = 1.89, p = .019, \eta^2_p = 0.003$. In contrast, there was not a similar overall effect on secondary parents' social support $F(15, 4857) = 1.26, p = .22, \eta^2_p = 0.004$. We report specific differences for each dimension below.

4.4.1.1 Emotional/Information Support

For primary parents, there small were significant differences with respect to perceptions of emotional/informational support across sport participation groups $F(3, 3095) = 4.89, p = .002, \eta^2_p = 0.005$. Specifically, parents with adolescents involved in team sport reported higher emotional/informational support than parents of non-sport participants ($p = .02$). Similarly, parents with adolescents involved in both individual and team sport reported higher emotional/informational support than parents of non-sport participants ($p = .01$). No significant differences emerged when comparing parents of individual sport child-athletes.

For secondary parents, there were no significant differences of perceptions of emotional/informational support across sport participation groups $F(3, 1331) = 0.69, p = .55, \eta^2_p = 0.002$.

4.4.1.2 Tangible Support

Among primary parents, there were small significant differences with respect to perceptions of tangible support across sport participation groups $F(3, 3095) = 5.66, p = .001, \eta^2_p = 0.005$. Regarding specific differences, parents with adolescents involved in team sport perceived more tangible support than parents of non-sport participants ($p =$

.005), and parents with adolescents involved in both types of sport (team and individual) also perceived more tangible support than parents of non-sport participants ($p = .008$). No significant differences emerged when comparing perceptions of social support among parents of individual sport athletes.

Among secondary parents, there were no significant differences of perceptions of tangible support across sport participation groups $F(3, 1331) = 1.76, p = .15, \eta^2_p = 0.004$.

4.4.1.3 Affectionate Support

For primary parents, there were small significant differences with respect to perceptions of affectionate support across sport participation groups $F(3, 3095) = 5.24, p = .001, \eta^2_p = 0.005$. Similar to above, parents with adolescents involved in team sport perceived more affectionate support than parents of non-participating adolescents ($p = .007$), and parents with adolescents involved in both types of sport reported higher affectionate support than parents of non-participating adolescents ($p = .007$). Comparison between parents with adolescents involved in individual sport and other sport participation groups yielded no significant results.

For secondary parents, there were no significant differences of perceptions of affectionate support across sport participation groups $F(3, 1331) = 0.83, p = .48, \eta^2_p = 0.002$.

4.4.1.4 Positive Social Interaction

There were small significant differences with respect to perceptions of positive social interactions among primary parents across sport participation groups $F(3, 3095) = 6.00, p < .001, \eta^2_p = 0.006$. Specifically, parents with adolescents involved in team sport reported more positive social interactions than parents of non-participating adolescents ($p = .001$), and parents with adolescents involved in both types of sport

perceived more positive social interactions than parents of non-participating adolescents ($p = .01$). No significant differences emerged when comparing parents with adolescents involved in individual sport and other sport participation groups.

Among secondary parents, there were no significant differences of perceptions of positive social interactions across sport participation groups $F(3, 1331) = 0.95, p = .42, \eta^2_p = 0.002$.

4.4.1.5 Total Social Support

For primary parents, there were small significant differences with respect to perceptions of emotional/informational support across sport participation groups $F(3, 3095) = 7.01, p < .001, \eta^2_p = 0.007$. Similar to the aforementioned dimensions of social support, parents with adolescents involved in team sport perceived more total social support than parents of non-participating adolescents ($p = .001$), and parents with adolescents involved in both types of sport reported more total social support than parents with non-participating adolescents ($p = .001$). Comparison between parents with adolescents involved in individual sport and other sport participation groups yielded no significant differences.

With regard to secondary parents, there were no significant differences of perceptions of total support across sport participation groups $F(3, 1331) = 0.74, p = .52, \eta^2_p = 0.002$.

4.4.2 Predictors of Parental Social Support

4.4.2.1 Weekly Days Involved in Sport Participation

We hypothesised that more days involved in sport per week would predict stronger perceptions of social support among parents (H2A). We found partial support for H2A. Among primary parents, the number of days per week parents' children were engaged in youth sport activities predicted perceptions of emotional/informational

support ($p = .006$), tangible support ($p < .001$), affectionate support ($p < .001$), positive social interactions ($p < .001$), and total social support ($p < .001$). Regarding secondary parents, days per week parents spent engaged in youth sport activities did not predict perceptions of emotional/informational support ($p = .83$), tangible support ($p = .08$), affectionate support ($p = .35$), positive social interactions ($p = .81$), or total social support ($p = .40$).

4.4.2.2 Daily Hours Involved in Sport Participation

We hypothesised that more hours spent engaged in sport participation during a typical day would predict perceptions of social support (H2B). No support was detected for H2B. For primary parents, the number of hours parents spent engaged in youth sport activities during a typical sport participation day did not significantly predict emotional/informational support ($p = .98$), tangible support ($p = .13$), affectionate support ($p = .20$), positive social interactions ($p = .17$), and total social support ($p = .26$). Among secondary parents, daily hours spent engaged in youth sport activities during a typical participation day did not predict perceptions of emotional/informational support ($p = .99$), tangible support ($p = .35$), affectionate support ($p = .46$), positive social interactions ($p = .78$), or total social support ($p = .61$).

4.4.3 Moderation of Household Income

The overall moderation model of household income on primary parents' total social support was significant $F(3, 2588) = 7.27, p < .001$, however the effect for household income, $B = -0.07, 95\% \text{ CI} [-.13, .00]$, was not. The interaction effect was significant, $B = .03, p = .03, 95\% \text{ CI} [.00, .06]$, whereby primary parents that reported \$1,050.85 of weekly household income or more were more likely to experience higher levels of social support. When probing further into the four dimensions of social support, our analysis revealed that this effect was driven by significant interactions with

emotional/informational support $B = .04$, $p = .04$, 95% CI [.00, .07], and tangible support $B = .04$, $p = .04$, 95% CI [.00, .07]. Significant interaction effects were not found for affectionate support nor positive social interactions among primary parents. Among secondary parents, the overall model of household income on social support $F(3, 1571) = .87$, $p = .46$, the effect of household income $B = 0.01$, 95% CI [-.10, .11], and the interaction $B = -.02$, 95% CI [-.07, .03] were not significant.

4.5 Discussion

The purpose of this study was to investigate the types and levels of perceived social support among parents in relation to the child's sport participation. To compliment the growing body of qualitative literature, this study provides contextual and directional clarity with respect to perceptions of social support among parents in sport. Partially supporting our first hypothesis, we found that across all dimensions of social support, primary parents with adolescents involved in team sport or both types of sport reported stronger social support than parents of individual sport athletes and parents of adolescents that do not participate in sport. Moreover, the number of days per week primary parents spent engaged in youth sport activities appeared to be a more salient predictor of social support than the number of hours in a typical participation day. Moderation analyses showed that primary parents with higher household income reported stronger social support. As a final point, effect sizes generated in this study were relatively low, and all significant effects should be taken with caution.

Among the findings, the differences between primary parents' perceptions of social support depending on whether their adolescent participated in team sport was noteworthy. To reiterate, in both participation categories where team sport was involved (i.e., team sport only; both types of sport), primary parents reported significantly stronger social support than parents without adolescent sport participants. With that

said, it is important to note that the measurement tools used in this study did not assess whether parents' perceptions of social support were attributed to their interactions with other parents in sport contexts specifically. Nonetheless, there appears to be an emerging pattern wherein adolescent involvement in organised team sport predicts general social support among primary parents. Although more research is required with measurement tools specifically tailored to youth sport parents, we hope this initial finding encourages further exploration in parental social support through youth sport contexts.

In a similar vein, the number of weekly days that primary parents' adolescents spent engaged in sport emerged as a significant predictor of perceived social support. Speculatively, frequency of interaction has long been associated with perceptions of social support and closeness within a network (House et al., 1988), which makes it unsurprising that parents who interact with other parents more often report stronger perceptions of support. In contrast, the number of hours parents' adolescents spent engaged in youth sport activities during a typical participation day did not predict social support. Within the assumption that some social support may come from other parents in sport, sport programs that only meet once a week or fortnightly may require further consideration on how to connect parents in the youth sport environment. Organised sport is often one of many priorities for parents and therefore any time-efficient social activity is valuable.

Furthermore, we tested household income as potential moderators of parental social support. A less encouraging finding from the current study pertains to household income moderating primary parents' perceptions of social support. In fact, the Johnson-Neyman technique (Aiken & West, 1991) allowed us to detect a threshold wherein primary parents that reported \$1050 or more of weekly income reported stronger social

support. In our sample, 81% of primary parents were at or above this threshold, thus indicating that approximately one in five parents report lower social support based on their income. This is unfortunate considering that parents that fall below this threshold (i.e., lower socio-economic status) would likely benefit from social support the most. Therefore, future work should pay close attention to socio-economic status to detect whether class differences may lead to isolated parents in youth sport contexts. Indeed, deliberate efforts to connect parents with other parents in their child's sports club is a worthwhile endeavour for scholars and practitioners working in this space.

Strong effects emerged for primary parents when compared to secondary parents across all research questions. This finding is worth reflection as 94% of primary parents were mothers. As noted in a literature review by Bean et al. (2014), on top of their fulltime work outside of the home, mothers typically face additional responsibilities with respect to childcare and household tasks, and therefore facilitating youth sport only adds to this heavy load. The additional tasks and responsibilities have led to occupational and social sacrifices among mothers (Coakley, 2006; Lindstrom-Bremer, 2012), thus pointing to the potential salience of youth sport as social support provider for mothers. We encourage researchers to further explore organised sport as a social ground for mothers in an effort to mitigate some of the daily burdens of leading extracurricular family activities.

Furthermore, it is worth discussing the potential broader implications of youth sport as a viable context for parental social support. Social support has long been a strong associate of many positive health outcomes, particularly mental health and wellbeing (see Harandi et al., 2017 for a recent meta-analysis). In fact, studies have reported promising findings when examining social support as a moderator of the effects of daily stress on mental health outcomes (e.g., Wang et al., 2014). This aligns

with recent comments by Sutcliffe, Kelly et al. (2021) wherein parents with adolescent athletes perceived less psychological distress, but more time pressure and overall life stress than parents with non-participating adolescents. The authors speculated that the positive effects on psychological distress were in part due to the social support and connection that parents may gain from organised sport. As such, the aforementioned study along with the current findings offer clear direction for future work – studying social support as a moderator of the relationship between youth sport involvement and parental mental health. Such an approach may lead to novel social interventions for the benefit of adult mental health.

4.5.1 Applied Implications

The current study's findings have applied implications that are worth highlighting. First, the salience of team sport for primary parents' (i.e., largely mothers) perceptions of social support presents an opportunity for sport stakeholders to consider youth team sport as a viable context for promoting positive outcomes among parents. In fact, sport organisations and coaches may consider organising social opportunities to connect parents from the same team. It is important that social events created for parents through sport are inclusive and accommodating to families of all backgrounds (e.g., socioeconomic status, family structure). For example, parent-led social gatherings should consider varying work schedules, monetary cost expectations, and cultural differences among the team. Further, considering that the number of days primary parents spent engaged in sport predicted social support, regular social gatherings during practices and training are encouraged for parents. Taken together, although more research on parental social support in sport is needed and encouraged, the findings from this study highlight important applied implications for mothers with adolescents involved in team sport.

4.5.2 Limitations and Future Directions

The findings from the current study are limited in the following ways. First, although the LSAC collects data from a large sample of Australian family-units every two years, we chose to conduct an initial exploratory cross-sectional study to understand basic predictors of parental social support in sport. As such, no causality can be inferred from the current study, and we therefore encourage researchers to pursue this topic through longitudinal or more robust, controlled research designs. Further, while the primary aim of this study was to explore organised sport as a context to foster parental social support, we acknowledge that sport is one of many leisure activities that families engage in. It is possible that similar benefits could be observed among parents with children involved in music, dance, or other group-based activities in which parents observe their child in close proximity to other parents. A worthwhile future research endeavour would be to compare social and health outcomes among parents with children with varying leisure interests. Moving forward, as with other studies using data from the LSAC (e.g., Sutcliffe, Kelly et al. 2021), this study is limited in participant-related definitions. Specifically, we examined data from primary and secondary parents, although these labels were self-reported without the idea of sport participation in mind. Therefore, we can only presume that primary parents were more likely to be the primary facilitator (i.e., transportation, attending events) of their child's sport activities. Future studies with youth sport parents should consider controlling for degree of involvement or consider varying profiles of parental commitment (e.g., working mom versus stay-at-home dad).

4.6 Conclusion

To conclude, this study provides a novel perspective and contextual clarity with respect to the relationship between involvement in organised youth sport and parental

social support. We found associative evidence that primary parents with adolescents involved in team sport report higher emotional, affectionate, and tangible support along with more positive social interactions than parents with non-participating adolescents. We hope that these findings encourage researchers and sport practitioners to conceptualise youth sport as an advantageous context for not just athletes, but parents too. A youth sport approach that considers the experiences of all social agents is perhaps best positioned for sustained participation.

Chapter 5: Parental demands in sport and mental health: The parallel mediating roles of social identity, social support, and parent-child relationship quality

5.1 Foreword

Results from Chapter 4 revealed associations between contextual youth sport variables and primary parents' perceptions of social support. With that said, a key limitation of Chapter 4 was that measures used to assess parental social support did not isolate support received from other parents in the youth sport environment. As such, at this stage of the research program I began to ponder other potential mechanism of parental mental health in sport. Therefore, the purpose of Chapter 5 was to examine social support, social identity, and parent-child relationship quality as parallel mediators of the relationship between parents' demands in youth sport and mental health.

Institutional ethics approval for Chapters 5 and 6 is included in Appendix H. The following research (excluding abstract and reference list) has been submitted to the *The Sport Psychologist* and reformatted for the thesis.

5.2 Introduction

Participation in organised youth sport carries implications for various social agents involved in the experience, including parents (Dorsch et al., 2022). From the commencement of participation, parents are immersed in the youth sport experience as they often initiate their child's involvement and organise the various logistical challenges that allow youth to participate (Wuerth et al., 2004). As a result of their involvement and the associated duties that come with the position, parents themselves have complex experiences that span emotional, behavioural, physical, and cognitive (Dorsch et al., 2009). Indeed, a recent review of the parental experience in sport highlights that youth sport parents are subject to similar outcomes as their child-athletes, such as mental health (Sutcliffe et al., 2021).

In youth sport, the mental health of parents is yet well understood. Early literature indirectly points to potential mental health challenges by documenting the various types of stressors experienced by parents, including organisational (e.g., daily logistical challenges), competitive (e.g., competition-related stressors), and developmental (e.g., related to the child-athletes success; Harwood & Knight, 2009; Hayward et al., 2017). These studies revealed the difficulties of managing youth sport as a parent, but did not further examine how such stressors influenced perceptions of mental health and wellbeing. More recently, empirical reports have begun to examine recognised mental health outcomes among parents in sport. For example, Bean and colleagues (2019) report that mothers of competitive young athletes experience a decline in wellbeing following increased organisational demands. Conversely, Sutcliffe, Kelly et al. (2021) note that parents of adolescent athletes report lower psychological distress, but higher time pressure and general life stress than parents of non-athletes. As such, parents appear to experience a mixed-symptom profile of mental health outcomes in sport. Therefore, to best examine mental health among sport parents, it is important to gather perceptions that cover the entire spectrum of mental health experiences. For example, a mental health continuum lens wherein symptoms of anxiety and depression (i.e., psychological distress) and wellbeing are considered offers a promising approach (Keyes, 2002). Moreover, due to parents' various roles in the youth sport environment (Knight et al., 2016), their mental health experiences will likely only be well understood once examined in light of potential mediators, such as social support.

Parents spend considerable time interacting in the social environment surrounding youth sport, which has important implications for their emotional experiences (Clarke & Harwood, 2014). Namely, much of parents' time in the physical youth sport environment is spent with numerous other parents, leading to a novel sport-

related social network of youth sport parents (Brown, 2014). Indeed, parents with child-athletes on the same sports team are situated in a network with potentially similar goals and values, which can foster a sense of relatedness and community among sport parents (Dorsch et al., 2009, Peter, 2011). Depending on how the interactions within the parent network unfold, the perceived sense of community can lead parents to view the network as a valuable outlet of support (e.g., Knight et al., 2013, Neely et al., 2017). This is important given that there is an association between perceptions of social support and positive mental health (Harandi et al., 2017). As an empirical example, qualitative research has highlighted that parents provide tangible support by offering to transport other child-athletes and relieving some time pressure for other parents (Garst et al., 2019). Alternatively, parents also report other parents as a source of psychological stress, particularly following antisocial behaviour (e.g., Elliott & Drummond, 2013). In an attempt to clarify this relationship, examining social support in relation to other sport parents specifically, and how such support predicts parental mental health and wellbeing offers an important avenue for investigation.

In addition to the potential benefits of social support on parents' mental health and wellbeing in sport, the resultant perceptions of similarity and relatedness can foster group identities among parents (Clarke & Harwood, 2014). Recent conceptualisations of parental social identity in sport highlight that parents experience ingroup ties (i.e., perceptions of similarity and bonding) in relation to other parents from the same team, while cognitive centrality (i.e., the importance of being a group member) and ingroup affect (i.e., positive emotions associated with group membership) are perceived in relation to the team as a whole (e.g., Sutcliffe et al., 2020). Social identity has been shown to have protective effects against mental health outcomes, such as depression (Cruwys et al., 2015), anxiety (Wakefield et al., 2013), and post-traumatic stress

(Swartzman et al., 2017). The mechanism underlying the protective effect of social identity is often attributed to the positive self-attribution that results from group membership (Cruwys et al., 2015). In sport, empirical work shows that social identity strength can influence parents' moral intentions towards ingroup and outgroup parents (Sutcliffe et al., 2020). As such, parents' willingness to protect the ingroup highlights that social identity may be an important predictor of parents' behavioural and emotional experiences in sport. As such, social identity may be one mediator through which parental experiences in youth sport are linked to their mental health and wellbeing.

The experience of navigating youth sport is shared between parents and athletes (Pynn et al., 2021). In fact, parents and their child-athletes spend considerable amounts of time together before and after competitions (e.g., in the car; Tamminen et al., 2022) and make sacrifices to facilitate the experience (Côté, 1999). As a result, the shared experiences accumulated during organised youth sport provides parents with opportunities to develop and strengthen relationships with their child-athletes. In some cases, sport represents the primary context for parents to nurture a relationship with their child, particularly between fathers and daughters (Kay, 2007). Specifically, sport can serve as a platform to share interests, values, goals, and identities among parents and athletes (Coakley, 2006). This is important because as a parent, feeling satisfied and fulfilled with familial relationships has implications for their mental health and wellbeing (Nathalie Ferraresi Rodrigues Queluz et al., 2022). Unfortunately, youth sport can also lead to tension and conflict between parents and athletes (Elliott & Drummond, 2013), which would speculatively hinder the mental health and wellbeing of both social agents. Nonetheless, examining parents' perceptions of their parent-child relationship quality in relation to their mental health would help further our understanding of the parental experience in sport as it relates to their mental health.

The direct relationship between having children involved in organised sport and parental mental health is becoming better understood, but the variables that may mediate this relationship remain unknown. In this study, mental health is defined as “a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community” (WHO, 2014). We further conceptualise mental health as a continuum wherein individuals flourish (i.e., complete mental health, elevated levels of wellbeing) or languish (i.e., incomplete mental health, low levels of wellbeing) depending on their psychological distress and emotional, psychological, and social wellbeing. Thus, directly investigating sub-components of wellbeing as mediators to mental health outcomes offers a robust pathway to understanding parental mental health in sport. For example, parents’ relationship with their child may be perceived as an essential element of purpose and autonomy for parents, which may determine where they fall on the continuum. Additionally, parents’ social categorisation within their child’s team may offer an important marker of social wellbeing. Taken together, whether parents flourish or languish in sport will likely only be well understood when examining their emotional, psychological, and social wellbeing.

Guided by evidence from the sport parenting literature and broader social determinants of mental health and wellbeing (e.g., Allen et al., 2014; Sutcliffe et al., 2021), examining whether parents’ perceptions of social support, social identity, and parent-child relationship quality mediate the relationship between youth sport experience and mental health and wellbeing would provide novel insights. Although there are other mediating variables likely worthy of investigation, each of the three aforementioned variables have been empirically linked with mental health and are evidence-based outcomes related to parents in youth sport. Furthermore, such an

investigation would shine a light on whether parents' family dynamics (i.e., parent-child relationship quality) or social dynamics (i.e., social support, social identity) in sport are more predictive of mental health. With respect to independent variables representative of parental demands in youth sport, going beyond objective time measurements (e.g., days per week, hours per day) and instead probing parents' subjective perceptions of the demands of youth sport may prove more valuable. For example, using the number of days and hours spent in sport as a proxy for sport-related demands may be unhelpful for parents with sufficient time resources (e.g., two-parent household, flexible occupation). Therefore, the purpose of this investigation was to examine social support, social identity, and parent-child relationship quality as parallel mediators of the relationship between parents' perceived demands in youth sport and mental health. We propose the following two hypotheses:

H1: We hypothesised that perceptions of social support, social identity, and parent-child relationship quality would mediate a negative relationship between parents' perceived demands in youth sport and wellbeing.

H2: We hypothesised that perceptions of social support, social identity, and parent-child relationship quality would mediate a positive relationship between parents' perceived demands in youth sport and psychological distress.

5.3 Method

5.3.1 Participants

The current study includes data from 347 youth sport parents ($M_{age} = 46.43$ years, $SD = 5.58$). Participants predominately identified as female (76%) and reported their country of residence as Australia ($n = 275$), Canada ($n = 49$), United Kingdom ($n = 12$), United States ($n = 5$), New Zealand ($n = 2$), South Africa ($n = 1$), and Germany ($n = 1$). Further, 92% of parents ($n = 318$) identified themselves as the primary parent (i.e.,

parent that knows the child best), and 89% ($n = 308$) identified as the primary sport facilitator (i.e., parent that facilitates most sport duties). Additionally, a large majority of parents reported playing organised sport in their youth ($n = 291$). Parents' educational status varied from school certificate (i.e., year 10 or equivalent; $n = 17$), high school certificate or diploma ($n = 29$), graduate diploma or college ($n = 90$), university undergraduate degree ($n = 138$), or university graduate degree ($n = 73$). Finally, parents reported their household income as either \$0 – 25,000 ($n = 6$), \$25,000 – 50,000 ($n = 16$), \$50,000 – 100,000 ($n = 66$), \$100,000 – 150,000 ($n = 92$), or \$150,000 or more ($n = 161$). Household income was measured in Australian dollars.

Parents reported their child-athletes (43% female) ranged in age from 10 – 18 years ($M_{age} = 14.72$ years, $SD = 2.33$). Child-athletes represented a wide range of organised sports ($n = 23$), including Australian rules football, athletics, baseball, basketball, biathlon, cricket, curling, field hockey, football/soccer, golf, gymnastics, ice hockey, karate, lacrosse, netball, ringette, rugby league, rugby union, sport climbing, swimming, tennis, triathlon, and water polo. Eighty three percent ($n = 282$) of parents reported that their child-athlete competed at a competitive level (i.e., child went through a selection process to be on the team), and the remaining 17% identified as recreational ($n = 59$). In a similar vein, 55% of parents ($n = 189$) identified their child-athlete as a sport specialiser (i.e., is committed to one sport and avoids other sports) compared to the 45% that identified their child-athlete as sport samplers (i.e., involved in multiple sports year-round).

5.3.2 Procedure

Following institutional ethical approval, parents were invited to participate in a 15-minute cross-sectional survey. Parents were invited to participate through one of two mediums: (a) face-to-face during competitions; or (b) online social media invitations.

Regarding the former, the first author attended a total of six weekend tournaments and approximately 20 single-competition events to invite participants. In both settings, the first author approached parents either before or after their child's competition to ensure no parents' spectating time was reduced for research purposes. Parents were required to have at least one child-athlete currently involved in sport to participate. If parents agreed to complete the survey, they were then asked to scan a QR code with their mobile phone which led them to a Qualtrics survey. Upon opening the survey, parents were required to read the letter of information and subsequently provide informed consent prior to beginning the study questions. With respect to our online approach, we distributed the survey through social media pages operated by local sport organisations (e.g., regional soccer club page). If the organisation agreed to post our survey on their page, all necessary information was provided along with the electronic link to the survey. Across both approaches (i.e., face-to-face or online), participation was voluntary, and parents could terminate their participation at any time without penalty. Face-to-face participation was attributed with approximately 37% of the sample ($n = 128$), whereas online was attributed with the remaining 63% ($n = 219$). Following examination of descriptive statistics, no meaningful differences were detected between the two sampling approaches, and remuneration was not offered for participating in this study. Anecdotally, approximately one in five female parents that were invited to participate in Study 4 agreed to complete the questionnaire, whereas approximately one in ten male parents agreed to participate.

5.3.3 Measures

5.3.3.1 Parental Demands in Sport

We asked parents to respond to a single item which read "To what extent does your home life revolve around your child's primary sport", and could choose between 1

(*rare extent*), 2 (*some extent*), or 3 (*great extent*). This item was used to measure parents' perceptions of their level of demands in organised youth sport. This particular item has been used in previous work examining parents in sport (Weiss & Hayashi, 1995).

5.3.3.2 Wellbeing

The 15-item Mental Health Continuum was used to gather a mean of parents' wellbeing (Keyes, 2002). Parents were asked to report the extent to which numerous statements applied to them in the last 30 days. For example, parents were asked "During the past month, how often did you feel happy". Other example statements ended with "interested in life", "that you belonged to a community", or "that your life has a sense of direction and meaning to it". All items ranged from 1 (*never*) to 6 (*every day*), and the resulting data showed strong reliability ($\alpha = .94$).

5.3.3.3 Psychological Distress

The Kessler-6 (K6; Kessler et al., 2005) is a six-item measure of psychological distress that assesses anxiety and depressive symptomology. Parents were asked to rate how often they have felt, for example, "restless or fidgety" or that "everything felt like an effort" in the past 30 days from 1 (*none of the time*) to 5 (*all of the time*). Responses from the K6 showed excellent reliability ($\alpha = .85$) and is suitable for use with different demographic adult samples (Kessler et al., 2005). A mean of the six items was used for analyses.

5.3.3.4 Social Identity

Social identity was assessed using a parent-adapted version of the 9-item Social Identity Questionnaire for Sport SIQS (Bruner & Benson, 2018). The measure assessed ingroup ties ($\alpha = .92$) cognitive centrality ($\alpha = .83$) and ingroup affect ($\alpha = .91$) as it related to parents' identity with their child's team. Example items include, "I have a lot

in common with other parents on my child's team". Each item was scored from 1 (*strongly disagree*) to 7 (*strongly agree*). The adapted SIQS returned strong reliability ($\alpha = .89$).

5.3.3.5 Social Support

Social support was measured using the 15-item Medical Outcome Study (MOS) social support survey (Sherbourne & Stewart, 1991). This instrument measures perceptions of available support along dimensions of emotional/informational support, tangible support, affectionate support, and positive social interactions. Parents were asked the extent to which each of the various forms of support were available to them in relation to other parents from their child's sport team. Importantly, parents were directed to exclude their partner when responding to the items. Example items include "Someone you can count on to listen to you when you need to talk" and "Someone to have a good time with". All items ranged from 1 (*none of the time*) to 5 (*all of the time*) and excellent internal reliability was present ($\alpha = .97$).

5.3.3.6 Parent-Child Relationship Quality

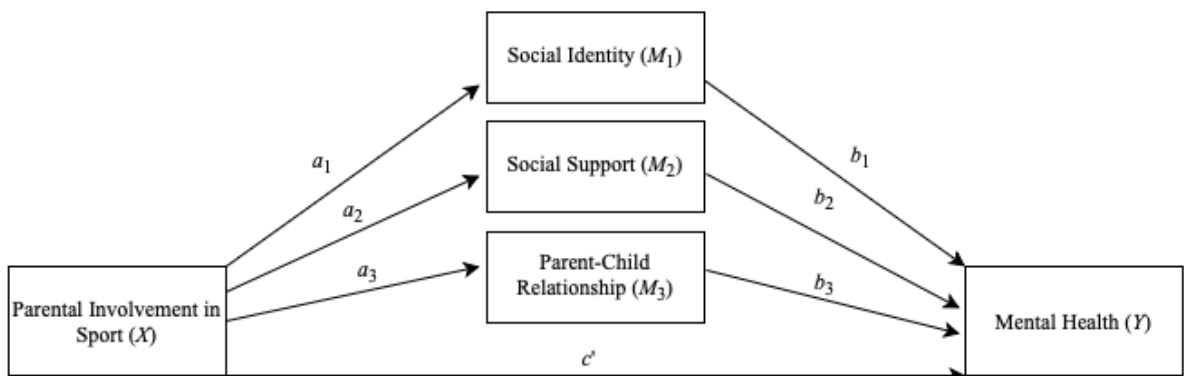
Parents responded to the 15-item child-parent relationship scale (Driscoll & Pianta, 2011). This tool consists of two sub-dimensions, including parent-child closeness and parent-child conflict. An example item of parent-child closeness includes "I share an affectionate, warm relationship with my child", whereas an example item of parent-child conflict is "My child and I always seem to be struggling with each other". Parents could respond from 1 (*definitely does not apply*) to 5 (*definitely applies*), and parent-child conflict items were reversed scored to obtain an overall mean. Strong internal consistency was achieved with the measure ($\alpha = .87$).

5.3.4 Analysis

IBM SPSS Statistics was used to conduct all study analyses. Descriptive statistics such as bivariate correlations were tested to gather an initial understanding of the relationships between study wellbeing (see Table 5.1). Then, two parallel mediation models were tested to examine whether social identity, social support, and parent-child relationship quality (i.e., mediating wellbeing) mediated the relationship between parental demands in youth sport and mental health (i.e., psychological distress and wellbeing; see Figure 5.1). A parallel mediation approach allowed us to examine multiple mechanisms simultaneously in the presence of correlated mediators. In both models, we examined the total, direct, and indirect effects. As illustrated in Figure 5.1, direct effects examined included path “a” (i.e., effect of sport demands on our three mediators), path “b” (i.e., effects of our three mediators on parental mental health), and path “c” (i.e., effect of sport demands on mental health while controlling for our mediators). Finally, indirect effects were tested through paths “ a_1b_1 ” (i.e., mediating effect of social support), “ a_2b_2 ” (i.e., mediating effect of social identity), and “ a_3b_3 ” (i.e., mediating effect of parent-child relationship quality).

Figure 5.1.

Conceptual model representing both parallel mediation pathways linking parental involvement (i.e., via subjective demands) demands in sport and parental mental health.



We applied the mediational approach articulated by Zhao et al. (2010). This approach moves beyond the traditional Baron-Kenny procedure (Baron & Kenny, 1986) wherein a zero-order effect of the independent variable on the dependent variable is required to test mediation. The Baron-Kenny approach has led scholars to believe that there ought to be “an effect to be mediated”, which has been critiqued for potentially missing important insights. The more recent approach recommended by Zhao et al. (2010) suggests that in order to establish mediation, authors need only detect significant indirect effects via bootstrap testing (i.e., “ab” pathways). Then, dependent on whether the direct effect is significant, the resultant mediation model is classified as either indirect-only mediation (i.e., non-significant direct effect), competitive mediation (i.e., significant direct and indirect effects in the opposite direction), or complementary mediation (i.e., significant direct and indirect effect in the same direction).

Regarding our specific steps to analyse the data, we began by examining descriptive statistics to ensure data were reported and entered accurately. We also used this step to look for missing data and incomplete cases. If cases were detected in which multiple wellbeing of interest were incomplete (e.g., social identity, social support, parent-child relationship, wellbeing, or psychological distress), the participant was removed from the analytic sample ($n = 64$ cases). Then, we screened for outliers by excluding cases ($n = 3$) with a Mahalanobis distance greater than 18.47 as per chi-square table with four degrees of freedom and an alpha set at $p = .001$. Once these steps were complete, we used model 4 within the PROCESS SPSS macro (Hayes, 2012) to test our mediation models using a bootstrapping method with 10,000 bootstrapped samples. Significant effects were determined from 95% confidence intervals, and both

mediation models controlled for parent gender, child gender, household income, and parents' education level.

5.4 Results

Once assumptions of linearity, homoscedasticity, normality of estimation error, and independence of observations were confirmed, descriptive statistics and bivariate correlations were examined (see Table 5.1). Notably, there was a strong positive correlation between two of our parallel mediators: social identity and social support ($r = .52, p < .01$). However, provided that previous research suggests social identity and social support are not causally linked (Frisch et al., 2014), parallel mediation was deemed appropriate. As illustrated in Table 5.1, parents were generally high in social identity, wellbeing, and reported strong relationships with their child. In contrast, parents scored low in social support and psychological distress. Finally, it is also worth noting that parental demands in sport were positively correlated with higher competition levels in youth sport.

Table 5.1*Descriptive statistics and bivariate correlations*

Variable	Mean	SD	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) Competitive vs. Recreational	--	--	--											
(2) Sampler vs. Specialiser	--	--	.01	--										
(3) Athlete gender	--	--	.03	-.01	--									
(4) Parent gender	--	--	-.003	.06	.11*	--								
(5) Household income	--	--	-.04	.003	.01	-.03	--							
(6) Parental education	--	--	-.10	.03	.07	.07	.25**	--						
(7) Demands in sport	2.53	.57	-.32**	.07	-.01	.05	-.11*	.03	--					
(8) Social identity	4.65	1.05	-.11*	-.05	-.07	-.10	-.01	.07	.20**	--				
(9) Social support	2.23	.98	-.09	-.02	.04	.09	.03	-.03	.16**	.52**	--			
(10) Parent-child relationship	4.08	.58	-.05	-.08	.004	.06	.06	-.03	-.16**	.04	.12*	--		
(11) Wellbeing	4.53	.94	-.001	-.04	.03	.15**	.03	.22**	-.09	.21**	.21**	.34**	--	
(12) Psychological distress	1.88	.63	-.06	.06	-.06	-.10	-.05	-.15**	.13*	-.01	-.03	-.36**	-.60**	--

Note: ** $p < .01$, * $p < .05$.

5.4.1 Parallel Mediation Models

We hypothesised that perceptions of social identity, social support, and parent-child relationship quality would mediate a negative relationship between parents' perceived demands in youth sport and wellbeing (see Table 2 for complete results). Regarding "a" pathways, parental demands in sport was positively associated with social identity and social support, and negatively associated with parent-child relationship quality. Further, "b" pathways revealed that social identity and parent-child relationship quality were positively associated with wellbeing, however social support was not. The direct association of parental demands in sport on wellbeing was not significant. With respect to indirect associations, parental demands in sport positively predicted wellbeing through social identity. Further, parental demands in sport negatively predicted wellbeing through parent-child relationship quality. Therefore, we found indirect-only mediation of parent-child relationship quality and social identity on the relationship between parental demands in sport and wellbeing.

We hypothesised that perceptions of social identity, social support, and parent-child relationship quality would mediate a positive relationship between parents' perceived demands in youth sport and psychological distress (results can be found in Table 2). With respect to "a" pathways, parental demands in sport was positively associated with social identity, social support, and negatively associated with parent-child relationship quality. Regarding "b" pathway associations, parent-child relationship quality was negatively associated with psychological distress, however social identity and social support were not significantly associated. The direct association of parental demands in sport on psychological distress was not significant. As it pertains to indirect associations, parental demands in sport positively predicted psychological distress through parent-child relationship quality. In contrast, social identity and social support

were not significant mediators of parental psychological distress. Together, we found indirect-only mediation of parent-child relationship quality on the relationship between parental demands in sport and psychological distress.

.

Table 5.2*Unstandardised results the two parallel mediation models linking parental demands in sport and mental health*

	B	SE	95% CI
Model 1			
<i>a paths</i>			
Sport → Social Identity	.436	.099	.241, .632
Sport → Social Support	.347	.092	.166, .528
Sport → Parent-Child Relationship	-.176	.056	-.287, -.065
<i>b paths</i>			
Social Identity → Wellbeing	.165	.057	.053, .276
Social Support → Wellbeing	.065	.062	-.057, .187
Parent-Child Relationship → Wellbeing	.521	.084	.355, .687
<i>Indirect effect</i>			
Sport → Social Identity → Wellbeing	.072	.035	.012, .148
Sport → Social Support → Wellbeing	.023	.025	-.025, .076
Sport → Parent-Child Relationship → Wellbeing	-.092	.032	-.161, -.037
Model 2			
<i>a paths</i>			
Sport → Social Identity	.419	.101	.220, .618
Sport → Social Support	.342	.093	.159, .523
Sport → Parent-Child Relationship	-.181	.057	-.294, -.069

b paths

Social Identity → Psychological Distress	-.023	.040	-.101, .055
Social Support → Psychological Distress	.028	.044	-.058, .114
Parent-Child Relationship → Psychological Distress	-.375	.059	-.491, -.259

Indirect effect

Sport → Social Identity → Psychological Distress	-.010	.020	-.051, .029
Sport → Social Support → Psychological Distress	.010	.020	-.028, .053
Sport → Parent-Child Relationship → Psychological Distress	.070	.023	.028, .171

5.4.2 Supplementary Analyses

Provided that each of our mediating variables were multidimensional, we conducted follow-up analyses to determine whether significant indirect associations were driven by specific dimensions. With regard to our first mediation model, follow-up analyses revealed that the mediating role of parent-child relationship quality on parental wellbeing was driven by the closeness dimension $B = -.09$, 95% CI [-.16, -.03]. Specific to social identity, follow-up analyses showed that perceptions of ingroup ties drove mediation between parental demands in sport and wellbeing $B = .08$, 95% CI [.02, .16]. Finally, supplementary analysis with our second mediation revealed that parental demands in sport positively predicted psychological distress through parent-child conflict $B = .05$, 95% CI [.01, .10].

5.5 Discussion

The purpose of this study was to examine the mediating roles of social support, social identity, and parent-child relationship quality of the relationship between parents' perceived demands in youth sport and mental health and wellbeing. We found partial support for our H1 as no direct negative association between parental demands in youth sport and wellbeing was detected. However, social identity and parent-child relationship quality mediated the relationship between parental demands in sport and wellbeing. Contrary to H1, no indirect mediating effect for social support was detected. Further, H2 was partially supported as no direct positive association between parental demands in youth sport and psychological distress was detected. Conversely, parent-child relationship quality mediated the relationship between parental demands in sport and psychological distress. Social identity and social support were not significant mediators. Altogether, these findings offer a novel understanding of how parents' perceived demands in youth sport influence their mental health and wellbeing.

The only variable to mediate both psychological distress and wellbeing was the quality of parents' relationship with their child-athlete. When examining the findings more closely, parental wellbeing was mediated by parent-child *closeness*, whereas psychological distress was mediated by parent-child *conflict*. These findings highlight that in addition to the benefits of a high-quality parent-child relationship for athletes (for a review, see Rouquette et al., 2021), parents may experience mental health benefits from youth sport participation via their relationship with their child. In their theoretical review of parent-athlete relationships, Rouquette et al. (2021) encouraged the investigation of this relationship with the thriving through relationships model (Feeney & Collins, 2015). This model draws on foundational family development theories such as attachment theory (Bowlby, 1998) and self-determination theory (Deci & Ryan, 1985), and considers relational responsiveness as a core construct. Considering thriving and wellbeing have conceptual similarities (e.g., Duan et al., 2016), this model may be well-positioned to build off the findings of the current study. Although the aforementioned review was primarily concerned with athlete outcomes, we believe the thriving through relationships model is apt for examining both athletes and parents in sport. In line with the model, parent and athlete wellbeing may be best served by secure attachment and shared intrinsic motivation in sport (Carr, 2009).

With regard to the specific implications of this finding, previous literature on athletes has reported parent-athlete conflict as the result of parents overemphasising performance outcomes or being too critical of their child's performances (e.g., Lauer et al., 2010; O'Rourke et al., 2013). In this study, parent-child conflict mediated the relationship between parental demands in sport and psychological distress, thus confirming the pernicious implications of conflict for each member of the dyad. As such, considering the athlete literature points to parental behaviour as a salient predictor

of parent-athlete conflict, it appears as though efforts to inform parents about supportive behaviours towards their children in sport would benefit both parents and athletes. A study by Dorsch et al. (2016) showed that athletes feel supported when their parents enable a mastery climate wherein improvement and enjoyment is prioritised. Moreover, the mediation of parent-child closeness for parental wellbeing further emphasises the importance of having positive family relations for sport participation. Altogether, the current findings show that the way in which sport participation influences the parent-child relationship may have implications for parental mental health and wellbeing. To this end, designing youth sport programs that promotes closeness and dissuades conflict between parents and athletes is imperative for the parental experience in sport, albeit such programs must not further increase demands on parents.

Parents' identity tied to their child's sport team mediated the relationship between their perceived demands in youth sport and self-reported wellbeing. Building off earlier work that suggests sport parents live vicariously through their child-athletes and emotionally engage with the sport experience (Wiersma & Fifer, 2008), the concept of parental social identity in sport has received attention more recently (e.g., Sutcliffe et al., 2020). Indeed, the combination of parents developing ties with other parents from the same team (i.e., ingroup ties), considering the team an important group in their life (i.e., cognitive centrality), and experiencing positive emotions when engaged with the group (ingroup affect) can foster group memberships among parents. This is important because, in support of the current findings, the link between holding valued group identities and individual wellbeing has been documented (e.g., Haslam et al., 2022). Furthermore, considering that our follow-up analyses highlighted the mediating role of ingroup ties in particular, it appears as though bonding with similar individuals is salient for parental wellbeing in sport. Contrary to our second hypothesis, social identity did

not mediate the relationship between parental demands in sport and psychological distress. Speculatively, although this finding does not dismiss the value of group membership for parents, it may reveal that socially identifying with their child's sport team is insufficient for mitigating psychological distress.

Furthermore, contrary to H1 and H2, we found no support for the mediating role of social support after allowing for the effects of social identity and child-parent relationship quality. The social experiences offered to parents in sport have been interpreted and reported in various ways. For example, some parents have developed meaningful relationships with other parents from their child's sport team (e.g., Legg et al., 2015), whereas others report other parents as their primary concern in youth sport (e.g., Elliott & Drummond, 2013). In this study, parental demands in sport were associated with social support, however, no direct association between social support and mental health, or any indirect effects were detected. As such, having children involved in sport may lend parents more social support, but this appears to have little effect on their mental health experiences overall. One potential explanation is that the social support experienced in sport only represents a fraction of their social support overall (i.e., from family, work, or other peer groups). Such mixed effects are consistent with comments from a recent meta-analysis, in which the strength of correlation between social support and mental health varies across populations (Harandi et al., 2017). Alternatively, it is possible that sport parents expect balance with respect to social support provided and received within their child's sport team, which could add further demands on parents. Importantly, however, social support is often conceptualised as available support from members of peer and family relationships, and therefore it is possible that parents do not consider other sport parents as supportive agents when dealing with challenges. In sum, although there are likely specific

conditions (e.g., newcomer family) in which receiving social support from other parents is highly valued, it appears as though group identification is a more salient predictor of parental wellbeing than receiving social support.

5.5.1 Practical Implications

Mental health concerns are common in adult populations, and the daily challenges of parenting can exacerbate such concerns (Anding et al., 2016). Given the high rates of sport participation in many developed countries (e.g., Australia, Canada, United States; Aubert et al., 2018), the findings from this study may help guide future work that aims to protect parental mental health through community sport. For example, interventions should endeavour to reduce the perceived demands of youth sport on parents by focusing on healthy parent-child relationships and group membership. Specific to the promotion of strong parent-child relationships, informing parents about behavioural approaches that maintain harmonious relationships with their child-athletes may reduce emotional demands (e.g., parent-child conflict) for parents. Additionally, the current findings showed that the parent-child relationship may benefit from having families' home life revolve less around sport. This may be achieved by encouraging families to balance the role of youth sport with other interests and activities. With respect to fostering group identities for parental wellbeing in sport, scholars may consider developing interventions grounded in a social identity approach. Namely, deliberate efforts to increase ties among parents (e.g., connecting parents through sport-related social events) or promote the centrality of being a group member (e.g., offering team apparel for parents) may lead to an enhanced parental experience in youth sport. All the above considered, the magnitude of the current findings does not indicate that one should expect meaningful clinical mental health benefits from the suggested interventions. Beginning with pilot interventions is therefore likely a fruitful next step.

5.5.2 Limitations and Future Directions

The mediation study was cross-sectional, and therefore no causality can be inferred from the data. As such, caution should be applied when interpreting the current findings. For example, we found that parental demands in sport negatively predicted wellbeing through parent-child closeness, which can be interpreted in two ways. First, higher levels of demand in sport decreases parents' wellbeing due to lost opportunities to be close with their child. Alternatively, parents are unable to experience the demands of sport positively due to poor relationships with their child. Regardless if no directionality could be solidified from the current study, the parent-child relationship appears to be an important variable for parents' mental health in sport.

Furthermore, there were a meaningful number of cases excluded from our analyses based on incomplete data ($n = 64$ cases), thus indicating potential limitations in our data collection procedures. Specifically, participants completed the study electronically either in the physical youth sport environment (i.e., before or after their child's competition) or at their personal residence. Without researcher supervision parents may have been more tempted to exit the study questionnaire prematurely. Nonetheless, no meaningful patterns were detected among the sample of excluded cases across our dependent variables (i.e., psychological distress and wellbeing). In a similar vein, parents were not offered remuneration for their participation in the current study, thus perhaps reducing interest in study participation. Moreover, in an effort to collect a sufficient sample size, the research team extended online invitations to parents across several sports, which in turn gathered parents from several different countries. Although the heterogeneity of the sample could be viewed as a strength, there were nonetheless imbalances in participant diversity within the final analytic sample (e.g., 76% of participants were female). Future studies should look to collect equal numbers of

parents from various countries to examine global differences in parental mental health in sport. Finally, a dyadic approach to parental mental health in sport may serve as a valuable approach going forward. Provided that parents from two-parent households can have different roles when managing the demands of youth sport, examining whether one parent's efforts contribute to changes in mental health among the other parent would add a meaningful contribution to the literature.

5.6 Conclusion

The findings from this study provide novel insight with respect to some of the mechanisms that predict parents' mental health experiences in organised youth sport. Namely, the parental experience in sport appears to benefit from strong parent-child relationships and group membership tied to their child's team. Considering the high prevalence of sport participation in several countries, these findings offer a promising way forward for mental health promotion among parents. This is important because not only do parents merit positive experiences for their ongoing efforts in and outside of sport, but because they experience meaningful challenges in sport that must be offset by opportunities to gain social and psychological resources (e.g., strong family and peer bonds).

Chapter 6: A qualitative examination of parental mental health and wellbeing in youth sport

6.1 Foreword

Findings from Chapter 5 revealed that parent-child relationship quality and social identity mediate the relationship between parental demands in sport and their psychological distress and wellbeing. Additionally, findings showed that despite not being a significant mediator, perceptions of social support were nonetheless associated with parental demands in sport. As such, the collective findings uncover a complex reality with respect to how parents' interactions in the youth sport environment influence their mental health. For that reason, the purpose of Chapter 6 was to go deeper and examine perceptions of mental health and wellbeing among parents in relation to their involvement in organised youth sport.

This Chapter (excluding abstract and reference list) has been submitted to the *International Journal of Sport and Exercise Psychology* and reformatted for the thesis.

6.2 Introduction

Mental health as an outcome of youth sport participation has recently received increased attention from empirical reports (Vella & Swann, 2021). Despite much of the research being dedicated to elite sport contexts, calls have been made to pay closer attention to the mental health of community sport participants and stakeholders (Vella & Swann, 2021). Provided that community sport is an experience shared by athletes, coaches, parents, sponsors and administrators (Dorsch et al., 2022), the mental health of each stakeholder is to be taken seriously. Parents, for example, have long been recognised as an integral social agent of the youth sport experience (for a historical review, see Dorsch et al., 2021). In fact, the ongoing financial, temporal, and emotional investment required from youth sport parents results in a spectrum of behavioural,

affective, and relational experiences (Sutcliffe, Fernandez et al., 2021). Within this spectrum, parents' mental health and wellbeing are important, yet relatively unexplored outcomes worthy of investigation.

Some of the first mental health outcomes reported among sport parents pertained to symptoms of anxiety while spectating their child-athletes. Specifically, parents reported feeling anxious in response to the overwhelming range of possible outcomes their child might experience in sport (e.g., exclusion, injury; Dorsch et al., 2009). A more well-developed category of outcomes that have been documented among parents include stressors (e.g., Harwood & Knight, 2009a). Although not explicitly conceptualised as mental health, foundational work by Harwood and Knight (2009) shows how the sport environment (i.e., competitive), logistical responsibilities (i.e., organisational), and their child's progress in sport (i.e., developmental) represent stressors for parents. Relatedly, a study by McFadden et al. (2016) found that parents experienced decreased wellbeing as a result of having child-athletes that specialised before the age of 12 years as opposed to parents of sport samplers. However, this study was conducted with Canadian youth ice hockey parents exclusively, highlighting the need to examine mental health among parents with youth involved in other sports. Together, these findings point to the fact that parents' involvement in youth sport can lead to symptoms of common mental health problems (e.g., stress and anxiety).

Despite the paucity of explicit mental health research among youth sport parents, it is worth synthesising and critiquing the literature that could be considered under the purview of parental wellbeing. Keyes (2002) conceptualises mental health as a spectrum of psychological distress and emotional, psychological, and social wellbeing. More specifically, emotional wellbeing involves a hedonic perception of positive and negative affect (Keyes, 2005). In youth sport, although some work has

attempted to examine affective experiences from parents (e.g., Dorsch et al., 2016), explicit links to mental health have not been drawn. Further, psychological wellbeing includes self-acceptance, positive relations with others, environmental mastery, autonomy, personal growth, and a sense of purpose in life (Ryff & Keyes, 1995). Previous research shows that sport parents develop relations with others outside of the family (e.g., Brown, 2014), desire some autonomy with respect to their child's development (e.g., Holt et al., 2021), and may experience a deeper sense of meaning or purpose through parenting in sport (e.g., Coakley, 2005). Nonetheless, although sub-components of wellbeing have surfaced in the youth sport parent literature, the lack of explicit investigation towards parental mental health is problematic and must be addressed.

Given calls for more research on the mental health of parents in sport (Sutcliffe, Fernandez et al. 2021), recent exploratory work offered some initial clarity on the topic. Sutcliffe, Kelly et al. (2021) found that primary parents (i.e., the child that knew the child best) of adolescent sport participants reported lower psychological distress, yet higher time pressure and life stress than parents of non-participants. This study shines a light on the complexity of parental mental health in sport, highlighting the need for further examination of the construct. The authors comment on the possibility that parents' perceptions of the social environment in youth sport may impact the relationship between their involvement and mental health outcomes. Such a hypothesis is aligned with the well-documented social benefits for sport parents, in which the youth sport environment can serve as a context for meeting or extending parents' social needs (e.g., Warner et al., 2015). With that said, the aforementioned study was limited in that little contextual information could be gathered with respect to the sport environment, and the associations drawn between parental involvement in sport and mental health

lacked depth. Nevertheless, furthering the understanding of parental mental health in sport requires a more critical examination of parents' roles and behaviours in the youth sport environment.

To better understand how parents' involvement in youth sport influences their mental health and wellbeing, one may consider recognised social determinants of mental health (for a review, see Allen et al., 2014). The financial implications of youth sport are one of the most highly reported challenges by parents (Sutcliffe, Fernandez, et al., 2021), which may have a pernicious effect on their mental health. In extreme cases, parents have invested up to 10% of their gross household income towards their child's sport endeavours (Dunn et al., 2016). In a similar vein, the time demands of youth sport participation are also reported highly by parents, which in turn reduce parents' ability to engage in family time and leisure activities (Bean et al., 2019). Alternatively, some parents may appreciate the additional time spent engaged in organised sport, as it affords them more time spent with their partners and children (Tamminen et al., 2017). Thus, the way in which parents perceive the time demands of youth sport may have downstream effects on their mental health and wellbeing. There is therefore a need to examine how parents' roles, responsibilities, and interactions in the youth sport environment can lead to meaningful outcomes, including their mental health and wellbeing.

Mental health is defined as "a state of wellbeing in which an individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community" (WHO, 2014). Applying the definition to the realm of sport parenting, parents operating in a desirable state of wellbeing are likely those who can balance the various demands of youth sport, can remain productive within their roles in and outside of sport, and feel as though their

efforts contribute to a positive sport experience. To further operationalise wellbeing specifically, an in-depth review of the construct concluded that wellbeing is “the balance point between an individual’s resource pool and challenges faced (i.e., physical, social, and psychological; Dodge et al. 2012, p. 230).” This conceptualisation aligns with the parental experience in youth sport considering the well-documented challenges (e.g., stressors, Harwood & Knight, 2009a) and resources (e.g., social capital; Warner et al., 2015) afforded to parents. Finally, in contrast to formal definitions of parental involvement in sport (e.g., Leff & Hoyle, 1995), the current study operationalised parental involvement in sport as the collection of roles (e.g., supporters, role-models, interpreters; Fredericks & Eccles, 2005) parents assume to facilitate their child’s sport experiences. More specifically, this study sought to understand how parents’ roles as, but not limited to, the financier, the transportation agent, the coach, the emotional supporter, or the role model influenced their general state of mental health and wellbeing. Together, the definitions offer grounds to further the understanding of parental mental health in organised youth sport.

To better understand how parents’ involvement in youth sport influences their mental health and wellbeing, a study that allows for deeper accounts of parents’ experiences would complement the existing literature well. Qualitative inquiry is well-positioned to meet this need by providing parents with the opportunity to reflect on their experiences in sport and how such experiences led to perceptions of mental health and wellbeing. In the current study, we sought to build off the growing literature on parents’ mental health in sport and use qualitative methods to further the understanding of this phenomena. Therefore, the purpose of this study was to examine the perceptions of mental health and wellbeing among parents in relation to their involvement in organised youth sport.

6.2 Methods

6.2.1 Participants

The current study included 18 parents of Australian youth sport participants (12 mothers and 6 fathers), ranging in age from 38 – 58 years ($M_{age} = 47.0$ years, $SD = 4.74$). Parents reported that their child-athletes ranged in age from 12 – 18 years (13 females and 5 males; $M_{age} = 13.63$ years, $SD = 1.69$), and represented various of sports such as swimming, rugby league, water polo, netball, soccer, biathlon, triathlon, golf, tennis, and Australian rules football. For demographic purposes, we asked parents to report the number of years their child had been involved in youth sport ($M = 5.56$ years, $SD = 2.55$), and whether they considered their child-athlete a sampler ($n = 10$) or a specialiser ($n = 8$). Similarly, 13 parents reported their child-athletes as competitive (i.e., underwent a selection process), whereas five parents reported recreational (i.e., no selection process involved). Further, a strong majority of parents reported being involved in organised sport during their youth (94%).

With respect to parents' socioeconomic status, several participants reported their household income as \$150,000 or higher ($n = 12$ parents). Alternatively, one parent reported their household income between \$100,000 – 150,000, four reported between \$50,000 – 100,000, and one parent reported under \$25,000. As such, a majority of parents in the current study were either around or above the median gross household income in Australia (approximately \$92,000; Australian Bureau of Statistics, 2020). Finally, parents were asked to report their approximate expenditures on youth sport in the last year ($M = 3,419.44$ Australian Dollars, $SD = 2,216.06$).

6.2.2 Qualitative Approach

This investigation was approached with a realist ontology (Maxwell, 2012) and subjectivist epistemology (Chamberlain, 2015). A realist ontology suggests the

existence of an underlying reality that is independent of the researcher's knowledge of it. As articulated by Archer (2007, p.195), ontological realism suggests "there is a state of the matter which is what it is, regardless of how we do view it, choose to view it or are somehow manipulated into viewing it". With that said, such an approach acknowledges that reality can never be entirely understood, but only closely approximated (Crotty, 2003). Specific to the current study, our realist ontological position infers that there is an underlying truth regarding how parents' roles, interactions, and behaviours in youth sport influence their mental health and wellbeing. Epistemologically, we acknowledge that parents' individual mental health experiences in sport are interpretive and fallible, and can therefore only be partially understood (Maxwell, 2012). For example, it may be the case that the parent-child relationship in sport affects parents' mental health, but where this effect lands within the spectrum of mental health experiences depends on the nature of the relationship and parents' subjective understanding of it.

With respect to positionality of the authorship team, the first author has been examining the effect of having children involved in youth sport on parent-specific outcomes for five years. The second and third author have specific expertise in mental health in either sport or clinical domains. Moreover, all three authors have personal experience as either youth athletes, youth sport parents, or both. Collectively, the authorship team are well-positioned to examine the mental health of parents in youth sport, but recognise that our interactions with participants, lived experiences, and research expertise inevitably helped shape our interpretation of the findings (Bradbury-Jones, 2007).

6.2.3 Procedure

Following approval from the first author's institutional ethics committee, the first author approached parents at various youth sport events (e.g., weekend tournaments, individual competitions) to invite them to participate in a questionnaire pertaining to their experiences in sport (for the original cross-sectional study, see Chapter 5). The final item of the questionnaire offered parents the opportunity to leave their contact information for a follow-up interview. To achieve diversity in the sample, we drew on both the principles of maximum variation (Patton, 1990). Maximum variation sampling allows identification of shared patterns that may cut across different settings or contexts (Palinkas et al., 2015). In this study, parents with varying sport experiences (e.g., type and level) were extended invitations to be interviewed. Parents were emailed a separate consent form with an invitation to participate in an interview at their convenience. Once consent was received and an agreed upon time for the interview was confirmed, a Zoom invitation or invite for a mobile phone call was sent to participants. The first author then engaged in a semi-structured interview with each participant, which was recorded using a traditional Dictaphone along with an Apple supported recording application. Altogether, 34 parents were invited to participate in an interview, and 20 accepted the invitation. All interviews were conducted remotely (i.e., via Zoom or Skype), and two interviews were omitted from the analysis due to insufficient data (i.e., unengaged participants).

The interview guide was developed based on previous literature (e.g., Harwood & Knight, 2009a) and findings from Sutcliffe, Fernandez et al. (2021). Specifically, interview questions aimed to explore whether and how the various roles (e.g., facilitator, interpreter, supporter) and associated outcomes (e.g., social and family support) parents experience in youth sport influenced their mental health. During the

first part of the semi-structured interview, parents were asked several questions pertaining to how contextual (e.g., structure and type of sport) and social (e.g., relationships with other social agents in sport) variables influenced their mental health and wellbeing. Contextually, an example question is “How does your child’s weekly sport schedule impact your day-to-day wellbeing?” Socially, example questions included “How has youth sport impacted your relationship with your child?”, with follow-up probes such as “And how does this relationship impact your mental health?” Following this, the second stage of the semi-structured interview focused on how specific events and interactions in youth sport led to common symptoms of acute mental health problems (e.g., symptoms of anxiety or psychological stress) or wellbeing (i.e., positive affect). Example questions included “Have you ever felt stressed, anxious, or depressed as a result of your involvement in youth sport, and if so, what was the context?” or “What aspects of youth sport brings you the most joy?” Moreover, provided that participating parents had already completed a sport-related survey from a previous study, little time of the interview was spent on demographic information. The resulting 18 interviews were transcribed verbatim. The average length of participant interviews was 41.83 minutes ($SD = 14.80$), ranging between 24 and 76 minutes.

6.2.4 Data Analysis

Data gathered from the current study were analysed using descriptive thematic analysis (Braun & Clarke, 2006). In the first of six steps, the first author familiarised himself with the data by reading the raw transcripts several times before any piece of data was coded (Braun & Clarke, 2006). The second step then involved an unstructured-coding process that generated initial codes from the transcripts by highlighting specific sections of text. During this stage, the first author consulted notes that were collected during the interviews to help contextualise some of the rich information offered by

participants. As our third step, initial themes were generated from the codes. This stage was conducted by continuously revisiting the codes to ensure the meaning behind participants' reflections was not lost or misinterpreted. We then further reviewed, revised, and developed initial themes (i.e., Step 4) by (a) engaging in the literature on parental involvement in sport; and (b) engaging in critical discussions between the first and third author. To specify the latter, the two authors met to discuss whether the generated themes represented the codes appropriately. Once agreement was reached on the content, names, and definitions of each theme following further refinement (i.e., Step 5), a final draft of results was prepared (i.e., Step 6). Each author was then provided the opportunity to offer final semantic changes.

6.2.5 Methodological Rigour

Several steps were taken to ensure the current study was approached and conducted with methodological rigor. As a first step, an audit trail was used during interviews to help contextualise the transcripts in an effort to minimise the researcher's inevitable subjective interpretations. Additionally, since participants in the current study were recruited as a follow-up from a cross-sectional study, we were able to invite participants from a variety of sport backgrounds and demographics. Moreover, the first and third author acted as critical friends and engaged in peer debriefs throughout the study. This involved debriefs on preliminary insights following interviews and further challenging the first author's assumptions during regular meetings (Smith & McGannon, 2018). To extend this point, having multiple researchers offer independent perspectives of the data allowed a clearer interpretation of the findings (Smith & McGannon, 2018). Furthermore, we encourage the reader to consider methodological coherence when evaluating the quality of the current study. Specifically, the alignment of our purpose, construct operationalisation, philosophical assumptions, methodology

and findings was an important goal of our research. Finally, author positionality (e.g., personal experience as youth sport parents) helped provide a more accurate representation of participants' experiences (Maxwell, 2012).

6.3 Results

Thematic analysis generated 19 unique codes and five themes that unpack how parents' involvement in youth sport influences their mental health and wellbeing in youth sport: (a) sport as a platform for family unity; (b) cohesion and conflict between parents and other social agents; (c) requirements of youth sport and family equity; (d) interconnectedness of parent and child emotions in sport; and (e) a context for self-improvement and parental validation.

6.3.1 Sport as a Platform for Family Unity

Parents in the current study conveyed the important ties between sport and family life, and how these ties influence their wellbeing. Within this theme, parents touched on how their child's sport participation presents parent-couples with opportunities to challenge and strengthen their relationship. As an example, parents spoke to the procedure of working together and balancing sport-related responsibilities:

“It's pretty family oriented- we'll share. You know, obviously there are times when they're training they can actually just do it on their own. But mostly one of us will take them to training or to the match that they've got. And it's sharing the list between the two of us.” (P9)

Participants also spoke to the challenges of not seeing their partner due to having multiple children with busy youth sport schedules. In this example, a mother shares the difficulties of only seeing her husband for limited hours a week:

“My husband and I barely saw each other. Purely because it was - we'd see each other for a couple of hours on a Friday night and then one of us would be off

first thing Saturday morning and not back until Sunday night. That was hard.”

(P12)

Despite some parents finding their child’s sport participation was trying on their marriage, others reported being resilient through such challenges based on the quality of their relationship going into sport, “I think for the average couple, it would be trying but for my husband and I, because we’ve got such a strong foundation in our relationship, we were fine.” (P12)

Another robust code that was discussed by parents was the opportunities that were presented to become closer with their child through sport participation. Parents reported that youth sport served as platform to share mutual interests, values, and goals with their child. The following quote offers a rich example of a father becoming closer with his daughter through Netball:

“With my daughter, it [sport] has extremely enhanced my relationship with her. She - we have an amazing bond through netball. Netball has provided an amazing experience that we’ve shared together and amazing memories that will never leave us, and the joy it brought and the fact that we experienced it together is irreplaceable and amazing, absolutely amazing.” (P6)

One context in particular that appeared to evoke conversations between parents and athletes was during transportation to and from sport:

“And the car, yeah - regardless of which kid - always driving a kid to sport, being in the car gives you that opportunity to have conversations that you never normally would. I don’t know, it’s weird, kids seem to open up in cars. I don’t know why. You’re not looking at them, I think, so they just think that they’re talking at somebody, but not you. Yeah, you get to hear amazing things in cars.”

(P3)

To further emphasise the value of sport for parent-child communication, the father in the following example touches on the communication challenges between fathers and daughters, and how soccer has provided something to share and enjoy together:

“So, I'm not going to talk to her about women's things, and she may not talk to me about some of the things that are happening in her life around boyfriends and so forth. But soccer is something that we have mutually, we can mutually appreciate. So yeah, I think without a doubt it's given us just something to kind of connect and talk about.” (P18)

In addition to the moments parents experienced with their child-athletes through sport, parents reported that youth sport provided opportunities for novel, whole-family experiences. One common example is weekends away at sport carnivals or tournaments, which was highly valued by the following parent:

“We do really value that time, because it is oftentimes when we're all trapped together and we have such hectic lives, when we do road trips, whether it's to a netball carnival to a ski field, we really value that as a family. And we often do it as an entire family. Even though one child might be going to one sport, we often - the whole family come.” (P9)

These whole-family moments motivated through sport participation can transfer to more leisure activities on the weekend:

“So yeah, I think for us, sport has been a big thing to bring the family together. Yeah, it really has actually. And even there'll be some weekends where I'll just go to the kids, “Let's go and play tennis,” and they're like, “Yeah, sure, let's go and do that.” So yeah, it brings everyone together for a bit of a fun sort of thing; down the oval with a football.” (P3)

The combination of these important moments along with the family's dedication to sport appeared to foster a sense of family-related identity. The mother in the next example not only self-identified as an athletic family, but goes on to say that athleticism through sport represents their way of life:

“No, pretty much we're pretty an athletic family. Both my husband and I were competitive athletes and spent most of their time - even as athletes, we're still going away competitively. I come from a family that was full of athletes, which was a way of life for us, I guess.” (P9)

As a final code within this theme, parents went beyond whole-family experiences and discussed how their approach and values in sport were intergenerational. More specifically, parents' sport-related experiences with their own parents helped shape their approach in current day. This allowed for joyful reflection on childhood memories with their parents in sport:

“So, I grew up in the country, and played sport quite competitively. So, we would travel country areas and then travel for sport. So, we had, I guess, that old “It takes a village to raise a family,” like, we had connections everywhere. And at the time, it was like “Oh, this is a lot of travel” but you look back, and the time in the car as a family and that sort of stuff was some of our fondest memories. And trips away, the different families that you'd see only at certain events, but you look forward to catching up with them. So, it's kind of the same way that we roll as parents.” (P2)

Taken together, this theme highlights that for families involved in organised sport, sport represents a vehicle for family interaction, bonding, identity formation, and joyful reminiscence. These key outcomes are important as they may represent underlying mechanisms of parental mental health in sport. Despite some reported challenges, a

strong majority of reports in this theme were positive. Thus, returning to the important link between family relationships and parental mental health more broadly, sport appears to be a viable platform for family unity.

6.3.2 Cohesion and Conflict Between Parents and Other Social Agents

Having a child involved in youth sport appeared to have a meaningful effect on parents' social experiences. Depending on the nature of the relationship, parents reported changes in the size of their social networks, receiving social support from other parents, and noted the importance of holding mutual values with other social agents in the youth sport environment (e.g., parents, coaches). In the following example, a mother discusses how her child's sport participation led to more peer interactions and subsequent perceptions of community:

“I can now walk down the street and walk past the swimming coach who taught my girls to swim for years. My kids started swimming when they were six months old. And my oldest swam until she was about 14, and my youngest swam until she was 12. I can now walk down the street and see their swimming teacher Jerry, and go, “Hey, Jerry,” and stop and have a conversation with her. Definitely a sense of community. And also, the other mums: you're sitting by the pool, someone is pregnant, you watch the baby while they go to the toilet, all those sorts of things. They're actually really community building.” (P15)

In other cases, parents articulated that the friendships made through their child's sport outlived their child's friendships:

“My son's team, football team, he's 21 now but their football team folded at 16. So, the parents are still friends, we all go out together still, would have like a Facebook chat. Once a month or once every two months we go down to the pub, we have dinner, catch up. We go away together. You know what? The boys

don't have anything to do with each other, but the parents do. It's not all the parents but everyone's welcome. It's probably about six families, just the parents, the kids don't – the boys don't catch up, they don't come to the pub with us." (P16)

However, the influence of youth sport on parents' social networks was not always positive. In fact, some parents spoke to the formation of cliques within the group of sport parents. Despite accepting the situation without distress, the mother in this example shared her frustrations with some of the other parents:

"It's quite funny actually, they drive me a bit mad. It's like Year 9 girls [referring to the parents]. They're really quite cliquey and judgy and not – see, I'm quite confident, so it doesn't actually bother me, and they're really nice to your face. But you see them slamming each other when they turn around." (P11)

Moreover, the mother in the following example conveyed that the presence of cliques among both parents and child-athletes evoked negative feelings:

"So, part of the cliquey parents, the cliquey daughters stick together sort of thing, so yeah. Even though for example in our surf team there's four very good competitive swimmers who form a surf team and they compete at state and stuff. Two of them are very cliquey and then two other girls are on the side. So it doesn't - even though they're performing at a high level, it's not that nice team feeling "Oh yes, we did that together" sort of thing." (P1)

In a similar vein, some parents showed disinterest in connecting with other parents in sport due to satisfaction with pre-existing friendships outside of sport:

"I'm not really social with the team. Usually, the team changes every year. There's always people coming and going, and we don't know if we're going to be there the next. So there's a lot of uncertainty and in all honesty, I just don't have

the time to make friendships with people that I probably have no interest in anyway. I've got my good friends. I'll say "Hi", I'll have a chat, but I don't see them as social connections. In fact, they probably drain me of my energy more than they would give me energy, if that makes sense." (P4)

As the above example highlights, connection with other parents in sport does not always result in enhanced wellbeing, and may even reduce it. However, when parents shared their appreciation for the social aspect of youth sport, the relationships often evolved through exchanges of social support:

"It depends on the day; it is a bit of a juggle. But I guess because of shift work, we're used to being flexible and figuring things out. We're lucky enough that our neighbours, two out of the three sports they play as well, so it's often a shared effort with the neighbours as well, which is really nice. So, they will help take, pick up if we can't, so yeah that's nice." (P1)

In addition to other parents from the same team, participants also reported the importance of sharing mutual values with other adults in the youth sport environment (i.e., coaches, managers, administrators). For example, the following example highlights how the parental experience in sport improves when there is mutual respect between parents and the sport organisation:

"I think I see the value in it more so as a holistic thing. And we're really lucky that we're associated with good clubs, good coaches, nice people, so it makes it an enjoyable experience." (P1)

Similarly, parents' perceptions of their team manager can also impact their experiences:

"I think really a good team, it's not even actually the coaches, it's really a good team manager that keeps parents informed. We've got this amazing manager who sends one email a week about how the game went, where the next game's

coming up, anything you need to know and then there's also a WhatsApp group. I mean you've probably got to put a fair bit of time into it, but you just know exactly what to expect, when your game times are, when you need to be there, then you can plan your life around that. So, they're – and it also makes you feel part of a team too.” (P7)

Furthermore, parents expressed frustrations in regard to receiving insufficient information and guidance from coaches and larger sport bodies:

“Parents are very competitive because they all want their child to succeed, but the information available to parents is very scarce, very limited that I think on a National level down to the club there has to be a way for the parents to know, like how does this program work? What is your role as a parent? How will you be updated on the progress of your child? There has to be a better way.” (P6)

The parent in the following example extends this theme by explaining the potential conflict that may arise between parents and coaches over financial matters:

“For the coaches and the local club administrators, it's important to them that there is no having to chase people for the initial fees. It means everybody gets off on a good start - especially with struggling families.” (P5)

Finally, beyond disinterest in forming social relationships with other parents, experiencing antisocial behaviour from other parents was noted as a source of mental health challenges. This quote offers an example of a mother losing sleep after another sport parent accused her of an unknown wrongdoing associated with their child's sport:

“I had a mother pull me off the table and drag me over to a fence and started screaming at me for something I had no knowledge of, in front of 500 people. It was horrific, absolutely horrific. I had many sleepless nights over that because she accused me of being the one that did it and I had no idea what she was

talking about, so it was very difficult to try and clarify with her what was going on when she was in such an irate state. So, it's the community of sport that causes more stresses than your actual relationship with your child in that sport."

(P12)

In sum, the findings generated in this theme uncover a complex relationship between having children involved in sport and parents' social capital. Although most parents discussed the increased opportunities for socialising as beneficial for their wellbeing, others found other parents as sources of psychological stress. It appears parents' interactions with other adults in sport (e.g., parents, coaches, managers) link to their mental health and wellbeing, but the direction of such link is dependent on parents' previous social relationships and personalities.

6.3.3 Requirements of Youth Sport and Family Equity

Parents offered additional insight on how the management of organisational requirements differ based on the sport context, the size and number of challenges to meet, and parents' social position (i.e., socioeconomic status, health status). As an example of sport context, when asked about whether their child's sport influences their mental health, the following parent reported that it depends on the dose: "I don't think she does enough sport [to negatively influence parental mental health]. If she would train more times a week it would, but once during the week and once on the weekend, that's really quite manageable." (P7)

Moving to the financial challenges of youth sport, the mother in this example shares her decision process behind buying quality equipment for continually growing child-athletes:

"Yes, so, things have definitely gotten more expensive. I've done this where, okay, so I might make the choice to get cheap sneakers, because yes, they're

cheap and then everybody [multiple child-athletes] can get a brand-new pair.

But then they don't last as long. There is just always that clothing issue with growing kids, whether it's sports equipment, or uniforms, or other stuff." (P5)

Alternatively, high-earning parents did not appear to experience financial stress from youth sport: "No, we're very lucky: we're both in IT, so we're both big income earners, so for us it's not an issue. I have seen other parents that go - not that they would come out with it, but you think 'yep, they've got two or three kids and they don't do as much as we do'." (P3)

With respect to how the management of physical challenges is influenced by parents' current life situation, the single mother in this quote offers a telling example of how beneficial government aid can be for her child's continued participation in sport and her own peace of mind:

"As a single mum, even working fulltime, it's still not enough to live on. Even though I was working fulltime hours, at above average rates, that still wasn't enough. So, I still qualified for the government sports vouchers, and they made such a huge difference. Even when technically we're really, really poor and on welfare, my girls have been able to keep on with their extracurricular activities, without interruption. And that's one of those mental health things, where okay, life might be changing at home, but there is consistency. And so yes, they've [government sport vouchers] been absolutely priceless." (P5)

As a follow-up the previous example, the mother transitions into the experienced anxiety of potentially not providing sport participation opportunities for her children:

"So, when this time – well, it wasn't a family breakdown that changed, but still, having those vouchers just meant that I was conscious of the fact that, 'Well, there is something I don't have to worry about this time'." (P5)

In addition to financial challenges, physical challenges that weigh on parents' mental health also include the interplay between managing youth sport and occupational demands. The mother in this example describes feeling exhausted despite not having the time to meet her physical exercise requirements, and how that can evolve as child-athletes age:

“When the kids were little, I found the sacrifices for this kind of stuff did lay heavily on me, so I would leave meetings early or I would leave work until later in the night, to do homework prep, all that sort of stuff. I felt like I was running around and exhausted from training, but I hadn't moved a muscle. But now, I'm actually being physically active while they're being physically active.” (P2)

In contrast, parents with occupational flexibility spoke to being at ease with the physical challenges associated with parenting in sport:

“I'm happy to do it [facilitate sport]. I'm very lucky that I've got a flexible job, so when I drop her off at 5:30, 6:00 in the morning, they're happy to let me start working. So I just get straight to work, I don't really waste those hours.” (P13)

Taken together, these findings extend the robust literature on parents' physical challenges in sport by touching on how such challenges are experienced by parents regarding their mental health and general wellbeing. Importantly, the extent of parents' resources has a strong underlying influence on their ability to manage the challenges of youth sport.

6.3.4 Interconnectedness of Parent and Child Emotions in Sport

Parents' emotional experiences in sport tended to reflect their child's emotional experiences, regardless of how the emotions were interpreted. In fact, parents' greater sense of wellbeing or flourishing as sport parents aligned with periods when their child was succeeding developmentally and making the most of their sport experiences.

Finally, parents reported finding solace in knowing their child was supported by a group outside of the family. This first example illustrates how parents' emotions during competition can mirror the perceived emotions of their child:

“I don't know if it's that I'm kind of feeling his angst. That's how I think it is because I don't care about the outcome. Of course, I want him to win if he wants to win, but I think I feel his anxiety, because I sit there and watch, and I'm glad when it's all over. But when I break it down in my head, I'm not worried about him getting injured, whereas when I watch NRL [rugby league], that's my fear. When it's over, I think 'Thank God he didn't get hurt.' And he goes all right in Jui Jitsu, he wins some, he loses some, but there's no pressure. It's all a kind of learning curve, that's how it's looked on. So, I don't understand my anxiety for that. I don't know if it's kind of like an empathy, kind of feeling what he might be feeling.” (P11)

Similarly, the father in this example explains how his worst moments in youth sport emotionally were tied to his daughter's apparent lack of motivation:

“And like there's just so much that's going on and sometimes you'll be like 'Hey, you know, let's focus on the session, do you want to go for a kick?' and they'll just be like 'Nah' and completely shut down and that to me is probably the worst thing and you kind of feel like 'Am I doing the wrong thing? I'm so invested in this sport, like are you? Have I pushed too hard?' And that would be - I don't know if this is the worst thing but it's definitely the hardest thing.” (P18)

The final example for this code exemplifies how parents can experience performance anxiety during high-stake moments for their child (e.g., championship match). This mother describes her surprise that her son did not experience as much anxiety as her:

“I felt really, really anxious because I wanted them to win and I’m not usually competitive. But I just thought they’ve gone this far, and I’m not usually like that. I really struggled watching the game. I really felt uncomfortable until it was pretty clear that they won. There was a good few minutes left and I could chill out. I was sitting there feeling sick. I’d almost like an excuse not to watch it until the last 10 minutes.” (P11)

To emphasise the importance of developmental success for parents, the next quote offers a rich example of the negative emotion experienced by a father that perceives their child is not making the most of their time in sport developmentally:

“I can't put my finger on whether it was disappointing that he was quite good at footy and I wanted him to keep developing that, or whether it was around the fact that he used to really love it – he used to pester me all weekend, any spare moment, ‘Dad, can we kick the footy? Can we kick the footy?’ And I guess because I loved it, I rarely said no to him. Then suddenly, he didn't want to kick the footy with me anymore, and it wasn't probably because he didn't want to kick the footy, it was just because he had something better, or something he enjoyed more, and that thing didn't involve me. So, I perhaps felt – I don't know if I felt like my feelings were hurt by that – I'm not really sure, I haven't had to analyse it that much. But maybe it was just a combination of those things.”

(P14)

Some parents reported finding solace from knowing their child was supported by a group outside of the family. Specifically, observing their child as happy and supported through sport was reported as invaluable for parental wellbeing when circumstances at home were not ideal:

“But this time yes, the only thing the kids were worried about was Mum was sick. That was the only thing. First Mummy went to see the doctor, but that made no difference to their life. And then Mummy got sick – that made the difference. But not as much to them. They still had their sports, which in this case was netball. And so, in that sense, it doubled the support, because when they were at netball, their netball friends supported them. So, being able to keep on – keep connected – really did make a huge amount of difference. For them, and for me, because I just didn’t have to worry about it then, you know?” (P5)

Altogether, this theme highlights that emotional experiences in sport are often shared by parents and their child-athletes. Therefore, strategies that promote positive emotions among parents or athletes are likely to benefit both ends of the dyad.

6.3.5 A Context for Self-improvement and Validation

The final theme of the current study relates to how youth sport can serve as a vehicle for parents’ self-improvement and validation. Indeed, parents spoke to experiences of gaining skills and behaviours that promote positive mental health due to their child’s engagement in sport, and how sport provides moments for parents to reflect on their parenting and adjust their behaviours accordingly. This next quote provides an example of how positive child-athlete experiences reassures parents that their efforts are well spent:

“Well, it makes me think that their emotional health, that part of it’s okay. The fact that they want to be there, they want to try, they want to be with their friends, they want to be included, and they’re not having arguments and falling out with anyone. They’re out there doing stuff with them, it’s kind of rewarding because I’m thinking that it’s kind of like, and they’re doing something right, they’re happy and connected.” (P11)

In a similar vein, the following parent (P4) touched on how sport provides moments to feel needed as their child transitions into independence: “As they get older, obviously my needs are less, so it [sport] maintains that side I think as a mum to still be able to provide support in a physical way like that for my children.” Additionally, parents described instances where they reflected on undesirable behaviours and deliberately attempted to improve their approach:

“I’ve probably had times where I’ve been a bit over the top and become conscious of that and realised, ‘Hang on, he’s just a kid having a good time; that’s really all that matters. So, I’ve had to rein myself in a little bit, a couple of times, a few times. Not insofar as necessarily the way I’ve been behaving, but just the way I’ve been thinking. I caught myself probably getting a little bit too serious for a kid who’s 10 and wants to have a good time with his mates. So, I’ve had to adjust my attitude towards it.” (P14)

Further, a common code that was closely aligned with parental validation involves perceptions of giving and receiving gratitude. In fact, parents placed great importance on feeling like their child-athletes and partners were grateful for their efforts, which is articulated in this example:

“I think if they said a few more thank you’s, I probably sometimes feel more appreciated and more understood. Same as when my husband’s able to say - I’ve heard him a couple of times say to someone, “She does so much. I don’t know how she manages to do it at all.” Just that recognition I think sometimes provides that stimulus to say, “Actually I’m doing it, I can do this. I’m okay with it.” So yeah, of course a couple more thank you’s here and there, or some kind of appreciation would certainly make me feel more valued.” (P4)

This notion is further emphasised in the following example, wherein a mother notes the imbalance between parental sacrifice and gratitude expressed from the child:

“I don't think my boys will understand the amount of sacrifice and the amount of effort it takes to get them where they need to until they experience it themselves. In saying that, they're not selfish. I get a thanks here and there, but I don't think, if I was to look at the amount of sacrifice, effort, time that goes into me supporting them in their sport, the amount of thanks I get, no, it doesn't equate.”

(P2)

Outside of parenting, youth sport also presented parents with opportunities to learn new skills and make decisions that benefit their mental health and wellbeing. For example, the father in the following quote describes returning to sport due to his daughter's participation:

“I probably took a fair bit of time away from golf from when my second child arrived, through to maybe 18 months ago, 12 to 18 months ago. And then, because my daughter was getting into it and I was going to the golf course with her, I started to practice a lot more, and that obviously made we want to play more. So, I started to play regularly. And I have been playing a lot more regularly.” (P14)

Similarly, many parents touched on using the time during training to be physically active themselves: “And he [husband] and I usually, on a Saturday morning when we take her there, we'll go for a run or a walk around the lake while she swims and then we'll go and pick her up after.” (P3)

Taken together, youth sport can serve as a context for parents to indirectly improve their mental health and wellbeing through validation and self-improvement.

Considering parents are a primary consumer of youth sport, deliberate efforts to provide such opportunities for parents are important and should be prioritised.

6.4 Discussion

The purpose of this study was to examine the perceptions of mental health and wellbeing among parents in relation to their involvement in organised youth sport. Using thematic analysis, the findings in this study can be described in five themes: (a) sport as a platform for family unity; (b) cohesion and conflict among parents and other social agents; (c) structure of youth sport and family equity; (d) the interconnectedness of parent and child emotions in sport; and (e) a context for self-improvement and parental validation. Collectively, the five themes offer a novel perspective on how parents' behaviours, interactions, and observations in and outside the youth sport environment impacts their mental health and wellbeing.

Parents described their experiences of wellbeing through sport in various ways, such as reciting what made them happiest as a sport parent, or which aspects of youth sport they appreciated the most. This took the form of cherished moments with family members, receiving help from other parents, or gaining access to financial aid for their child's sport participation. Returning to Dodge et al.'s (2010) conceptualisation of wellbeing, individuals experience states of wellbeing when their resources outweigh life challenges (i.e., social, psychological, and physical). This conceptualisation may therefore be particularly helpful for the understanding of parental wellbeing in sport going forward. Indeed, parents will never be free from challenges in youth sport, but whether they have the resources to match such challenges may be of primary importance for the parental experience in sport overall. As shown in the current study, the parental experience in sport is not always equitable, and therefore parents that lack resources initially may be further burdened by youth sport. Moving forward, sport

stakeholders and family members that aim to enhance the parental experience in sport may consider an approach that deliberately increases resources and decreases challenges.

This study found that the effect sport had on parents' family life had implications for their mental health and wellbeing. Fundamentally, parents facilitate sport experiences for their child's benefit, thus the experience is inherently familial. Specific to the parent-child dynamic, the meaning and purpose some parents ascribe to their youth sport involvement has been documented (e.g., Coakley 2006). In some families, sport represents the primary medium for parents to emotionally engage with their children, which is an important consideration for parental wellbeing. In the current study, parents' wellbeing was attributed to moments of closeness with their child (e.g., during transportation), having novel experiences with them (e.g., travelling to a tournament), and developing shared interests that remain for life (e.g., spectating sport together on a weekly basis). Regarding parents' partners, the relationship between marital relationships and wellbeing are well documented (Carr & Springer, 2010), and this study found that youth sport can strengthen or challenge that link. Parents that co-facilitated sport reported feeling shared respect and admiration for their partner and gained unique opportunities to spend time together (e.g., a walk during training, weekend tournaments). In sum, the current study suggests that youth sport can serve as a context for meaningful and enriching family experiences.

This study reaffirms that when parents involve their children in organised youth sport, the size of their social network, the amount of social support given and received, and their perceptions of group identities are subject to change. Importantly, however, this study also showed that changes in parents' social dynamic as a result of youth sport is not always welcomed and could even lead to isolation or social conflict. To illustrate

this point, newcomers to the community were grateful for the relationships offered in sport (Holt et al., 2011), while established locals perceived the same relationships as superfluous. Considering this, deliberate efforts early in a youth sport experience (i.e., beginning of the season) to connect all parents within the same team may be helpful. Such a process could help clarify which parents are seeking new social relations and which are satisfied with their current network. Specific to symptoms of mental health, parents reported the support received from other parents as invaluable for their time and psychological stress management. In other cases, parents discussed experiences of anxiety due to the behaviour and norms of other parents. Bringing this together, to ensure the social relations offered in sport are experienced favourably and do not burden parents' mental health, parent groups should encourage inclusivity and establish values that are expected to be adhered to by all members.

The physical demands (e.g., time and financial) of youth sport are among the most researched in sport parenting literature (e.g., Holt et al., 2011). The current study sought to extend this body of work by understanding how such physical demands influence parents' mental health and wellbeing. The results point to the importance of the structure of the sport program (i.e., level of competition, frequency of delivery, and developmental period), and each family's unique life situation. Related to the former, parents had varying opinions of their ideal frequency of weekly youth sport events before becoming unmanageable. Nonetheless, the extent to which such structural variables were experienced as challenging largely depended on parents' social position (e.g., SES, household structure, health status). Thus, to ensure the demands of organised sport are not leading to mental health problems among parents, sport stakeholders (i.e., coaches, managers, and administrators) may consider approaching their interactions with parents through an equitable lens. As one supporting example, lower SES parents

spoke to the immense benefits of government sport vouchers, and therefore ensuring parents are aware of such financial opportunities and can access them is critical (Holt et al., 2011; Tamminen et al., 2021). Furthermore, lower-SES parents described being barred to receiving some of the potential benefits of spending time in the youth sport environment. Namely, lower-SES parents were more likely to work during evenings and weekend and had less flexibility with their schedule. As such, the reduced time spent in sport often isolated parents from the larger parent group, and in turn, led to less social support and more perceived demands. Altogether, a youth sport approach that considers each family's unique position is likely one that will offer the greatest experience for parents.

An intriguing finding from the current study was the extent to which parents' and athletes' emotional experiences in sport are connected. This supports previous work wherein parents report living vicariously through their child's sport experiences (e.g., Dorsch et al., 2015a; Eckardt et al., 2021; Holt et al., 2008). Considering emotional experiences and one's ability to regulate emotions are predictive of mental health (Berking & Wupperman, 2012), the way in which parents' and child-athletes' emotions are regulated in sport is likely an important avenue to consider. In this study, parents discussed experiences of somatic anxiety during competition based on their perceptions of their child's emotional state. Conversely, parents' emotional state appeared optimal when they perceived their child to be flourishing in sport. As such, sport parents' mental health and wellbeing may benefit from attempts to regulate their child's emotions in sport – either from themselves or other social agents (e.g., teammates and coaches). Everything considered, the current findings point to the importance of considering parent and athlete emotions in sport as a shared experience.

The final theme that warrants discussion involves thinking of organised youth sport as a context for self-improvement and validation among parents. Previous sociological work has suggested that enrolling children in youth sport is an extension of parenting, and that child-athlete success in sport can serve as an indicator for parenting quality (Coakley, 2006). This notion was supported in the current study, whereby parents felt satisfied and accomplished when their child-athlete seemingly enjoying their sport experience and developing as a person. Relatedly, organised sport presented parents with opportunities to feel needed as their children aged towards independence, thereby confirming personal identities (i.e., identity of being a parent). Moreover, findings from this study extend a small body of research wherein parents adopt skills and healthy behaviours as a result of their involvement in organised youth sport (e.g., Dorsch et al., 2015a). For example, despite numerous accounts of lost time due to sport facilitation, many parents discussed utilising the time during training sessions for their own benefit (e.g., physical activity, social catch-up). Approaching this finding through an applied lens uncovers the potential of youth sport as vehicle for parental health and wellbeing more broadly. Sport teams may consider organising parent-led activities that capitalise on time already spent in the youth sport environment.

6.4.1 Limitations and Future Directions

There are limitations worth noting from the current study. First, although the sample was diverse in terms of sport-related variables (i.e., level and type of sport), participants were culturally homogenous. This is important to highlight considering perceptions of mental health and wellbeing can differ between cultures, and therefore future work should aim to gather perceptions from non-Western sport families. In a similar vein, the current sample was predominantly female and thus the generated themes may misrepresent the fatherly experience in youth sport. It should be noted,

however, that we sampled participants with varying mental health (i.e., high and low levels of wellbeing) and sport (i.e., individual and team sport) experiences. This strategy allowed us to gather rich information across the spectrum of mental health experiences among sport parents. Furthermore, although accepted definitions did guide our inquiry, this study was limited in that no explicit theoretical model or framework was applied to examine mental health perceptions among sport parents. Our atheoretical approach was chosen due to the infancy of specific literature on parental mental health in sport, and the lack of available frameworks to examine this phenomenon. As echoed in Dorsch et al. (2021), future examinations of parental involvement in sport could strongly benefit from theoretical approaches that consider parents as one of the primary agents in the sport system.

Although many examples for future work have been foreshadowed throughout the current discussion, findings from this study uncovered numerous avenues to address and enhance the mental health and wellbeing of youth sport parents. Perhaps most importantly, the quality of parents' relationships (i.e., familial and social) in sport appear to have noteworthy influence on the parental experience. Therefore, interventions efforts that aim to maintain harmony and support among parents and child-athletes, other parents, and coaches will likely have substantial influence on parent wellbeing. Relatedly, parents are a primary consumer of youth sport as they often initiate their child's involvement, cover the financial costs, and spend considerable time facilitating the experience. As such, designing sport programs that consider outcomes of all stakeholders (i.e., including parents) is long overdue. To achieve this aim, practitioners and key stakeholders should provide opportunities for parents to reflect on their experiences and voice any concerns. Altogether, coaches, administrators, and

practitioners should foster and encourage opportunities for parents to benefit physically, socially, and emotionally through their involvement in organised youth sport.

6.5 Conclusion

The findings from this study offer a novel understanding of how the complexities of parenting in youth sport influence perceptions of mental health and wellbeing. Although certain circumstances can have a pernicious effect on parents' mental health, youth sport is uniquely positioned to benefit parents through multiple inherent mechanisms, such as family engagement and social support. In fact, many developing countries have high participation rates among children and adolescents, and therefore leveraging youth sport as a vehicle to enhance parental mental health and wellbeing may be a relatively accessible public health approach. Moving forward, deliberate efforts to maximise meaningful moments for parents in sport should be prioritised.

Chapter 7: General Discussion

7.1 Summary of the Research Program

The overall aim of this doctoral program of research was to further the understanding of how having children involved in organised youth sport impacts parents' mental health and wellbeing. To achieve this aim, the first study systematically reviewed and synthesised, assessed study quality, and proposed a descriptive model of the qualitative literature pertaining to parental experiences in youth sport (Study 1). As such, Study 1 synthesised relevant qualitative literature on the parent experience in youth sport, and offered a novel, descriptive model wherein parents experience outcomes that span single (e.g., emotional reactions, interpersonal behaviours, learned behaviours, and resource expenditure) and multiple-events (e.g., health and wellbeing, identity, social relationships, and parental satisfaction) as a result of their involvement in organised sport. Moreover, the literature reviewed and synthesised in Study 1 demonstrated that parents provide ongoing financial, temporal, and emotional investment to facilitate their children's sport experiences. Perhaps most importantly, Study 1 also demonstrated that contrary to the popular dichotomous characterisation of parental experiences in sport (i.e., positive or negative, pressuring or supportive), parent-specific outcomes in youth sport exist across a spectrum. Among the outcomes, parental mental health surfaced as an important, yet relatively unexplored outcome in youth sport literature.

The aim of Study 2 was to investigate the relationship between having a child involved in youth sport on primary (i.e., parent that knows the child best) and secondary parents' mental health. This exploratory study utilised a large national dataset to provide some initial clarity regarding how parents' involvement in sport (i.e., number of days involved per week, number of hours per day) predicted mental health outcomes.

Additionally, group differences were examined between parents of adolescents involved in team sport only, individual sport only, both team and individual sport, and non-participating adolescents. The findings showed that primary parents of adolescent sport participants experience a mixed-symptom profile of mental health outcomes, wherein they report higher life stress and time pressure, yet lower psychological distress than parents of non-participating adolescents. Furthermore, the number of days per week and hours spent per day in organised sport predicted primary parents' time pressure and life stress. Provided that all significant effects detected in Study 2 were among primary parents, a larger finding from Study 2 is that two parents from the same household may have different mental health experiences related to their youth sport involvement. Nevertheless, the mixed-symptom profile of mental health outcomes highlights that parental mental health can exist on varying ends of the spectrum simultaneously. It was therefore plausible to assume that other social-relational variables have a meaningful impact on parents' mental health in sport.

In an effort to understand the mixed symptom profile of mental health experience found in Study 2, the purpose of Study 3 was to test whether having children involved in organised sport was associated with increased social support among parents. Using similar procedures as Study 2, data from the LSAC highlighted that primary parents with children involved in team-sport only or both types of sport reported stronger perceptions of social support than primary parents of non-sport participants. In addition, the number of days per week that adolescents spent involved in sport activities positively predicted social support among primary parents. Importantly, however, Study 3 examined perceptions of social support more generally (i.e., the measure was not specific to the youth sport environment). At this stage of the current research program, it was clear that sport parenting was associated with unique mental health experiences,

and that social support may represent an important mediating factor in the relationship between youth sport participation and parental mental health.

The purpose of Study 4 was to examine the potential parallel mediating roles of social identity, social support, and parent-child relationship quality for the relationship between parents' perceived demands in youth sport and measures of mental health (i.e., psychological distress and wellbeing). In addition to examining more potential mechanisms of parental mental health in sport, Study 4 went beyond objective time measurements (e.g., days per week) and instead measured parents' subjective understanding of their demands in youth sport. Findings revealed that social identity and parent-child relationship quality mediated the relationship between parental demands in sport and wellbeing. Moreover, parent-child relationship quality mediated the relationship between parental demands in sport and psychological distress, whereas no mediation effects were detected for parents' perceptions of social support. Altogether, Study 4 offered further clarity with respect to how parents' interactions in the youth environment predict mental health experiences. However, the specific details of how parents' interactions with their child and other parents predict their mental health remained an important gap in this doctoral research program.

In an effort to address the remaining gaps from the previous studies, Study 5 aimed to go deeper and qualitatively examine perceptions of mental health and wellbeing among parents in relation to their involvement in organised youth sport. Following semi-structured interviews with Australian youth sport parents, Study 5 revealed that parents' mental health experiences are influenced by the extent to which their family is flourishing through sport, whether their interactions with other social agents are cohesive or contentious, and whether parents have the necessary resources to accommodate the requirements of youth sport programs. Furthermore, this study found

that parents and child-athletes often share emotional experiences in youth sport, and that organised sport can serve as a context for parents to validate their parenting and engage in self-improving behaviours. Together, Study 5 provided important clarity regarding how parents' roles, interactions, and behaviours in youth sport led to favourable mental health outcomes.

7.2 Aggregate Findings from the Research Program

The collective findings from the five-study research program offer a novel perspective on parental mental health in organised youth sport. In short, parental mental health outcomes that result from involvement in organised youth sport depend on whether the youth sport environment is designed to meet their familial, social, and personal needs. For example, in addition to the familial literature synthesised in Study 1, Studies 4 and 5 revealed the importance for parents to leverage the time spent involved in youth sport to foster meaningful relationships with their child-athletes. Although this is not a novel finding on its own (e.g., Clarke et al., 2016), the implications for parental mental health are noteworthy. A substantial body of work points to the potential conflict that can arise between parents and athletes in sport, often due to misaligned goals and pressuring behaviours exhibited by parents (for a review, see Rouquette et al., 2021). Although these works highlight the consequences of negative parent-child relations for athletes, the current research program extends this by demonstrating the implications for parents' mental health and wellbeing. It is therefore imperative that youth sport environments are designed to promote prosocial family interactions and dissuade punitive parent behaviour. One avenue through which this could be achieved is using sport to facilitate supportive communication among families. In fact, parents in this research program discussed the importance of family discussions during transportation to and from sport, and that receiving words of gratitude from their

child-athletes contributed to their wellbeing. Therefore, findings from this research program provide clear direction for future interventions aimed at enhancing the family experience in youth sport.

Aggregating the findings from the current research program also provides novel insight regarding how the youth sport environment can serve as a meaningful context for parental wellbeing. Prior to this research program, it was known that having children involved in youth sport can lead to changes in parents' social networks and associated support, however the effects on parents' mental health were unclear. To this end, we examined two primary variables to understand parents' interactions with other parents in the youth sport environment – social support and social identity. The key finding here is that although involvement in youth sport is reliably associated with social support from other parents, the extent to which parents identify with the parent-group is a more salient predictor of mental health and wellbeing. At face value one may assume that the increased opportunities to interact with other adults offered through youth sport is welcomed by all parents, but this assumption was not evident in the data. Indeed, each parent that enrolls their child in organised sport arrives with a pre-existing social network, and with varying levels of satisfaction with that network. As such, in the same way that youth sport can serve as an invaluable context to connect parents with their community (e.g., Warner et al., 2015), it can also overburden parents and result in unwanted social demands (as found in Study 5). Therefore, a more helpful approach to leverage the social youth sport environment for improved mental health may be in enhancing group membership. More specifically, sport programs that consider parents as part of the team, create opportunities for bonding, and frame the parent-group as a positive and important part of their life are likely to have a meaningful influence on parental mental health (Bruner et al., 2020; Sutcliffe et al., 2022).

As a final overarching finding of the research program, facilitating favourable mental health outcomes among parents requires a balance of personal demands and resources. Expending resources is unavoidable for parents that enrol their children in sport, but whether such expenditures lead to mental health challenges is dependent on whether those challenges exceed parental resources (Dodge et al., 2012). For example, findings from Study 5 revealed that financial demands of youth sport are experienced differently between one- and two-parent households. Similarly, time demands become increasingly manageable when multiple parents divide the load. This is unfortunate for parents that facilitate sport on their own, as financial and time demands not only drain personal resources but impede them from further pursuing their own self-care. To address this important concern, youth sport programs and the stakeholders within them (e.g., coaches and administrators) should account for parents' individual needs early in the sport experience. Implementing strategies that inform parents about financial and time support options would likely have a meaningful effect on parents' mental health and wellbeing (Tamminen et al., 2021). In sum, the parental experience in youth sport is best supported by an environment that allows their family to flourish, provides opportunities to develop group membership if desired, and ensures the demands of youth sport do not outweigh their physical and emotional resources.

7.3 Theoretical Implications

The findings from this doctoral research program have several theoretical implications. As a first step, it is important to return to the descriptive model proposed in Chapter 2. Prior to any empirical work, this research program commenced by synthesising the literature into a descriptive model that highlights how parents experience short-term (i.e., single competitions) outcomes in the youth sport environment (e.g., acute emotions, interactions with other parents). Then, as parents

spend greater amounts of time engaged in youth sport activities, they become subject to more complex outcomes such as changes in health, identity formation, and relationship quality. After considering findings from the four subsequent empirical studies, there are components of the model that are supported while others that require adjustment or further examination. As an example of the former, the model was accurate in the hypothesis that time, financial, and emotional investments have an ongoing impact on parent-specific outcomes, including mental health. Additionally, findings from Chapters 5 and 6 (Studies 4 and 5) support a link between parents' interactions in the youth sport environment, ensuing prosocial or antisocial exchanges, and resultant mental health. With respect to how the model could be improved, more complex outcomes such as mental health and social identity were considered variables of the same level that could coexist. However, findings from this research program highlight that social identity may instead be one mechanism through which parental wellbeing is influenced in sport. Moreover, the categorisation of outcomes as spanning from single- or multiple-events is likely to be an oversimplification. Although there does appear to be a directional trend for certain outcomes, the complexity of sport parenting may result in very meaningful outcomes in short periods of time, whereas it may take other parents much longer to grasp the potential meaning and purpose offered through sport (see Coakley, 2006). Taken together, although the model proposed in Chapter 2 provides a helpful illustration of the various outcomes experienced by parents, the findings from this research program, as well as any future research, can lead to model improvements.

Furthermore, despite the establishment of links between parent involvement in sport and mental health outcomes in this research program, there remain multiple steps before having any level of meaningful effects on sport parents' mental health.

Following the Behavioural Epidemiology Framework (BEF; Sallis et al., 2000),

establishing links between behaviours and health outcomes (step 1) is to be followed by developing high-quality methods to measure the behaviour (step 2), identifying factors that influence the behaviour (step 3), and finally evaluate interventions that attempt to change the behaviour (step 4). Knowing that a link exists between parental involvement in sport and mental health outcomes, the next step requires developing valid and reliable measures of sport involvement among parents. Indeed, one limitation of this research program is the measures used to assess parents' involvement in youth sport (discussed in more detail below). Examples include the number of days their child-athletes spent engaged in sport per week, the number of hours their child-athletes spent engaged in sport during a typical participation day, and the extent to which parents' home life revolved around youth sport activities. As such, measures that accurately assess parents' subjective understanding of their role in youth sport and associated demands are needed. One potential avenue to address this step is to evaluate the psychometric properties of an adapted version of the Sport Engagement Questionnaire (SES; Guillen & Martinez-Alvarado, 2014). The SES is a three-dimensional measure that assesses vigour (i.e., elevated levels of resilience in the face of challenges), dedication (i.e., being strongly involved in a significant task), and absorption (i.e., concentration and immersion in the task). Considering the authors comment on the link between sport engagement and wellbeing among athletes, this measure may be apt for examining parental mental health going forward.

Moving on to theoretical frameworks that apply to youth sport parents more directly, Dorsch et al. (2022) have recently provided a novel integrated understanding of the youth sport system. The framework identifies parents as an integral component of the family subsystem, which can influence and be influenced by athletes' range of experiences in youth sport. The authors highlight that parents seek support from others

to meet the demands of youth sport, lean on coaches to understand their child's sport-related needs, and encourage their child-athletes to develop family and social relationships in sport. Findings from the current research program support this framework in that parents' mental health experiences are influenced by the balance of challenges and resources (e.g., social support), and that parents often stress the importance of family and social connection through organised sport. Although this model highlights some of the complexities of sport parenting, it is nonetheless athlete-centred and does not capture the entire parental experience in youth sport. Therefore, scholars interested in examining parent-specific outcomes in sport with underlying theory may need to consider frameworks that recognise parents (alongside athletes) as primary agents of the youth sport system.

It is important to discuss the potential for situating the current findings within theories of family development. Based on family systems theory (Bowen, 1978), Hellstedt's (1987) typology of parental influence in sport categorises parents as either under-involved (i.e., insufficient investment in their child's sport), moderately involved (i.e., a balance between parental affirmation and child-athlete decision making), or over-involved (i.e., extreme involvement in their child's sport). Speculatively, it may be that under-involved parents are insufficiently involved in youth sport to have any meaningful influence on their mental health, while over-involved parents are more prone to mental health problems due to unrealistic expectations for their child (Hellstedt, 1987). Effectively, moderate involvement would position parents to manage the challenges and experience the benefits afforded from youth sport. However, it must be noted that Hellstedt's (1987) original typology focused on the involvement of sport families as opposed to parents alone. Therefore, a family-systems approach wherein each subsystem (i.e., parents, child-athletes) is considered for the overall family

experience may therefore be well suited to support parent-athlete relationships in sport, and in turn, parental mental health.

Moreover, based on tenets of attachment theory (Bowlby, 1988) and motivation (Deci & Ryan, 1985), the *thriving through relationships model* (Feeney & Collins, 2015) may also align with parental mental health in sport. The model suggests that when dyads (e.g., parents and athletes) navigate opportunities and adversities that arise in life together, long-term wellbeing for each member can be achieved. Such positive outcomes are however dependent on the quality of support following opportunities and adversities. Behaviours such as transparent communication, active listening, and supportive encouragement are considered ideal to foster thriving. Applying this to youth sport, parents and athletes face enumerable opportunities and challenges that require responsive support in order to gain wellbeing through the experience. Taken together, there are multiple fruitful avenues to conduct theory-driven examinations of parental mental health in organised youth sport going forward. These are discussed in the following section.

7.4 Practical Implications

There are several practical implications worth discussing in light of the collective findings from the research program. Foremost is the need to establish youth sport environments that promote healthy relationships between parents and other social agents (e.g., child-athletes, other parents, coaches). This may be achieved through two mediums: (a) collaborative effort from all stakeholders involved in the youth sport system; and (b) policy to monitor, reinforce, and evaluate appropriate behaviour towards and from parents. Returning to the aforementioned ecological framework of the youth sport system (Dorsch et al., 2022), recreational sport systems that favour parental mental health requires dynamic collaboration between subsystems. As such, to protect

parents' mental health and enhance their wellbeing in youth sport, there requires understanding and appreciation between parents and individuals (e.g., athletes, coaches, parents, volunteers), groups (e.g., team), and organisations (e.g., association, sport governing body). For example, coaches should account for parents' needs from the beginning of sport experiences, which could involve having coaches outline their expectations for athletes and parents prior to any competition. Further, in an effort to create cohesive relationships between coaches and parents, coaches may consider including parents in decisions when appropriate. Similarly, sport associations and the employees within them should provide parents with information and guidance that may enhance their experiences, such as information on government sport vouchers and behavioural expectations in the youth sport environment (see Holt et al., 2011; Tamminen et al., 2021). Sport bodies are therefore encouraged to develop policy to help normalise these coach behaviours for parents' benefit. As opposed to the traditional understanding of "having a return on their investment" for sport parents, wherein their financial and time investments warrant child-athlete success, the youth sport system should be expected to provide parents with returns on their investment in the form of inclusion, support, and opportunities to flourish.

One practical way to promote parent flourishing identified in Study 1 and supported in Study 5 is implementing opportunities for health-related behaviours through youth sport. A key finding from the research program is that youth sport involvement is associated with time pressure for parents, yet parents are open to utilising the time spent in sport for their own benefit. Spectating competitions can lead to meaningful changes in emotional and social outcomes; however, as voiced in Study 5, parents do not appear to place similar weight on training sessions. As such, using training sessions to benefit both athletes and parents may be normalised to achieve this

aim. For example, a youth sport team may establish parent leaders that are tasked to organise physical exercise or social gatherings during training. Depending on the sport, parents may utilise unused space to engage in simple forms of recreational sport (e.g., soccer) or physical activity (e.g., walking or running groups). Adults, and in particular parents, are often unable to engage in their own leisure due to child-related time demands (e.g., Bean et al., 2019), and therefore leveraging contexts in which ample time is already spent may serve as a fruitful public health strategy. As outlined above, establishing such opportunities for parents would require collaboration with other individuals (i.e., coaches), the team, and associations to ensure parents' physical and psychological safety. In sum, designing interventions that utilise time spent in the youth sport environment for parents' benefit, while leaving the most salient components of sport parenting undisturbed (i.e., observing their children compete and enjoy themselves) represents a fruitful opportunity to address parental mental health and wellbeing.

With the above intervention approaches in mind, sport stakeholders and program designers should be aware of potential implementation issues with this population. As found in Studies 1, 2, 3, and 5, parents' experiences in sport are influenced by personal (e.g., socioeconomic status) and contextual factors (e.g., type of sport), and therefore a "one size fits all" approach may be unhelpful for parent-targeted interventions. For example, an approach wherein training sessions are utilised for parents may not reach those who need it most. Lower-earning or single-parents may deliberately use evenings of training sessions to work or engage in child-care. Thus, intervention designers and parent leaders may consider a flexible approach that suits the diverse needs of parents (see Thrower et al., 2019). Further, parents from Study 5 spoke to the importance of individual desirability in these respects. Parents enter youth sport experiences with

varying levels of social capital, family connection, and health norms, and therefore intervention designers should not assume all parents from the same team have similar goals and motivations for their involvement in youth sport (Thrower et al., 2019; Knight et al., 2019).

7.5 Limitations and Future Directions

The five studies included in this research program have limitations and implications for future research. One apparent limitation is that the findings are situated within the first phase of the behavioural epidemiology framework – the level at which links are established between behaviours and health outcomes. This level of evidence is nonetheless important for concepts that are in their infancy, such as parental mental health in sport. However, the cross-sectional nature of the research program can only draw associations between parents' involvement in youth sport, social variables, and mental health outcomes. Causal inferences are therefore not offered from the findings, and caution is encouraged when interpreting the direction of the associations. For example, parents appear to experience more wellbeing when the relationship with their child is enhanced through youth sport, however, it is equally possible that parents with high wellbeing are more likely to engage in their child's sport activities. To help clarify directionality, longitudinal work that allows for examination of between- and within-parent changes in mental health across a sport experience would be an invaluable addition to the literature.

Another limitation that applies throughout the research program is the overrepresentation of female participants (i.e., mothers). Study 1 found that sport parenting literature is approximately 60% female, and primary parents from Studies 2 and 3 (i.e., parent that knew the child best) were over 90% female. To achieve balance in the sample, deliberate steps were taken to collect data from male participants in

Studies 4 and 5, yet such efforts were repeatedly met with challenges. Steps to reach male parents included deliberately approaching more males at youth sport tournaments and sending more interview invitations to fathers or male caregivers. Anecdotally, approximately one in five female parents that were invited to participate in Study 4 agreed to complete the questionnaire, whereas approximately one in ten male parents agreed to participate. Moreover, interview invitations in Study 5 were responded to and accepted at a meaningfully higher rate among female parents compared to male parents. As such, scholars interested in understanding the parental experience in youth sport may benefit from innovative, yet un-invasive strategies to gather perspectives from male parents. Considering organised youth sport represents a salient context for male parents to engage with their children (Coakley, 2006), male parents may be unwilling to sacrifice any time while their child is engaged in sport, whether that be during training or competitions. Researchers should therefore consider methodological approaches that allow fathers to contribute insight outside of traditional sport periods. One potential approach is to have male parents engage in audio diaries (Crozier & Cassell, 2016), whereby participants are asked to reflect and record their experiences following a particular event. Alternatively, the Electronic Activated Recorder (EAR; Herbison et al., 2020) is an observational tool that collects rich data without active engagement from the participant. Researchers could therefore examine how interactions between both parents and their child-athletes lead to emotional experiences with little participant engagement. Despite examination of primary and secondary parents in Studies 2 and 3, the lack of parent-parent comparison represents a limitation of the thesis. Scholars may consider a family systems approach to examine how two parents from the same household are influenced by their child(ren)'s sport participation.

There are also limitations of the research program that arose during the COVID-19 pandemic. The pandemic began five months after the commencement of the research program, thus limiting options for research design and data collection. For this reason, Studies 2 and 3 utilised data from the Longitudinal Study of Australian Children (LSAC), a national sample of Australian youth and parents. Although the LSAC did include sound measures of mental health symptoms and child sport participation, measures of the sport environment were not available. As such, the LSAC offered a valuable contribution to the research program but was limited in that the research team had no influence on the included measures. Moreover, Studies 3 and 4 involved data collection conducted by the doctoral candidate, which occurred during a period that included state-wide lockdowns. This is important to note because lockdowns both impeded data collection efforts and had an influence on the resultant findings. The candidate approached approximately 2000 parents to collect the desired sample for Study 4, yet only 10% agreed to participate (approximately 200 parents). This may have been due to social norms regarding interacting with unfamiliar individuals, or because parents were particularly engaged in the event following time away from sport. In addition, parents that agreed to participate were required to scan a QR code and complete the questionnaire on their mobile phones (i.e., in line with a COVID-safe protocol). Despite being a helpful adaptation, many parents did not complete the questionnaire in full. Subsequently shifting to online participant recruitment served the research program well, yet questionnaire completion remained an issue. Finally, interviews conducted in Study 5 were required to be remote (i.e., not face-to-face), and therefore participants' responses may have been influenced by the methodology. For example, three interviews were not included in Study 5's analysis due to unengaged

participants. Taken together, the doctoral research program was limited due to measures that were in place throughout the program to address the global coronavirus pandemic.

Related to the above, there are equally important conceptual limitations to note in the current thesis. As previously discussed, using the LSAC for Studies 2 and 3 offered a suitable approach to study parental mental health in sport for multiple reasons (e.g., large heterogenous sample, COVID-19 restrictions). However, using a national dataset is accompanied with unique limitations as the researcher has no influence on the measures used. In this thesis we apply Keyes (2002) conceptualisation of mental health, which involves a continuum of emotional, psychological, and social wellbeing. Although the variables examined in the LSAC do fall within this conceptualisation of mental health, better measurement options exist. For example, the LSAC was particularly limiting in Study 3 as measures of social support did not specifically target support received from other sport parents. Therefore, although using large national datasets has many strengths, the challenges in aligning one's conceptualisation with predetermined measures is an undoubtable limitation.

Regarding further avenues for future research, the understanding of parental mental health in sport would benefit from measurement development, incorporation of theory, and innovative methods that allow for dyadic approaches. As alluded to earlier, adapting available measures or developing new measures of parental involvement in sport is important for the field moving forward. Theoretically, the recently developed systems theory of the youth sport system considers parents as a primary subsystem and provides a framework for designing studies aimed at enhancing the parental experience in sport (Dorsch et al., 2021). Finally, extending work from Holt et al. (2008; 2011), parents in Study 5 reported that emotional experiences in youth sport are often shared between them and their child-athletes, highlighting the promise for dyadic research

approaches going forward. As an example, scholars may consider having parent-athlete dyads engage in a structured diary approach to test whether navigating emotional experiences together impacts mental health in both members.

7.6 Conclusion

This research program extends the youth sport literature by offering novel insight pertaining to parents' mental health and wellbeing. Collectively, the five included studies synthesised the parental experience in youth sport, established links between sport participation and parental mental health, and identified mechanisms that underpin mental health symptoms and wellbeing among parents. The resulting insight provides scholars with clear theoretical and practical direction for parents' sport experiences going forward. At present, parents are sometimes characterised as agents simply present to facilitate their child's sport experiences. It is important to remember, however, that parents are the primary consumers of organised youth sport, and without their sacrifices, there would be no resulting product for young athletes. As an integral component of the youth sport system, sport programs should recompense their primary consumers by providing them with opportunities to flourish through meaningful family, social, and resource support.

References

- Ahn, S., & Fedewa, A. L. (2011). A meta-analysis of the relationship between children's physical activity and mental health. *Journal of Pediatric Psychology, 36*(4), 385-397. <https://doi.org/10.1093/jpepsy/jsq107>
- Aiken, L. S., & West, S. G. (1991). Multiple regression: Testing and interpreting interactions. Newbury Park, CA: Sage.
- Allen, J., Balfour, R., Bell, R., & Marmot, M. (2014). Social determinants of mental health. *International Review of Psychiatry, 26*(4), 392-407.
- Anderson, J. C., Funk, J. B., Elliott, R., & Smith, P. H. (2003). Parental support and pressure and children's extracurricular activities: Relationships with amount of involvement and affective experience of participation. *Journal of Applied Developmental Psychology, 24*(2), 241-257. <https://doi.org/10.1016/S0193-3973>
- Anding, J. E., Röhrle, B., Grieshop, M., Schücking, B., & Christiansen, H. (2016). Couple comorbidity and correlates of postnatal depressive symptoms in mothers and fathers in the first two weeks following delivery. *Journal of Affective Disorders, 190*, 300-309. <https://doi.org/10.1016/j.jad.2015.10.033>
- Archer, M. (2007). The ontological status of subjectivity: The missing link between structure and agency. In C. Lawson, J. Latsis, & N. Martins (Eds.), *Contributions to social ontology* (pp. 17-31). London: Routledge.
- Aubert, S., Barnes, J. D., Abdeta, C., Nader, P. A., Adeniyi, A. F., Aguilar-Farias, N., ... & Chang, C. K. (2018). Global matrix 3.0 physical activity report card grades for children and youth: results and analysis from 49 countries. *Journal of Physical Activity and Health, 15*(s2), S251-S273

- Australian Bureau of Statistics (2005). *Household income and income distribution, Australia 2003-04 (Appendix 3)*. Canberra, Australia: Australian Bureau of Statistics
- Australian Bureau of Statistics. (2008). *An introduction to Socio-Economic Indexes for Areas (SEIFA) 2006*. Canberra, Australia: Australian Government.
- Australian Institute of Health and Welfare (2013). *Young Australians: their health and wellbeing*. Canberra: Australian Institute of Health and Welfare.
- Bandura, A., & Walters, R.H. (1963). *Social learning and personality development*. Holt Rinehart and Winston: New York.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173-1182.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497-529. <https://doi.org/10.1037/0033-2909.117.3.497>
- Baxter-Jones, A. D. G., & Maffulli, N. (2003). Parental influence on sport participation in elite young athletes. *Journal of Sports Medicine and Physical Fitness*, *43*(2), 250-255.
- Bean, C., Fortier, M., & Chima, K. (2019). Exploring challenges and strategies associated with the demands of competitive male youth hockey on mothers' health. *Leisure*, *43*(1), 125–150. <https://doi.org/10.1080/14927713.2019.1583075>
- Bean, C. N., Fortier, M., Post, C., & Chima, K. (2014). Understanding how organized youth sport may be harming individual players within the family unit: A literature review. *International Journal of Environmental Research and Public Health*, *11*(10), 10226–10268. <https://doi.org/10.3390/ijerph111010226>

- Bean, C. N., Jeffery-Tosoni, S., Baker, J., & Fraser-Thomas, J. (2016). Negative parental behaviour in Canadian youth hockey: Expert insiders' perceptions and recommendations. *PHEnex Journal*, 7(3), 1-20.
- Berking, M., & Wupperman, P. (2012). Emotion regulation and mental health: recent findings, current challenges, and future directions. *Current Opinion in Psychiatry*, 25(2), 128-134. <https://doi.org/10.1097/YCO.0b013e3283503669>
- Bois, J. E., Lalanne, J., & Delforge, C. (2009). The influence of parenting practices and parental presence on children's and adolescents' pre-competitive anxiety. *Journal of Sports Sciences*, 27(10), 995-1005. <https://doi.org/10.1080/02640410903062001>
- Boneau, R. D., Richardson, B. K., & McGlynn, J. (2020). "We Are a football family": Making sense of parents' decisions to allow their children to play tackle football. *Communication & Sport*, 8(1), 26– 49. <https://doi.org/10.1177/2167479518816104>
- Bowen, M. (1978). *Family therapy in clinical practice*. New York: Aronson.
- Bowker, A., Boekhoven, B., Nolan, A., Bauhaus, S., Glover, P., Powell, T., & Taylor, S. (2009). Naturalistic observations of spectator behavior at youth hockey games. *The Sport Psychologist*, 23, 301-316. <https://doi.org/10.1123/tsp.23.3.301>
- Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. New York: Basic Books.
- Bradbury-Jones, C. (2007). Enhancing rigour in qualitative health research: Exploring subjectivity through Peshkin's I's. *Journal of Advanced Nursing*, 59(3), 290–298. <https://doi.org/10.1111/j.1365-2648.2007.04306>
- Bragg, E., Spencer, N. L., Phelan, S. K., & Pritchard-Wiart, L. (2020). Player and parent experiences with child and adolescent power soccer sport participation.

Physical & Occupational Therapy in Pediatrics, 40(6), 1–14.

<https://doi.org/10.1080/01942638.2020.1746946>

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.

<https://doi.org/10.1111/j.1460-2466.1978.tb01621.x>

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589–597.

<https://doi.org/10.1080/2159676X.2019.1628806>

Breslin, G., Shannon, S., Haughey, T., Donnelly, P., & Leavey, G. (2017). A systematic review of interventions to increase awareness of mental health and well-being in athletes, coaches and officials. *Systematic Reviews*, 6(1), 177-182.

<https://doi.org/10.1186/s13643-017-0568-6>

Bronfenbrenner, U. (2005). *Making human beings human: Bioecological perspectives on human development*. Thousand Oakes, CA: Sage.

Brown, S. F. (2014). How do youth sports facilitate the creation of parental social ties?

Sport in Society, 17(1), 23–37. <https://doi.org/10.1080/17430437.2013.828899>

Bruner, M. W., & Benson, A. J. (2018). Evaluating the psychometric properties of the Social Identity Questionnaire for Sport (SIQS). *Psychology of Sport and*

Exercise, 35, 181-188. <https://doi.org/10.1016/j.psychsport.2017.12.006>

Bruner, M. W., McLaren, C. D., Sutcliffe, J. T., Gardner, L. A., Lubans, D. R., Smith, J.

J., & Vella, S. A. (2021). The effect of sport-based interventions on positive youth development: A systematic review and meta-analysis. *International Review of Sport and Exercise Psychology*, 1–28.

<https://doi.org/10.1080/1750984X.2021.1875496>

- Brustad, R. J. (1988). Affective outcomes in competitive youth sport: The influence of intrapersonal and socialization factors. *Journal of Sport & Exercise Psychology*, *10*(3), 307-321.
- Burgess, N. S., Knight, C. J., & Mellalieu, S. D. (2016). Parental stress and coping in elite youth gymnastics: An interpretative phenomenological analysis. *Qualitative Research in Sport, Exercise and Health*, *8*(3), 237–256.
<http://doi.org/10.1080/2159676X.2015.1134633>
- Cameron, J. E. (2004). A three-factor model of social identity. *Self and Identity*, *3*(3), 239-262. <https://doi.org/10.1080/13576500444000047>
- Carr, D., & Springer, K. W. (2010). Advances in families and health research in the 21st century. *Journal of Marriage and Family*, *72*(3), 743–761.
<https://doi.org/10.1111/j.1741-3737.2010.00728>
- CASP. (2014). Critical Appraisal Skills Programme Checklists. Retrieved October 29, 2014, from [http:// www.casp-uk.net/#!/casp-tools-checklists/c18f8](http://www.casp-uk.net/#!/casp-tools-checklists/c18f8)
- Chamberlain, K. (2015). Epistemology and qualitative research. In P. Rohleder & A. C. Lyons (Eds.), *Qualitative research in clinical and health psychology* (pp. 9–28). Macmillan International Higher Education.
- Charbonneau, E., & Camiré, M. (2020). Parental involvement in sport and the satisfaction of basic psychological needs: Perspectives from parent–child dyads. *International Journal of Sport and Exercise Psychology*, *18*(5), 655–671.
<https://doi.org/10.1080/1612197X.2019.1570533>
- Chen, P., & Harris, K. M. (2019). Association of positive family relationships with mental health trajectories from adolescence to midlife. *Jama Pediatrics*, *173*(12), e193336-e193336. <https://doi.org/10.1001/jamapediatrics.2019.3336>

- Chiu, C. M., Huang, H. Y., Cheng, H. L., & Sun, P. C. (2015). Understanding online community citizenship behaviors through social support and social identity. *International Journal of Information Management*, 35(4), 504-519. <https://doi.org/10.1016/j.ijinfomgt.2015.04.009>
- Clark, M., Costas-Bradstreet, C., Holt, N. L., & Spence, J. C. (2019). Parental perceptions of a national program that funds sport participation for low-income children and youth in Canada. *Leisure Sciences*, 1–17. <https://doi.org/10.1080/01490400.2019.1700573>
- Clarke, N. J., & Harwood, C. G. (2014). Parenting experiences in elite youth football: A phenomenological study. *Psychology of Sport and Exercise*, 15(5), 528–537. <https://doi.org/10.1016/j.psychsport.2014.05.004>
- Clarke, N. J., Harwood, C. G., & Cushion, C. J. (2016). A phenomenological interpretation of the parent-child relationship in elite youth football. *Sport, Exercise, and Performance Psychology*, 5(2), 125–143. <https://doi.org/10.1037/spy0000052>
- Coakley, J. (2006). The good father: Parental expectations and youth sports. *Leisure Studies*, 25(2), 153-163. <https://doi.org/10.1080/02614360500467735>
- Cohn, P. J. (1990). An exploratory study on sources of stress and athlete burnout in youth golf. *The Sport Psychologist*, 4(2), 95-106. <https://doi.org/10.1123/tsp.4.2.95>
- Corbin, J., & Strauss, A. (2008). Theoretical sampling. *Basics of Qualitative Research*, 143-158. <https://dx.doi.org/10.4135/9781452230153.n7>
- Côté, J. (1999). The influence of the family in the development of talent in sport. *The Sport Psychologist*, 13(4), 395-417. <https://doi.org/10.1123/tsp.13.4.395>
- Côté, J., & Fraser-Thomas, J. (2007). Youth involvement in sport. In P. Crocker (Ed.), *Sport psychology: A Canadian perspective* (pp. 270-298). Toronto: Pearson.

- Côté, J., Turnnidge, J., & Evans, M. B. (2014). The dynamic process of development through sport. *Kinesiologia Slovenica*, *20*(3), 14-26.
- Cowley, E. S., Olenick, A. A., McNulty, K. L., & Ross, E. Z. (2021). “Invisible sportswomen”: the sex data gap in sport and exercise science research. *Women in Sport and Physical Activity Journal*, *29*(2), 146-151. <https://doi.org/10.1123/wspaj.2021-0028>
- Craig, L., & Brown, J. E. (2017). Feeling rushed: Gendered time quality, work hours, nonstandard work schedules, and spousal crossover. *Journal of Marriage and Family*, *79*(1), 225–242. <https://doi.org/10.1111/jomf.12320>
- Craike, M. J., Coleman, D., & MacMahon, C. (2010). Direct and buffering effects of physical activity on stress-related depression in mothers of infants. *Journal of Sport & Exercise Psychology*, *32*(1), 23–38. <https://doi.org/10.1123/jsep.32.1.23>
- Crotty, M. J. (1998). *The foundations of social research: Meaning and perspective in the research process*. Thousand Oaks, CA: Sage.
- Cruwys, T., South, E. I., Greenaway, K. H., & Haslam, S. A. (2015). Social identity reduces depression by fostering positive attributions. *Social Psychological and Personality Science*, *6*(1), 65-74. <https://doi.org/10.1177%2F1948550614543309>
- Currie, A., McDuff, D., Johnston, A., Hopley, P., Hitchcock, M. E., Reardon, C. L., & Hainline, B. (2019). Management of mental health emergencies in elite athletes: a narrative review. *British Journal of Sports Medicine*, *53*(12), 772-778. <http://dx.doi.org/10.1136/bjsports-2019-100691>
- Deci, E., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Publishing Co.
- DeFreese, J. D., Dorsch, T. E., & Flitton, T. A. (2018). The parent–child relationship and sport parents’ experiences of burnout and engagement. *Journal of Clinical Sport Psychology*, *12*(2), 218-233. <https://doi.org/10.1123/jcsp.2017-0006>

- Dodge, R., Daly, A.P., Huyton, J., Sanders, L.D. (2012). The challenge of defining wellbeing. *International Journal of Wellbeing*, 2(1), 222–235.
- Dorsch, T. E., King, M. Q., Dunn, C. R., Osai, K. V., & Tulane, S. (2017). The impact of evidence-based parent education in organized youth sport: A pilot study. *Journal of Applied Sport Psychology*, 29(2), 199-214.
<https://doi.org/10.1080/10413200.2016.1194909>
- Dorsch, T. E., King, M. Q., Tulane, S., Osai, K. V., Dunn, C. R., & Carlsen, C. P. (2018). Parent education in youth sport: A community case study of parents, coaches, and administrators. *Journal of Applied Sport Psychology*, 31(4), 427-450. <https://doi.org/10.1080/10413200.2018.1510438>
- Dorsch, T. E., Smith, A. L., Blazo, J. A., Coakley, J., Côté, J., Wagstaff, C. R., & King, M. Q. (2022). Toward an integrated understanding of the youth sport system. *Research Quarterly for Exercise and Sport*, 93(1), 105-119.
<https://doi.org/10.1080/02701367.2020.1810847>
- Dorsch, T. E., Smith, A. L., & McDonough, M. H. (2009). Parents' perceptions of child-to-parent socialization in organized youth sport. *Journal of Sport and Exercise Psychology*, 31(4), 444-468. <https://doi.org/10.1123/jsep.31.4.444>
- Dorsch, T. E., Smith, A. L., & McDonough, M. H. (2015a). Early socialization of parents through organized youth sport. *Sport, Exercise, and Performance Psychology*, 4, 3-18. <https://doi.org/10.1037/spy0000021>
- Dorsch, T. E., Smith, A. L., Wilson, S. R., & McDonough, M. H. (2015b). Parent goals and verbal sideline behavior in organized youth sport. *Sport, Exercise, and Performance Psychology*, 4(1), 19-35. <https://doi.org/10.1037/spy0000025>
- Dorsch, T. E., Vierimaa, M., & Plucinik, J. M. (2019). A citation network analysis of research on parent– child interactions in youth sport. *Sport, Exercise, and Performance*

Psychology, 8(2), 145-162. <https://doi.org/10.1037/spy0000140>

Dorsch, T. E., Wright, E., Eckardt, V. C., Elliott, S., Thrower, S. N., & Knight, C. J. (2021). A history of parent involvement in organized youth sport: A scoping review. *Sport, Exercise, and Performance Psychology*, 10(4), 536-557.

<https://psycnet.apa.org/doi/10.1037/spy0000266>

Driscoll, K., & Pianta, R. C. (2011). Child-parent relationship scale. *PsycTESTS Dataset*.

<https://doi.org/10.1037/t16909-000>

Duan, W., Guan, Y., & Gan, F. (2016). Brief inventory of thriving: A comprehensive measurement of wellbeing. *Chinese Sociological Dialogue*, 1(1), 15-31.

<https://doi.org/10.1177%2F2397200916665230>

Dunn, C., Dorsch, T. E., King, M. Q., & Rothlisberger, K. J. (2016). The impact of family financial investment on perceived parent pressure and child enjoyment and commitment in organized youth sport. *Family Relations*, 65(2), 287-299.

<https://doi.org/10.1111/fare.12193>

Eccles, J. S., & Harold, R. D. (1991). Gender differences in sport involvement: Applying the Eccles' expectancy-value model. *Journal of Applied Sport Psychology*, 3(1), 7-35.

<https://doi.org/10.1080/10413209108406432>

Eccles, J. S., Wigfield, A., & Schiefele, U. (1998). Motivation to succeed. In W. Damon & N. Eisenberg (Eds.), *Handbook of child psychology: Social, emotional, and personality development* (pp. 1017–1095). John Wiley & Sons, Inc.

Eime, R. M., Young, J. A., Harvey, J. T., Charity, M. J., & Payne, W. R. (2013). A systematic review of the psychological and social benefits of participation in sport for children and adolescents: informing development of a conceptual model of health through sport.

International Journal of Behavioral Nutrition and Physical Activity, 10(1), 98-118.

<https://doi.org/10.1186/1479-5868-10-98>

- Elliott, S. K., & Drummond, M. J. (2013). A socio-cultural exploration of parental involvement in junior Australian Rules football. *Asia-Pacific Journal of Health, Sport and Physical Education*, 4(1), 35–48. <https://doi.org/10.1080/18377122.2013.760426>
- Elliott, S. K., & Drummond, M. J. N. (2017). During play, the break, and the drive home: the meaning of parental verbal behaviour in youth sport. *Leisure Studies*, 36(5), 645-656. <https://doi.org/10.1080/02614367.2016.1250804>
- Ericsson, K. A., Krampe, R. T., & Tesch-Römer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review*, 100(3), 363-406.
- Eriksson, M., Nordqvist, T., & Rasmussen, F. (2008). Associations between parents' and 12-year-old children's sport and vigorous activity: The role of self-esteem and athletic competence. *Journal of Physical Activity and Health*, 5(3), 359–373. <https://doi.org/10.1123/jpah.5.3.359>
- Eriksen, I. M., & Stefansen, K. (2021). What are youth sports for? Youth sports parenting in working- class communities. *Sport, Education and Society*, 27(5), 592-603. <https://doi.org/10.1080/13573322.2021.1894114>
- Feeney, B. C., & Collins, N. L. (2015). A new look at social support: A theoretical perspective on thriving through relationships. *Personality and Social Psychology Review*, 19(2), 113–147. <https://doi.org/10.1177/1088868314544222>
- Felker, D. W., & Kay, R. S. (1971). Self-concept, sports interests, sports participation and body type of seventh- and eighth-grade boys. *The Journal of Psychology*, 78(2), 223-228. <https://doi.org/10.1080/00223980.1971.9916907>
- Fraser-Thomas, J. L., Côté, J., & Deakin, J. (2005). Youth sport programs: An avenue to foster positive youth development. *Physical Education & Sport Pedagogy*, 10(1), 19-40. <https://doi.org/10.1080/1740898042000334890>

- Fredricks, J. A., & Eccles, J. S. (2005). Family socialization, gender, and sport motivation and involvement. *Journal of Sport and Exercise Psychology, 27*(1), 3-31. <https://doi.org/10.1123/jsep.27.1.3>
- Frisch, J. U., Häusser, J. A., van Dick, R., & Mojzisch, A. (2014). Making support work: The interplay between social support and social identity. *Journal of Experimental Social Psychology, 55*, 154-161. <https://doi.org/10.1016/j.jesp.2014.06.009>
- Furusa, M. G., Knight, C. J., & Hill, D. M. (2020). Parental involvement and children's enjoyment in sport. *Qualitative Research in Sport, Exercise and Health, 13*(6), 936–954. <https://doi.org/10.1080/2159676X.2020.1803393>
- Gao, M. M., & Cummings, E. M. (2019). Understanding parent–child relationship as a developmental process: Fluctuations across days and changes over years. *Developmental Psychology, 55*(5), 1046-1058. <https://doi.org/10.1037/dev0000680>
- Garst, B. A., Gagnon, R. J., & Stone, G. A. (2019). “The credit card or the taxi”: A qualitative investigation of parent involvement in indoor competition climbing. *Leisure Sciences, 42*(5-6), 589–608. <https://doi.org/10.1080/01490400.2019.1646172>
- Greendorfer, S. L. (1977). Role of socializing agents in sport involvement. *Research Quarterly, 48*(2), 304-310. <https://doi.org/10.1080/10671315.1977.10615426>
- Gottzén, L., & Kremer-Sadlik, T. (2012). Fatherhood and youth sports: A balancing act between care and expectations. *Gender & Society, 26*(4), 639–664. <https://doi.org/10.1177/0891243212446370>
- Gould, D., Feltz, D., Horn, T., & Weiss, M. (1982). Reasons for attrition in competitive youth swimming. *Journal of Sport Behavior, 5*(3), 155-165.

- Gould, D., Feltz, D., & Weiss, M. (1985). Motives for participating in competitive youth swimming. *International Journal of Sport Psychology, 16*(2), 126-140.
- Gould, D., Lauer, L., Rolo, C., Jannes, C., & Pennisi, N. (2006). Understanding the role parents play in tennis success: a national survey of junior tennis coaches. *British Journal of Sports Medicine, 40*(7), 632-636.
<http://dx.doi.org/10.1136/bjism.2005.024927>
- Green, B. C., & Chalip, L. (1997). Enduring involvement in youth soccer: The socialization of parent and child. *Journal of Leisure Research, 29*(1), 61-77.
<https://doi.org/10.1080/00222216.1997.11949783>
- Guan, M., & So, J. (2016). Influence of social identity on self-efficacy beliefs through perceived social support: A social identity theory perspective. *Communication Studies, 67*(5), 588-604. <https://doi.org/10.1080/10510974.2016.1239645>
- Hansen, D. M., Larson, R. W., & Dworkin, J. B. (2003). What adolescents learn in organized youth activities: A survey of self-reported developmental experiences. *Journal of Research on Adolescence, 13*(1), 25-55.
<https://doi.org/10.1111/15327795.1301006>
- Haslam, S. A., Haslam, C., Cruwys, T., Jetten, J., Bentley, S. V., Fong, P., & Steffens, N. K. (2022). Social identity makes group-based social connection possible: Implications for loneliness and mental health. *Current Opinion in Psychology, 43*, 161-165. <https://doi.org/10.1016/j.copsyc.2021.07.013>
- Harandi, T. F., Taghinasab, M. M., & Nayeri, T. D. (2017). The correlation of social support with mental health: A meta-analysis. *Electronic Physician, 9*(9), 5212-5222. <https://doi.org/10.19082/5212>
- Harrington, M. (2006). Sport and leisure as contexts for fathering in Australian families. *Leisure Studies, 25*(2), 165-183. <http://doi.org/10.1080/02614360500503265>

- Harwood, C., Drew, A., & Knight, C. J. (2010). Parental stressors in professional youth football academies: A qualitative investigation of specialising stage parents. *Qualitative Research in Sport and Exercise*, 2(1), 39–55.
<http://doi.org/10.1080/19398440903510152>
- Harwood, C., & Knight, C. (2009a). Stress in youth sport: A developmental investigation of tennis parents. *Psychology of Sport and Exercise*, 10(4), 447–456.
<https://doi.org/10.1016/j.psychsport.2009.01.005>
- Harwood, C., & Knight, C. (2009b). Understanding parental stressors: An investigation of British tennis-parents. *Journal of Sports Sciences*, 27(4), 339–351.
<https://doi.org/10.1080/02640410802603871>
- Harwood, C. G., Knight, C. J., Thrower, S. N., & Berrow, S. R. (2019). Advancing the study of parental involvement to optimise the psychosocial development and experiences of young athletes. *Psychology of Sport and Exercise*, 42, 66-73.
<https://doi.org/10.1016/j.psychsport.2019.01.007>
- Haslam, S. A., Steffens, N. K., Peters, K., Boyce, R. A., Mallett, C. J., & Fransen, K. (2017). A social identity approach to leadership development: The 5R program. *Journal of Personnel Psychology*, 16(3), 113–124. <https://doi.org/10.1027/1866-5888/a000176>
- Hayes, A. F. (2012). *PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modelling*. Retrieved from www.afhayes.com/public/process2012.pdf
- Hayes, A. F. (2015). An index and test of linear moderated mediation. *Multivariate Behavioral Research*, 50(1), 1–22. <https://doi.org/10.1080/00273171.2014.962683>

- Hayward, F. P., Knight, C. J., & Mellalieu, S. D. (2017). A longitudinal examination of stressors, appraisals, and coping in youth swimming. *Psychology of Sport and Exercise, 29*, 56–68. <https://doi.org/10.1016/j.psychsport.2016.12.002>
- Herbison, J. D., Martin, L. J., Slatcher, R. B., Boardley, I., Benson, A., Sutcliffe, J., & Bruner, M. W. (2021). The electronically activated recorder (EAR): A novel approach for examining social environments in youth sport. *International Review of Sport and Exercise Psychology, 14*(1), 260-277. <https://doi.org/10.1080/1750984X.2020.1790025>
- Hines, S., & Groves, D. L. (1989). Sports competition and its influence on self-esteem development. *Adolescence, 24*(96), 861-869.
- Hoff, E., Laursen, B., & Tardif, T. (2002). Socioeconomic status and parenting. In M. H. Bornstein (Ed.), *Handbook of parenting: Vol. 2: Biology and ecology of parenting* (2nd ed., pp. 231–252). Mahwah, NJ: Erlbaum.
- Holt, N. L., Kingsley, B. C., Tink, L. N., & Scherer, J. (2011). Benefits and challenges associated with sport participation by children and parents from low-income families. *Psychology of Sport and Exercise, 12*(5), 490–499. <https://doi.org/10.1016/j.psychsport.2011.05.007>
- Holt, N. L., Neely, K. C., Slater, L. G., Camiré, M., Côté, J., Fraser-Thomas, J., MacDonald, D., Strachan, L., & Tamminen, K. A. (2017). A grounded theory of positive youth development through sport based on results from a qualitative meta-study. *International Review of Sport and Exercise Psychology, 10*(1), 1-49. <https://doi.org/10.1080/1750984X.2016.1180704>
- Holt, N. L., Tamminen, K. A., Black, D. E., Sehn, Z. L., & Wall, M. P. (2008). Parental involvement in competitive youth sport settings. *Psychology of Sport and Exercise, 9*(5), 663-685. <https://doi.org/10.1016/j.psychsport.2007.08.001>

- House, J. S., Umberson, D., & Landis, K. R. (1988). Structures and processes of social support. *Annual Review of Sociology*, *14*(1), 293-318.
- Howard, D., & Madrigal, R. (1990). Who makes the decision: The parent or the child? *Journal of Leisure Research*, *22*(3), 244-258.
<https://doi.org/10.1080/00222216.1990.11969828>
- Jowett, S., & Nezlek, J. (2012). Relationship interdependence and satisfaction with important outcomes in coach–athlete dyads. *Journal of Social and Personal Relationships*, *29*(3), 287-301. <https://doi.org/10.1177/0265407511420980>
- Jowett, S., & Timson-Katchis, M. (2005). Social networks in sport: Parental influence on the coach-athlete relationship. *The Sport Psychologist*, *19*(3), 267–287.
<https://doi.org/10.1123/tsp.19.3.267>
- Hellstedt, J. C. (1987). The coach/parent/athlete relationship. *The Sport Psychologist*, *1*(2), 151-160. <https://doi.org/10.1123/tsp.1.2.151>
- Hurley, D., Allen, M., Swann, C., Okely, A., & Vella, S. A. (2018). The development, pilot, and process evaluation of a parent mental health literacy intervention through community sports clubs. *Journal of Child and Family Studies*, *27*(7), 2149–2160. <https://doi.org/10.1007/s10826-018-1071-y>
- Hurley, D., Swann, C., Allen, M. S., Ferguson, H. L., & Vella, S. A. (2020). A systematic review of parent and caregiver mental health literacy. *Community Mental Health Journal*, *56*(1), 2–21. <https://doi.org/10.1007/s10597-019-00454-0>
- Jeanes, R., & Magee, J. (2011). Come on my son! Examining fathers, masculinity and ‘fathering through football’. *Annals of Leisure Research*, *14*(2-3), 273–288.
<https://doi.org/10.1080/11745398.2011.616483>

- Johansen, P. F., & Green, K. (2019). 'it's alpha omega for succeeding and thriving': Parents, children and sporting cultivation in Norway. *Sport, Education and Society*, 24(4), 427–440. <https://doi.org/10.1080/13573322.2017.1401991>
- Jowett, S., & Nezlek, J. (2012). Relationship interdependence and satisfaction with important outcomes in coach–athlete dyads. *Journal of Social and Personal Relationships*, 29(3), 287-301. <https://doi.org/10.1177/0265407511420980>
- Jowett, S., & Ntoumanis, N. (2004). The coach–athlete relationship questionnaire (CARTQ): Development and initial validation. *Scandinavian Journal of Medicine & Science in Sports*, 14(4), 245-257. <https://doi.org/10.1111/j.1600-0838.2003.00338.x>
- Kanters, M., Bocarro, J., & Casper, J. (2008). Supported or pressured? An examination of agreement among parents and children on parent's role in youth sports. *Journal of Sport Behavior*, 31(1), 64–80.
- Kay, T. (2000). Sporting excellence: A family affair? *European Physical Education Review*, 6(2), 151– 169. <https://doi.org/10.1177/1356336X000062004>
- Kay, T. (2007). Fathering through sport. *World Leisure Journal*, 49(2), 69–82. <https://doi.org/10.1080/04419057.2007.9674487>
- Kay, R. S., Felker, D. W., & Varoz, R. O. (1972). Sports Interests and abilities as contributors to self-concept in junior high school boys. *Research Quarterly*, 43(2), 208-215. <https://doi.org/10.1080/10671188.1972.10615132>
- Kaye, M. P., Frith, A., & Vosloo, J. (2015). Dyadic anxiety in youth sport: The relationship of achievement goals with anxiety in young athletes and their parents. *Journal of Applied Sport Psychology*, 27(2), 171-185. <https://doi.org/10.1080/10413200.2014.970717>
- Kessler, R. C., Andrews, G., Colpe, L. J., Hiripi, E., Mroczek, D. K., Normand, S. L., &

- Zaslavsky, A. M. (2002). Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine*, 32(6), 959-976.
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey replication. *Archives of General Psychiatry*, 62(6), 593–602. <https://doi.org/10.1001/archpsyc.62.6.593>
- Kessler, R. C., & McLeod, J. D. (1985). Social support and mental health in community samples. In S. Cohen, & S. Syme (Eds.), *Social support and health* (pp. 219–240). San Diego, CA: Academic Press.
- Keyes, C.L.M. (2002). The mental health continuum: From languishing to flourishing in life. *Journal of Health and Social Behavior*, 43(2), 207–222.
- Khan, K. M., Thompson, A. M., Blair, S. N., Sallis, J. F., Powell, K. E., Bull, F. C., & Bauman, A. E. (2012). Sport and exercise as contributors to the health of nations. *The Lancet*, 380(9836), 59–64. [https://doi.org/10.1016/S0140-6736\(12\)60865-4](https://doi.org/10.1016/S0140-6736(12)60865-4)
- Kidman, L., McKenzie, A., & McKenzie, B. (1999). The nature of target of parents' comments during youth sport competitions. *Journal of Sport Behavior*, 22(1), 54-68.
- Kirk, D., Carlson, T., O'Connor, A., Burke, P., Davis, K., & Glover, S. (1997). The economic impact on families of children's participation in junior sport. *Australian Journal of Science and Medicine in Sport*, 29(2), 27-33.
- Knight, C. J., Berrow, S. R., & Harwood, C. G. (2017). Parenting in sport. *Current Opinion in Psychology*, 16, 93–97. <https://doi.org/10.1016/j.copsyc.2017.03.011>.
- Knight, C. J., Boden, C. M., & Holt, N. L. (2010). Junior tennis players' preferences for parental behaviours. *Journal of Applied Sport Psychology*, 22(4), 377–391. <https://doi.org/10.1080/10413200.2010.495324>

- Knight, C. J., Dorsch, T. E., Osai, K. V., Haderlie, K. L., & Sellars, P. A. (2016). Influences on parental involvement in youth sport. *Sport, Exercise, and Performance Psychology, 5*(2), 161-178. <https://doi.org/10.1037/spy0000053>
- Knight, C. J., & Holt, N. L. (2013a). Factors that influence parents' experiences at junior tennis tournaments and suggestions for improvement. *Sport, Exercise, and Performance Psychology, 2*(3), 173–189. <https://doi.org/10.1037/a0031203>
- Knight, C. J., & Holt, N. L. (2013b). Strategies used and assistance required to facilitate children's involvement in tennis: Parents' perspectives. *The Sport Psychologist, 27*(3), 281–291. <https://doi.org/10.1123/tsp.27.3.281>
- Knight, C. J., & Holt, N. L. (2014). Parenting in youth tennis: Understanding and enhancing children's experiences. *Psychology of Sport and Exercise, 15*(2), 155-164. <https://doi.org/10.1016/j.psychsport.2013.10.010>
- Knight, C. J., Neely, K. C., & Holt, N. L. (2011). Parental behaviors in team sports: How do female athletes want parents to behave? *Journal of Applied Sport Psychology, 23*(1), 76-92. <https://doi.org/10.1080/10413200.2010.525589>
- Knoetze-Raper, J., Myburgh, C., & Poggenpoel, M. (2016). Experiences of families with a high-achiever child in sport: Case studies. *South African Journal for Research in Sport, Physical Education and Recreation, 38*(1), 75–89.
- Lafferty, M. E., & Triggs, C. (2014). The working with parents in sport model (WWPS-model): A practical guide for practitioners working with parents of elite young performers. *Journal of Sport Psychology in Action, 5*(2), 117–128. <https://doi.org/10.1080/21520704.2014.914113>
- Lahey, B., & Cohen, S. (2000). Social support theory and measurement. In S. Cohen, L. G. Underwood, & B. H. Gottlieb (Eds.), *Social support measurement and intervention: A guide for health and social scientists* (pp. 29–52). New York: Oxford University Press.

- Lally, P., & Kerr, G. (2008). The effects of athlete retirement on parents. *Journal of Applied Sport Psychology, 20*(1), 42–56. <https://doi.org/10.1080/10413200701788172>
- Lauer, L., Gould, D., Roman, N., & Pierce, M. (2010b). How parents influence junior tennis players' development: Qualitative narratives. *Journal of Clinical Sport Psychology, 4*(1), 69–92. <https://doi.org/10.1123/jcsp.4.1.69>
- Lauer, L., Gould, D., Roman, N., & Pierce, M. (2010a). Parental behaviors that affect junior tennis player development. *Psychology of Sport and Exercise, 11*(6), 487–496. <https://doi.org/10.1016/j.psychsport.2010.06.008>
- Leff, S.S., Hoyle, R.H. (1995). Young athletes' perceptions of parental support and pressure. *Journal of Youth and Adolescence, 24*(2), 187–203. <https://doi.org/10.1007/BF01537149>
- Legg, E., Wells, M. S., & Barile, J. P. (2015). Factors related to sense of community in youth sport parents. *Journal of Park and Recreation Administration, 33*(2), 73-86.
- Lerner, J. V., Phelps, E., Forman, Y., & Bowers, E. P. (2009). *Positive youth development*. In R. M. Lerner, & L. Steinberg (Eds.), *Handbook of adolescent psychology* (3rd ed., pp. 524–558). Wiley.
- Lewthwaite, R., & Scanlan, T. K. (1989). Predictors of competitive trait anxiety in male youth sport participants. *Medicine & Science in Sports & Exercise, 21*(2), 221–229. <https://doi.org/10.1249/00005768-198904000-00016>
- Lewko, J. H., & Ewing, M. E. (1980). Sex differences and parental influence in sport involvement of children. *Journal of Sport Psychology, 2*(1), 62–68. <https://doi.org/10.1123/jsp.2.1.62>
- Lienhart, N., Nicaise, V., Knight, C. J., & Guillet-Descas, E. (2020). Understanding parent stressors and coping experiences in elite sports contexts. *Sport, Exercise, and Performance Psychology, 9*(3), 390–404. <https://doi.org/10.1037/spy0000186>

- Lindstrom-Bremer, K. (2012). Parental involvement, pressure, and support in youth sport: A narrative literature review. *Journal of Family Theory & Review*, 4(3), 235–248.
<https://doi.org/10.1111/j.1756-2589.2012.00129.x>
- Lovibond, S. H., & Lovibond, P. F. (1996). *Manual for the depression anxiety stress scales*. Psychology Foundation of Australia.
- Lox, C. L., Martin Ginis, K., & Petruzello, S. J. (2010). *The psychology of exercise: Integrating theory and practice*. Scottsdale, AZ: Holcomb Hathaway.
- Lyons, L. K., Dorsch, T. E., Lowe, K., Kaye, M. P., Arnett, J. J., Faherty, A., & Menendez, L. H. (2021). Parents' perceptions of parental involvement in emerging adults' intercollegiate athletic careers: Policy, education, and desired outcomes. *Journal for the Study of Sports and Athletes in Education*, 15(2), 123–149.
<https://doi.org/10.1080/19357397.2021.1916303>
- Martin, L. J., McGuire, C., Robertson, M., & Saizew, K. (2020). Subgroups in the context of youth sport. In M. W. Bruner, M. A. Eys, & L. J. Martin (Eds.), *The power of groups in youth sport* (pp. 127–143). Academic Press. <https://doi.org/10.1016/B978-0-12-816336-8.00008-1>
- Maxwell, J. 2012. *What is Realism, and Why Should Qualitative Researchers Care? A Realist Approach for Qualitative Research*. Thousand Oaks, CA: Sage.
- McElroy, M. A., & Kirkendall, D. R. (1981). Conflict in perceived parent/child sport ability judgements. *Journal of Sport Psychology*, 3(3), 244-247.
- McFadden, T., Bean, C., Fortier, M., & Post, C. (2016). Investigating the influence of youth hockey specialization on psychological needs (dis) satisfaction, mental health, and mental illness. *Cogent Psychology*, 3(1), 1157975.
<https://doi.org/10.1080/23311908.2016.1157975>
- Mirehie, M., Gibson, H., Kang, S., & Bell, H. (2019). Parental insights from three elite-level

- youth sports: Implications for family life. *World Leisure Journal*, 61(2), 98–112.
<https://doi.org/10.1080/16078055.2018.1550437>
- Misener, K. E. (2020). Parent well-being through community youth sport: An autoethnography of “sideline” participation. *Journal of Sport Management*, 34(4), 329–340.
<http://doi.org/10.1123/jsm.2019-0201>
- Misener, K., & Doherty, A. (2014). In support of sport: examining the relationship between community sport organisations and sponsors. *Sport Management Review*, 17(4), 493–506. <https://doi.org/10.1016/j.smr.2013.12.002>
- Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Medicine*, 6(7), e1000097. <https://doi.org/10.1371/journal.pmed.1000097>
- Nathalie Ferraresi Rodrigues Queluz, F., de Santis, L., de Fatima Kirchner, L., & Rafael Ferreira Campos, C. (2022). The Influence of the Quality of Filial Relationship on the Mental Health of Children Caregivers. *Trends in Psychology*, 1-13. <https://doi.org/10.1007/s43076-022-00140-3>
- Neely, K. C., McHugh, T. L. F., Dunn, J. G., & Holt, N. L. (2017). Athletes and parents coping with deselection in competitive youth sport: A communal coping perspective. *Psychology of Sport and Exercise*, 30, 1–9.
<https://doi.org/10.1016/j.psychsport.2017.01.004>
- Newhouse-Bailey, M., Dixon, M. A., & Warner, S. (2015). Sport and family functioning: Strengthening elite sport families. *Journal of Amateur Sport*, 1(2), 1–26. <http://doi.org/10.17161/jas.v0i0.4934>
- Newport, R. A., Knight, C. J., & Love, T. D. (2020). The youth football journey: Parents’ experiences and recommendations for support. *Qualitative Research in Sport, Exercise and Health*, 13(6), 1–21.

<https://doi.org/10.1080/2159676X.2020.1833966>

Nicholls, J. G. (1984). Achievement motivation: Conceptions of ability, subjective experience, task choice, and performance. *Psychological Review*, *91*(3), 328–346. <https://doi.org/10.1037/0033-295X.91.3.328>

Omlil, J., & LaVoi, N. M. (2012). Emotional experiences of youth sport parents I: Anger. *Journal of Applied Sport Psychology*, *24*(1), 10-25. <https://doi.org/10.1080/10413200.2011.578102>

Omlil, J., & Wiese-Bjornstal, D. M. (2011). Kids speak: Preferred parental behavior at youth sport events. *Research Quarterly for Exercise and Sport*, *82*(4), 702-711. <https://doi.org/10.1080/02701367.2011.10599807>

O'Rourke, D. J., Smith, R. E., Smoll, F. L., & Cumming, S. P. (2014). Relations of parent-and coach-initiated motivational climates to young athletes' self-esteem, performance anxiety, and autonomous motivation: who is more influential? *Journal of Applied Sport Psychology*, *26*(4), 395-408. <https://doi.org/10.1080/10413200.2014.907838>

Panza, M. J., Graupensperger, S., Agans, J. P., Dore, I., Vella, S. A., & Evans, M. B. (2019). Adolescent sport participation and symptoms of anxiety and depression: a systematic review and meta-analysis. *Journal of Sport & Exercise Psychology*, *42*(3), 201-218. <https://doi.org/10.1123/jsep.2019-0235>

Paterson, B. L., Thorne, S. E., Canam, C., & Jillings, C. (2001). *Meta-study of qualitative health research: A practical guide to meta-analysis and meta-synthesis*. Thousand Oaks, CA: Sage.

Peter, N. E. (2011). Confessions of a baseball mom: The impact of youth sports on parents' feelings and behaviors. *New Directions for Youth Development*, *2011*(1), 123–171. <https://doi.org/10.1002/yd.422>

- Poucher, Z. A., Tamminen, K. A., Caron, J. G., & Sweet, S. N. (2020). Thinking through and designing qualitative research studies: A focused mapping review of 30 years of qualitative research in sport psychology. *International Review of Sport and Exercise Psychology, 13*(1), 163–186. <http://doi.org/10.1080/1750984X.2019.1656276>
- Power, T. G., & Woolger, C. (1994). Parenting practices and age-group swimming: A correlational study. *Research Quarterly for Exercise and Sport, 65*(1), 59-66. <https://doi.org/10.1080/02701367.1994.10762208>
- Rafferty, A., Gray, V. B., Nguyen, J., Nguyen-Rodriguez, S., Barrack, M., & Lin, S. (2018). Parents report competing priorities influence snack choice in youth sports. *Journal of Nutrition Education and Behavior, 50*(10), 1032–1039. <https://doi.org/10.1016/j.jneb.2018.04.275>
- Reardon, C. L., Hainline, B., Miller Aron, A., Baron, D., Baum, A. L., Bindra, A., Engebretsen, L. (2019). Mental health in elite athletes: International Olympic Committee consensus statement. *British Journal of Sports Medicine, 53*(11), 667-699. <http://dx.doi.org/10.1136/bjsports-2019-100715>
- Ridner, S. H. (2004). Psychological distress: concept analysis. *Journal of Advanced Nursing, 45*(5), 536-545. <https://doi.org/10.1046/j.1365-2648.2003.02938.x>
- Ronkainen, N., Wiltshire, G., & Willis, M. (2021). Meta-study. *International Review of Sport and Exercise Psychology, 15*(1), 226–241. <https://doi.org/10.1080/1750984X.2021.1931941>
- Ross, A. J., Mallett, C. J., & Parkes, J. F. (2015). The influence of parent sport behaviours on children's development: youth coach and administrator perspectives. *International Journal of Sports Science & Coaching, 10*(4), 605-621. <https://doi.org/10.1260/1747-9541.10.4.605>

- Rouquette, O. Y., Knight, C. J., Lovett, V. E., & Heuzé, J.-P. (2020). Parent-athlete relationships: A central but underexamined consideration within sport psychology. *Sport and Exercise Psychology Review*, *16*(2), 5–23.
- Sagar, S. S., & Lavalley, D. (2010). The developmental origins of fear of failure in adolescent athletes: Examining parental practices. *Psychology of Sport and Exercise*, *11*(3), 177-187. <https://doi.org/10.1016/j.psychsport.2010.01.004>
- Sallis, J. F., Owen, N., & Fotheringham, M. J. (2000). Behavioral epidemiology: a systematic framework to classify phases of research on health promotion and disease prevention. *Annals of Behavioral Medicine*, *22*(4), 294-298. <https://doi.org/10.1007/BF02895665>
- Schinke, R. J., Stambulova, N. B., Si, G., & Moore, Z. (2018). International society of sport psychology position stand: Athletes' mental health, performance, and development. *International Journal of Sport and Exercise Psychology*, *16*(6), 622-639. <https://doi.org/10.1080/1612197X.2017.1295557>
- Sherbourne, C. D., & Stewart, A. L. (1991). The MOS social support survey. *Social Science & Medicine*, *32*(6), 705-714. [https://doi.org/10.1016/0277-9536\(91\)90150-B](https://doi.org/10.1016/0277-9536(91)90150-B)
- Sheridan, D., Coffee, P., & Lavalley, D. (2014). A systematic review of social support in youth sport. *International Review of Sport and Exercise Psychology*, *7*(1), 198–228. <http://doi.org/10.1080/1750984X.2014.931999>
- Shields, D., Bredemeier, B. L., LaVoi, N. M., & Power, F. C. (2005). The sport behaviour of youth, parents and coaches. *Journal of Research in Character Education*, *3*(1), 43-59.
- Smith, B., & McGannon, K. R. (2018). Developing rigor in qualitative research: Problems and opportunities within sport and exercise psychology. *International*

Review of Sport and Exercise Psychology, 11(1), 101–121.

<https://doi.org/10.1080/1750984X.2017.1317357>

Smith, B., & Sparkes, A. C. (2012). Making sense of words and stories in qualitative research: Strategies for consideration. In G. Tenenbaum, R. Eklund, & A. Kamata (Eds.), *Measurement in sport and exercise psychology* (pp. 119–129). Human Kinetics.

Smoll, F. L., Cumming, S. P., & Smith, R. E. (2011). Enhancing coach-parent relationships in youth sports: Increasing harmony and minimizing hassle. *International Journal of Sports Science & Coaching*, 6(1), 13-26.

<https://doi.org/10.1260/1747-9541.6.1.13>

Snyder, E. E., & Purdy, D. A. (1982). Socialization into sport: Parent and child reverse and reciprocal effects. *Research Quarterly for Exercise and Sport*, 53(3), 263–266. <https://doi.org/10.1080/02701367.1982.10609352>

Snyder, E. E., & Purdy, D. A. (1985). The home advantage in collegiate basketball. *Sociology of Sport Journal*, 2(4), 352-356.

<https://doi.org/10.1123/ssj.2.4.352>

Snyder, E.E., & Spreitzer, E.A. (1973). Family influence and involvement in sports. *Research Quarterly*, 44(3), 249-255.

<https://doi.org/10.1080/10671188.1973.10615203>

Spreitzer, E. & Snyder, E. (1976). Socialization into sport: An exploratory path analysis. *Research Quarterly*, 47(2), 238-245.

<https://doi.org/10.1080/10671315.1976.10615367>

Stefansen, K., Smette, I., & Strandbu, Å. (2018). Understanding the increase in parents' involvement in organised youth sports. *Sport, Education and Society*, 23(2), 162–172. <https://doi.org/10.1080/13573322.2016.1150834>

- Stein, G. L., Raedeke, T. D., & Glenn, S. D. (1999). Children's perceptions of parent sport involvement: It's not how much, but to what degree that's important. *Journal of Sport Behavior*, 22(4), 591-601.
- Stets, J. E., & Burke, P. J. (2000). Identity theory and social identity theory. *Social Psychology Quarterly*, 63(3), 224. <http://doi.org/10.2307/2695870>
- Stillman, M. A., Glick, I. D., McDuff, D., Reardon, C. L., Hitchcock, M. E., Fitch, V. M., & Hainline, B. (2019). Psychotherapy for mental health symptoms and disorders in elite athletes: a narrative review. *British Journal of Sports Medicine*, 53(12), 767-771. <http://dx.doi.org/10.1136/bjsports-2019-100654>
- Sutcliffe, J. T., Benson, A. J., & Bruner, M. W. (2019). Parents value competence more than warmth in competitive youth ice hockey coaches: Evidence based on the innuendo effect. *Psychology of Sport and Exercise*, 43, 82-89. <https://doi.org/10.1016/j.psychsport.2019.01.005>
- Sutcliffe, J. T., Benson, A. J., McLaren, C. D., & Bruner, M. W. (2022). Part of the Team: The Social Identity Questionnaire for Sport Parents (SIQS-P). *Measurement in Physical Education and Exercise Science*, 1-11. <https://doi.org/10.1080/1091367X.2022.2092740>
- Sutcliffe, J. T., Graupensperger, S., Schweickle, M. J., Rice, S. M., Swann, C., & Vella, S. A. (2021). Mental health interventions in non-elite sport: a systematic review and meta-analysis. *International Review of Sport and Exercise Psychology*, 1-24. <https://doi.org/10.1080/1750984X.2021.2001839>
- Sutcliffe, J. T., Herbison, J. D., Martin, L. J., McLaren, C. D., Slatcher, R., Benson, A. J., Van Woezik, R., Boardley, I. D., Carré, J. M., Côté, J., & Bruner, M. W. (2021). Exploring parent-athlete sport related communication outside of the sport

- environment with the electronically activated recorder. *Psychology of Sport and Exercise*, 54, 101919. <https://doi.org/10.1016/j.psychsport.2021.101919>
- Sutcliffe, J. T., Kelly, P. J., & Vella, S. A. (2021). Youth sport participation and parental mental health. *Psychology of Sport and Exercise*, 52, 101832. <https://doi.org/10.1016/j.psychsport.2020.101832>
- Sutcliffe, J. T., McLaren, C. D., Benson, A. J., Martin, L. J., Arnocky, S., Shields, C., Law, B., & Bruner, M. W. (2020). Parents' moral intentions towards antisocial parent behaviour: An identity approach in youth sport. *Psychology of Sport and Exercise*, 49, 101699. <https://doi.org/10.1016/j.psychsport.2020.101699>
- Swanson, L. (2009). Complicating the “soccer mom” the cultural politics of forming class-based identity, distinction, and necessity. *Research Quarterly for Exercise and Sport*, 80(2), 345–354. <https://doi.org/10.1080/02701367.2009.10599569>
- Swartzman, S., Booth, J. N., Munro, A., & Sani, F. (2017). Posttraumatic stress disorder after cancer diagnosis in adults: A meta-analysis. *Depression and Anxiety*, 34(4), 327-339. <https://doi.org/10.1002/da.22542>
- Tajfel, H. (1981). *Human groups and social categories*. Cambridge, England: Cambridge University Press.
- Tajfel, H., & Turner, J.C. (1986). The social identity theory of intergroup behavior. In S. Austin & W.G. Austin (Eds.), *Psychology of Intergroup Relations* (pp.7-24). Chicago: Nelson Hall.
- Tamminen, K. A., Bissett, J. E., Azimi, S., & Kim, J. (2022). Parent and child car-ride interactions before and after sport competitions and practices: Video analysis of verbal and non-verbal communication. *Psychology of Sport and Exercise*, 58, 102095. <https://doi.org/10.1016/j.psychsport.2021.102095>

- Tamminen, K. A., & Holt, N. L. (2012). Adolescent athletes' learning about coping and the roles of parents and coaches. *Psychology of Sport and Exercise, 13*(1), 69-79. <https://doi.org/10.1016/j.psychsport.2011.07.006>
- Tamminen, K. A., Poucher, Z. A., & Povilaitis, V. (2017). The car ride home: An interpretive examination of parent–athlete sport conversations. *Sport, Exercise, and Performance Psychology, 6*(4), 325-339. <https://doi.org/10.1037/spy0000093>
- Tamminen, K. A., Poucher, Z. A., Povilaitis, V., Nirmalanathan, K., & Spence, J. C. (2021). Examining the experiences of individuals living in low income using a fee assistance program to access physical activity and recreation. *Journal of Poverty, 25*(1), 76–95. <https://doi.org/10.1080/10875549.2020.1746947>
- Teques, P., Calmeiro, L., Martins, H., Duarte, D., & Holt, N. L. (2018). Mediating effects of parents' coping strategies on the relationship between parents' emotional intelligence and sideline verbal behaviors in youth soccer. *Journal of Sport and Exercise Psychology, 40*(3), 152-162. <https://doi.org/10.1123/jsep.2017-0318>
- Thrower, S. N., Harwood, C. G., & Spray, C. M. (2017). Educating and supporting tennis parents: An action research study. *Qualitative Research in Sport, Exercise and Health, 9*(5), 600–618. <https://doi.org/10.1080/2159676X.2017.1341947>
- Thrower, S. N., Harwood, C. G., & Spray, C. M. (2019). Educating and supporting tennis parents using web-based delivery methods: A novel online education program. *Journal of Applied Sport Psychology, 31*(3), 303–323. <https://doi.org/10.1080/10413200.2018.1433250>
- Thrower, S. N., Harwood, C. G., & Spray, C. M. (2016). Educating and supporting tennis parents: A grounded theory of parents' needs during childhood and early

- adolescence. *Sport, Exercise, and Performance Psychology*, 5(2), 107–124.
<https://doi.org/10.1037/spy0000054>
- Todd, J., & Edwards, J. R. (2020). Understanding parental support in elite sport: A phenomenological approach to exploring midget triple a hockey in the Canadian Maritimes. *Sport in Society*, 24(9), 1590–1608.
<https://doi.org/10.1080/17430437.2020.1763311>.
- Trussell, D. E., & Shaw, S. M. (2012). Organized youth sport and parenting in public and private spaces. *Leisure Sciences*, 34(5), 377–394.
<https://doi.org/10.1080/01490400.2012.714699>
- Turnnidge, J., Evans, B., Vierimaa, M., Allan, V., & Côté, J. (2016). Coaching for positive youth development. In N. L. Holt (Ed.), *Positive Youth Development Through Sport* (2nd ed., pp. 137-150). New York, NY: Routledge.
- Ullrich-French, S., & Smith, A. L. (2006). Perceptions of relationships with parents and peers in youth sport: Independent and combined prediction of motivational outcomes. *Psychology of Sport and Exercise*, 7(2), 193-214.
<https://doi.org/10.1016/j.psychsport.2005.08.006>
- Vealey, R., & Chase, M. (2016). *Best practice for youth sport*. Champaign, IL: Human Kinetics.
- Vella, S. A., & Swann, C. (2021). Time for mental healthcare guidelines for recreational sports: A call to action. *British Journal of Sports Medicine*, 55(4), 184-185.
<http://dx.doi.org/10.1136/bjsports-2019-101591>
- Vella, S. A., Swann, C., Boydell, K. M., Eckermann, S., Fogarty, A., Hurley, D., & Deane, F. P. (2019). Sports-based mental health promotion in Australia: formative evaluation. *Psychology of Sport and Exercise*, 45, 101560.
<https://doi.org/10.1016/j.psychsport.2019.101560>

- Vierimaa, M., & Côté, J. (2016). An exploration of sociometric status and peer relations in youth sport. *Journal of Sport Behavior, 39*(1), 72-91.
- Vierimaa, M., Turnnidge, J., Bruner, M., & Côté, J. (2017). Just for the fun of it: Coaches' perceptions of an exemplary community youth sport program. *Physical Education and Sport Pedagogy, 22*(6), 603–617.
<http://doi.org/10.1080/17408989.2017.1341473>
- Vincent, A. P., & Christensen, D. A. (2015). Conversations with parents: A collaborative sport psychology program for parents in youth sport. *Journal of Sport Psychology in Action, 6*(2), 73–85. <https://doi.org/10.1080/21520704.2015.1054535>
- Wakefield, J. R., Bickley, S., & Sani, F. (2013). The effects of identification with a support group on the mental health of people with multiple sclerosis. *Journal of Psychosomatic Research, 74*(5), 420-426.
<https://doi.org/10.1016/j.jpsychores.2013.02.002>
- Wall, J. M., Baugh, L. M., Pradhan, K., Beauchamp, M. R., Marshall, S. K., & Young, R. A. (2019). The coach-parent relationship in Canadian competitive figure skating: An interpretive description. *Psychology of Sport and Exercise, 45*, 101577. <https://doi.org/10.1016/j.psychsport.2019.101577>
- Wang, J., Mann, F., Lloyd-Evans, B., Ma, R., & Johnson, S. (2018). Associations between loneliness and perceived social support and outcomes of mental health problems: A systematic review. *BMC Psychiatry, 18*(1), 156.
<https://doi.org/10.1186/s12888-018-1736-5>
- Warner, S., Dixon, M., & Leierer, S. (2015). Using youth sport to enhance parents' sense of community. *Journal of Applied Sport Management, 7*(1), 45–63.
<https://doi.org/10.7290/jasm>.

- Weiss, M. R., & Hayashi, C. T. (1995). All in the family: Parent-child influences in competitive youth gymnastics. *Pediatric Exercise Science*, 7(1), 36-48.
<https://doi.org/10.1123/pes.7.1.36>
- White, S. A. (1996). Goal orientations and perceptions of the motivational climate initiated by parents. *Pediatric Exercise Science*, 8(2), 122-129.
<https://doi.org/10.1123/pes.8.2.122>
- Wiersma, L. D., & Fifer, A. M. (2008). “The schedule has been tough but we think it’s worth it”: The joys, challenges, and recommendations of youth sport parents. *Journal of Leisure Research*, 40(4), 505–530.
<https://doi.org/10.1080/00222216.2008.11950150>
- Williams, T. L., & Shaw, R. (2016). Synthesizing qualitative research: Meta-synthesis in sport and exercise. In B. Smith & A. C. Sparkes (Eds.), *Routledge handbook of qualitative research in sport and exercise* (pp. 274–288). Routledge.
- Wold, B., & Anderssen, N. (1992). Health promotion aspects of family and peer influences on sport participation. *International Journal of Sport Psychology*, 23(4), 343-359.
- 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(2), 108–126. <https://doi.org/10.1080/10413200590932416>
- Woolger, C., & Power, T. G. (1993). Parent and sport socialization: Views from the achievement literature. *Journal of Sport Behavior*, 16(3), 171-187.
- World Health Organisation. (2014). *Mental health: a state of well-being*.
https://www.who.int/features/factfiles/mental_health/en/

Wuerth, S., Lee, M. J., & Alfermann, D. (2004). Parental involvement and athletes' career in youth sport. *Psychology of Sport and Exercise*, 5(1), 21-33.
[https://doi.org/10.1016/S1469-0292\(02\)00047-X](https://doi.org/10.1016/S1469-0292(02)00047-X)

Yuan, A. S. V. (2016). Father–child relationships and non resident fathers' psychological distress: What helps and what hurts? *Journal of Family Issues*, 37(5), 603–621. <https://doi.org/10.1177/0192513X14526394>

Zhao, X., Lynch Jr, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37(2), 197-206. <https://doi.org/10.1086/651257>

Appendix A: Thesis Format Agreement



UNIVERSITY
OF WOLLONGONG
AUSTRALIA

I agree that the thesis submitted by the PhD candidate, Jordan Sutcliffe, has been prepared in journal article compilation style format.

Principle Supervisor: A/Prof Stewart A. Vella	
Signature:	
Date:	28/07/2022
Co-Supervisor: A/Prof Peter J. Kelly	
Signature:	
Date:	28/07/2022
PhD Candidate: Jordan T. Sutcliffe	
Signature:	
Date:	28/07/2022

Appendix B: Statement of Contribution of Others



UNIVERSITY
OF WOLLONGONG
AUSTRALIA

As co-authors on at least one of the following papers:

Chapter 1

Sutcliffe, J. T., Fernandez, D. K., Kelly, P. J., & Vella, S. A. (2021). The parental experience in youth sport: a systematic review and qualitative meta-study. *International Review of Sport and Exercise Psychology*, 1-28.
<https://doi.org/10.1080/1750984X.2021.1998576>

Chapter 3

Sutcliffe, J.T., Kelly P. J., Vella, S.A. (2021). Youth sport participation and parental mental health. *Psychology of Sport and Exercise*, 52, 101832.
<https://doi.org/10.1016/j.psychsport.2020.101832>

Chapter 4

Sutcliffe, J.T., Kelly, P. J., Vella, S.A. (under review). Youth sport participation and parental social support. *International Journal of Sport and Exercise Psychology*.

Chapter 5

Sutcliffe, J.T., Kelly, P. J., Vella, S.A. (under review). Parental demands in sport and mental health: The parallel mediating roles of social identity, social support, and parent-child relationship quality. *The Sport Psychologist*.

Chapter 6

Sutcliffe, J.T., Kelly, P. J., Vella, S.A. (under review). A qualitative examination of parental mental health in youth sport. *International Journal of Sport and Exercise Psychology*.

I declare that the greater part of the work is directly attributable to the PhD candidate, Jordan Sutcliffe, I confirm that the candidate has made contributions in the design of the research, data collection and analysis, and the writing and editing of the manuscripts.

As a supervisor or co-author, I have been involved in the formulation of research ideas and editing of the manuscripts.

Principle Supervisor: A/Prof Stewart A. Vella	
Signature:	
Date:	28/07/2022
Co-Supervisor: A/Prof Peter J. Kelly	
Signature:	
Date:	28/07/2022
Co-Author: Dominic K. Fernandez	
Signature:	
Date:	28/07/2022
PhD Candidate: Jordan T. Sutcliffe	
Signature:	
Date:	28/07/2022

Appendix C: Summary of Meta-Method and Meta-Theory Analysis from Chapter 2

Study	Purpose	Setting	Sample	Sport Context	Theoretical Model	Philosophical Perspective	Methodology and Sampling Strategy	Data Collection	Data Analysis	Rigour
Bean et al. (2019)	Explore mothers' perceptions of competitive male youth hockey demands on their mental health, relationship health, and healthy lifestyle practices	Canada	13 ice hockey mothers aged 43 – 52 years	Ice hockey players aged 13-17 years	None specified	None specified	Qualitative description (Sandelowski, 2010) Purposeful sampling	Semi-structured interviews	Inductive thematic analysis (Braun & Clarke, 2006)	Iterative collaborative approach Member checking Independent coders for thematic analysis Member checking
Boneau et al. (2020)	Understand parents' sensemaking about their decisions to allow their child to play youth tackle football	US	12 married couples aged 28 – 56 years (M _{age} = 44 years)	Children were youth football athletes at the middle school level (i.e., 12-14 years old)	Sensemaking Theory (Weick, 1995)	None specified	Constant comparative approach Purposeful sampling and snowball sampling	Interviews with parent dyads	Iterative analysis including open coding, axial coding, and dimensionalization (Tracy, 2013)	Member checking
Bragg et al. (2020)	To provide insight into the experiences of power soccer players and their parents to inform rehabilitation practice	Canada	3 parents (two fathers, one mother) of power soccer athletes	Athletes were power soccer athletes aged 11 – 17 years	A social-relational understanding of disability guided the study (Kattari et al., 2017)	None specified	Interpretive description (Hunt, 2009) Purposeful sampling	Semi-structured interviews	Thematic analysis (Thorne, 2008)	Analysis reflexivity Field notes
Brown (2014)	Explore the mechanisms by which youth sports leagues facilitate the creation and mobilisation of parental social ties and social capital	US	No details available	Athletes were competitive youth baseball players aged 9 – 12 years	None specified	None specified	No specific methodology or sampling description	Observation and in-depth interviews	Unspecified content analysis	None specified

Burgess et al. (2016)	Understand how parents of elite youth gymnasts cope within youth sport	UK	7 parents (5 mothers, 1 father, and 1 stepfather of male and female gymnasts)	Athletes were elite female and male gymnasts aged 11 – 14 years	None specified	Interpretive (idiographic, phenomenological, and interpretive; Smith et al., 2009)	Interpretive phenomenological analysis (Smith, 1996) Purposeful sampling	Semi-structured interviews	Interpretive phenomenological analysis (Smith & Osborn, 2003)	IPA guided strategies (Yardley, 2000): Pilot interviewing Interviewer consistency Audit trail of themes Reflexive journal In-depth interviews
Charbonneau & Camiré (2020)	Examine parents' and children's perspectives on how parental involvement in sport influences basic psychological needs satisfaction	Canada	8 parents (6 fathers and 2 mothers) aged 36 – 53 years	Athletes were aged 14 years and played recreational football, soccer, basketball, or ice hockey	Basic Psychological Needs Theory (Deci & Ryan, 1985)	Ontological relativism and epistemological constructionism	Constructionism (Burr, 2003) Combination of purposive and convenience sampling	Semi-structured interviews	Deductive-inductive thematic analysis (Braun et al., 2016)	Pilot interviews Critical friend
Clark et al. (2019)	Examine the perceptions of parents who received funds from one such program in Eastern Canada	Canada	14 parents (12 mothers and 2 fathers)	Athletes were aged 7 – 17 years and participated in a large variety of recreational sports	None specified	None specified	Qualitative description (Neergaard et al., 2009; Sandelowski, 2000) Purposeful sampling	Semi-structured interviews (Patton, 2002)	Six-step thematic analysis (Braun & Clarke, 2006)	Collaborative review of themes (Morse et al., 2002)
Clarke & Harwood (2014)	Explore the experiences of parents of elite specialising stage youth footballers	UK	10 parents (5 mothers and 5 fathers) aged 38 – 56 years ($M_{age} = 43.8$)	Athletes were aged 8 – 11 years and were considered elite youth footballers	None specified	A relativist epistemology	A descriptive phenomenological design (Giorgi, 2009) Maximum variation sampling	Observation and semi-structured interviews	Analysis guided by a descriptive phenomenological approach (Giorgi, 2009)	Sensitivity to context, reflexivity, rigour and coherence (Sparkes & Smith, 2009)

Clarke et al. (2016)	Explore parent's and children's experience of their interaction and relationship, in the context of elite youth football	UK	8 parents (4 mothers and 4 fathers) aged 40 – 48 years (Mage = 44.75)	Athletes were aged 12 – 17 years and were considered elite youth footballers	None specified	Interpretive (phenomenology; Ashworth, 2003)	Existential phenomenological approach Purposeful sampling guided by maximum variation sampling (Patton, 2002)	Phenomenological semi-structured interviews	Two-stage phenomenological analytic approach (van Manen, 1990)	Peer debriefs Expert review
Côté (1999)	Describe patterns in the dynamics of families of talented athletes throughout their development in sport	Canada	7 parents (four mothers and three fathers)	Athletes were all aged 18 years and competed at a national level	None specified	None specified	No specific methodology described Participants were identified as potentially rich cases	In-depth open-ended interviews with individual parents	Constant comparison thematic analysis	Constant comparison of perspectives Peer debriefs
Dorsch et al. (2009)	Enhance understanding of how parents are socialised by their children's organised youth sport participation	US	26 parents (10 fathers, 16 mothers) aged 34 – 57 years	Athletes were recreational sport participants aged 6 – 15 years and competed in either softball, soccer, or basketball	Social Cognitive Theory (Bandura, 1986)	None specified	Purposeful sampling (Bruce, 2007)	Focus groups	Thematic analysis (open and axial coding with a constant comparison approach; Strauss & Corbin, 1998)	Member checking
Dorsch et al. (2019)	Highlight parent, coach, and administrator perceptions of community-based parent education in a youth sport community	US	12 parents with a mean age of 41.8 years	Community sport participants enrolled in either soccer, basketball, track and field, cross-country, football, or softball	None specified	Relativist ontology and constructivist epistemology	Community case study with a constructivist approach (Charmaz, 2014) Purposeful sampling (Suri, 2011)	Semi-structured interviews	Constructive thematic analysis (Suri, 2011)	Establish trust and rapport Data triangulation. Peer debriefs
Dorsch et al. (2015)	Examine sport socialisation over the initial period of a first child's sport involvement and how parents make sense of	US	Eight parents from four families	Children either played soccer, basketball, track and field,	PPCT Model (Bronfenbrenner, 2005)	Social constructivist epistemology (Schwandt, 2000)	Longitudinal collective case study (Stake, 2008; Thomas, 2011)	Semi-structured interviews, journals from primary parents, and direct observation of primary parents	Thematic analysis (open coding with a constant comparison approach; Corbin & Strauss, 2008)	Establish trust and rapport Data triangulation

	how youth sport shapes family relationships and parenting practices			volleyball, football, or softball			No specific sampling strategy described			Peer debriefs
Elliott & Drummond (2013)	Explore the self-perceived nature of parental involvement in junior Australian football and identify key parental issues specific to this understudied sporting context	Australia	15 parents (11 fathers, four mothers) of junior football players	Children were junior football athletes between the age of 10 – 11 years	Social constructionist framework (Burr, 2003)	Social constructionism (Willig, 2001)	No specific methodology described Purposeful sampling (Patton, 2002)	Semi-structured focus groups	Thematic content-analysis (Miles & Huberman, 1994)	Member checks from the co-author
Eriksen & Stefansen (2021)	Explores youth sports parenting in the context of working-class Norwegian families	Norway	19 parents (14 mothers, 5 fathers)	Athletes were aged 13 – 14 years and predominantly represented soccer and handball	None specified	None specified	No specific methodology described Purposeful sampling	Individual interviews (with the exception of 3 couples who were interviewed together)	Case by case comparison, followed by orientation and class categorisation, then a final comparison phase	None specified
Furusa et al. (2020)	Stage 2: Identify the factors that facilitate or prevent parents from being involved in the ways preferred by children	UK	26 parents (10 fathers, 16 mothers)	Athletes were aged between 8 – 12 years and currently involved in either field-hockey, football, golf, gymnastics, swimming, or tennis	None specified	Constructionism (in line with Interpretive description)	Interpretive description (Thorne, 2008) Maximum variation sampling (Stage 1; Patton, 2002) followed by criterion-based sampling (Stage 2)	Focus groups (Rabiee, 2004)	Reflexive thematic analysis (Braun et al., 2016)	ID focused strategies (Thorne, 2016): Focus groups and interpretive analysis Heterogeneous sample Alignment of procedures and findings with underlying philosophy Critical friend Audit trail

Garst et al. (2019)	Examine parent involvement in the context of indoor competition climbing	US	27 parents (11 fathers and 16 mothers)	Athletes were youth indoor climbers recruited from a national climbing competition	None specified.	Postpositivism guided through a pragmatic lens (Patton, 2002; Yin, 2016)	No specific methodology described Criterion based purposeful sampling (Patton, 2002)	Focus groups with a semi-structured interview script	Inductive-deductive thematic analysis (Braun & Clarke, 2006)	Addressed pertinent gap Persistent observation Investigator triangulation Member checking Multiple data sources
Gottzen & Kremer-Sadik (2012)	Examine how men juggle two contrasting cultural models of masculinity when fathering through sports	US	24 families (24 fathers, 24 mothers)	Athletes varied in age and primary played baseball and basketball	None specified	None specified	No specific methodology or sampling method described	Ethnographic video observation and semi-structured interviews	Discourse analysis (Garkinfel, 1967; Potter, 1996)	None specified
Harrington (2006)	Examines fathers' gendered experiences of sport-related leisure	AUS	10 families recruited from a soccer-club	Athletes were all above 10 years old and from the same soccer club	None specified	None specified	No specific methodology described Purposeful sampling	One-on-one semi-structured interviews	Thematic analysis (guided by Glaser & Strauss, 1967; Miles & Huberman, 1994; Strauss & Corbin, 1998)	None specified
Harwood & Knight (2009a)	Examine the stressors experienced by British tennis-parents	UK	123 parents (41 fathers and 74 mothers)	Children were tennis athletes aged 8 – 18 years	None specified	None specified	No specific methodology or sampling method described	Open-ended survey questions	Content analysis of survey responses (Côté et al., 1993) Reflexive cross-category analysis	Consensus validation (Miles & Huberman, 1994) Peer debriefs Critical friend
Harwood & Knight (2009b)	Investigate the stage-specific stressors experienced by British tennis parents	UK	22 tennis parents (9 fathers, 13 mothers)	Athletes were elite junior tennis players aged 9 – 16 years	None specified	None specified	No specific methodology described Purposive sampling	Semi-structured interviews	Inductive content analysis (Miles & Huberman, 1994)	Pilot interviews Member checking Peer debriefs

Harwood et al. (2010)	Investigate parental stressors within the context of professional football in Great Britain	UK	41 parents (25 fathers and 16 mothers)	Athletes were academy football players aged between 9 – 15 years	None specified	Post-positivist paradigm (Campbell, 1999) guided by critical realism (Bhaskar, 1975)	No specific methodology or sampling method described	Semi-structured focus groups (Morgan, 1997)	Hierarchical thematic content analysis (Côté et al., 1993; Miles & Huberman, 1994; Krueger & Casey, 2000)	Investigator triangulation Investigator triangulation and inter-rater reliability (Lincoln & Guba, 1985) Critical friend (Creswell, 1998) Member checking
Harwood et al. (2019)	Investigate psychological stress among parents of competitive British tennis players	UK	135 parents (41 fathers, 93 mothers, 1 unreported gender)	Athletes were elite junior tennis players aged 5 – 18 years	None specified	Post-positivism (Weed, 2009)	Mixed method design (Morse, 2003) Homogenous purposeful sampling	Open-ended survey questions	Inductive and deductive approach to hierarchical content analysis (Didymus, 2017)	Data familiarity Peer debriefs
Hayward et al. (2017)	Examine the individual and shared stress experiences among youth swimmers, their mothers, and coach within the context of training, tapering, and competition	UK	4 mothers (Mage = 45.25 years)	Athletes were elite junior tennis players aged 14 – 15 years	None specified	Interpretive paradigm	Longitudinal multi case study design (Yin, 2003) No sampling method described	Interviews and daily diaries.	An idiographic approach to examine each case (triad) followed by cross-case analysis (Miles & Huberman, 1994)	Multiple methods Pilot interviews Participant rapport Reflexive journaling
Holt et al. (2011)	Examine low-income parents' and their children's perceptions of the benefits and challenges associated with participation in youth sport	Canada	17 low-income parents (2 fathers, 15 mothers) with a mean age of 44.5 years	Athletes were adolescents (Mage = 12.5) and represented ice hockey, soccer, baseball, and track and field	Ecological systems theory (Bronfenbrenner, 2005)	Social constructionism	Interpretive description methodology (Thorne, 2008) Purposeful sampling	Semi-structured interviews	Interpretive thematic analysis (Thorne, 2008)	Self-corrective techniques (Morse et al., 2002) On-going peer dialogue Data corroboration

										Data sharing with youth sport stakeholders
Holt et al. (2008)	Examine parents' involvement in competitive youth sport settings	Canada	8 parents (4 mothers, 4 fathers) with a mean age of 41.9 years	Athletes were junior soccer players with a mean age of 12.9 years	Ecological systems theory (Bronfenbrenner, 2005)	None specified	Grounded theory methodology (Strauss & Corbin, 1998) Theoretical sampling	Semi-structured interviews	Grounded theory approach to open, axial, and theoretical integration (Strauss & Corbin, 1998)	Member checking interviews Data triangulation
Johansen & Green (2019)	Explore the role of parents in children's sporting involvement in Norway	Norway	11 parents of 'sporty' children	Children aged 11 – 13 years old defined as regular sport participants	None specified	None specified	No specific methodology described Criterion-based sampling (Bryman, 2015)	Interviews	Thematic and grounded theory analysis (Braun & Clarke, 2006; Charmaz, 2014)	Peer debriefs Internal homogeneity and external heterogeneity by comparing raw data and coding (Patton, 2015)
Jeanes & Magee (2011)	Examines the fathering practices of men whose sons played elite junior football	UK	33 fathers of elite junior footballers	Athlete were elite junior football players	None specified	Interpretivism	Interpretivist approach (Schwandt, 1998) No sampling method described	Participant observation and semi-structured interviews	Thematic analysis (Darlington & Scott, 2002)	Comparison of themes among authors (Jovchelovitch & Bauer, 2000) Member checking (Silverman, 2000)
Kay (2000)	Identify how families provide support for children's development of sports talent	UK	35 individual parents across 20 families	Athletes were aged between 12 – 20 years and represented elite swimming, tennis, or rowing	None specified	None specified	No specific methodology described Convenience sampling	Individual interviews with family members	Content analysis	None specified

Kay (2007)	Explore the role that leisure plays as a site for fathering	UK	8 fathers with at least one child in sport	Athletes were junior football players	None specified	None specified	Exploratory study No sampling method described	Individual interviews	None specified	None specified
Kirk et al. (1997)	Investigate time commitments in junior sport and the social consequences for participants and families	AUS	27 families participated in the qualitative component of the study	Athletes were aged 9 – 17 years and represented either netball, Australian football, hockey, gymnastics, or tennis	None specified	None specified	Multi-method grounded theory approach (Glaser, 1978) No specific sampling method described	Semi-structured interviews	Grounded theory thematic analysis	None specified
Knight et al. (2016)	Explore the influences on parental involvement in youth sport	UK	70 parents (32 fathers, 38 mothers) with a mean age of 42.32 years	Athletes were aged 3 – 29 years and played a large variety of sports	None specified	None specified	No specific methodology or sampling method described	Open-ended surveys	Thematic analysis (Miles & Huberman, 1994)	Pilot surveys Data immersion and familiarity Critical friends (Hill, 2002; Kincheloe & McLaren, 2000)
Knight & Holt (2014)	Develop a grounded theory of optimal parental involvement in youth tennis	UK	17 parents of junior tennis players	Athletes were either current or former junior tennis players	None specified	Pragmatism (Dewey, 1922)	Grounded theory (Strauss & Corbin, 1998) Purposeful sampling followed by theoretical sampling (Corbin & Strauss, 2008)	Semi-structured interviews	Grounded theory approach to open, axial, and theoretical integration (Corbin & Strauss, 2008)	Focus groups Iterative process of data collection Memos and diagrams to clarify conceptual links Data reflexivity
Knight & Holt (2013a)	Explore the factors that influence parents' experiences of watching their	UK	40 parents (20 fathers, 20 mothers) of	Athletes were competitive junior tennis players with a	None specified	Realism (Bhaskar, 1975)	Qualitative descriptive (Sandelowski, 2000) Purposeful sampling	Semi-structured interviews	Thematic analysis (data reduction followed by descriptive,	Data collection immersion

	children compete at junior tennis tournament		junior tennis players	mean age of 13.07 years					interpretive, and pattern coding; Miles & Huberman, 1994)	Informal debriefs with participants Critical friend Member checking
Knight & Holt (2013b)	Identify strategies parents to support their children's involvement in competitive tennis	US	41 parents (17 fathers, 24 mothers) of competitive tennis athletes	Athletes were competitive tennis players with a mean age of 13.25 years	None specified	None specified	No specific methodology described Purposeful sampling (Patton, 2002)	Structured interviews (guided by Rubin & Rubin, 2005)	Descriptive, interpretive, and pattern coding followed by data display procedures (Miles & Huberman, 1994)	Three strategies following Morse et al. (2002): Constant audio file review Reflexive journaling Critical friend and inter-rater reliability
Knoetze-Raper et al. (2016)	Explore the experiences of families with high-achieving adolescent athletes aspiring to compete in the Olympics	South Africa	3 families with high-achieving athletes	Youth were aspiring Olympic track and field athletes aged 13 – 18 years	None specified	Interpretive paradigm (De Vos et al., 2011)	Exploratory descriptive case-study (Yin, 2009) Purposive sampling	Phenomenological interviews (Creswell, 2013)	Thematic coding and cross-validation (Creswell, 2013; Yin, 2009))	Inter-coder reliability Member checking
Lally & Kerr (2008)	Examine the effects of athletes' disengagement from sport on parents	US	6 parents (two fathers, four mothers) of former elite gymnasts	Children were elite gymnasts who had retired within the last five years	None specified	None specified	Exploratory descriptive approach No sampling method described	In-depth interviews	Inductive thematic analysis (following procedures in Côté et al., 1993)	Member checking
Lauer et al. (2010)	Examine the role parents played in developing professional tennis players	US	8 parents (four mothers, four fathers) with a mean age of 54.9 years	Athletes were former professional tennis players aged 16 – 24 years	None specified	None specified	No specific qualitative methodology or sampling method described	Semi-structured interviews	Thematic analysis followed by content and constant comparative analysis (Miles & Huberman, 1994)	Peer debriefs

Lienhart et al. (2020)	Identify the stressors parents encounter when supporting their children performing within elite sports contexts	UK	Stage 1: 1299 parents (529 fathers, 8 stepfathers, 761 mothers) Stage 2: 16 parents (nine mothers, six fathers)	Children were elite individual or team sport athletes	None specified	Post positivism	Qualitative description (Sandelowski, 2010) Stratified random sampling	Stage 1: Open-ended surveys Stage 2: Semi-structured interviews with a descriptive approach	Abductive content analysis (Côté et al., 1993; Miles & Huberman, 1994)	Appropriate sampling (Creswell, 2007) Pilot interviews Case description and understanding Participant rapport (Tracy, 2010) Peer debriefs Philosophical continuity (Smith & Sparkes, 2016)
Mirehie et al. (2019)	Examine the influence of elite-level involvement in youth sport on family life	US	484 parents (99 fathers, 325 mothers) with a mean age of 46 years	Athletes were aged 10 – 16 years and represented elite swimming, athletics, and synchro	None specified	None specified	Mixed methods No sampling method described	Open-ended survey questions	Thematic analysis of open responses (Creswell & Poth, 2017)	Peer debriefs
Misener (2020)	An autoethnography of parental experience while engaging in “sideline” physical activity simultaneous to their child’s sport	Canada	One parent/researcher	Athletes of the parent were involved in youth soccer and ice hockey	Eudemonic wellbeing (Ryan & Deci, 2001)	Autoethnographic interpretivism (Adams et al., 2017)	Autoethnography (Cooper et al., 2017)	Reflexive journal notes, photographs, and emotional recall (Ellis, 2004)	Autoethnographic analysis (outlined by Anderson, 2006)	Feedback from academic mentors
Neely et al. (2017)	Examine how female adolescent athletes and their parents cope with deselection	Canada	14 parents (5 fathers, 9 mothers) with a mean age of 45.2 years	Athletes had a mean age of 15 years and were deselected	None specified	Interpretivist paradigm (Sparkes, 1992)	Descriptive phenomenology (Ainsworth, 2008; Giorgi, 2009)	Semi-structured interviews 10 – 12 weeks following deselection	Four-step inductive-deductive thematic analysis (Giorgi, 2009)	Researcher sensitivity (Yardley, 2008)

				from either provincial soccer, basketball, volleyball or hockey			Purposeful sampling (Mayan, 2009)			Critical friends Reflexive journal (Lincoln & Guba, 1985) Member checking (following Neely & Holt, 2014)
Newhouse-Bailey et al. (2015)	Better understand the relationship between elite youth sport participation and family units, and how these two spheres impact family functioning	US	7 families (14 parents)	Athletes were aged 8 – 18 years and represented lacrosse, soccer, hockey, baseball, football, or swimming	Family-systems theory (Becvar & Becvar, 2000; Olson, 2000)	Social constructivist epistemology	Multiple case study approach (Eisenhardt, 1989) Purposeful sampling	Semi-structured interviews with an open-ended interview guide (Orlick, 1974)	Thematic analysis (Glaser, 1978)	Independent analysis from three researchers
Newport et al. (2020)	Understand parents' experiences and offer recommendations for supporting parents within youth academy football	UK	26 parents (16 mothers and 10 fathers) aged 31 – 60 years	Athletes ranged from U9 – U16 from the same youth soccer academy	None specified	Interpretive paradigm (constructivist epistemology and relativist ontology; Denzin & Lincoln, 2018))	Instrumental case study approach (Hodge & Sharp, 2016) guided by an interpretive paradigm Purposeful sampling	Informal data: observation and field notes (Thorpe & Olive, 2016), conversations, and group discussions Formal: semi-structured interviews and focus groups	Reflexive thematic analysis (Braun & Clarke, 2019)	In line with a relativist approach to case studies (Sparkes & Smith, 2009): Appropriateness and identification of a unique case Data triangulation Reflexive diary Critical friend

Omlí & Lavoi (2012)	Identify sources of anger from the perspective of parents	US	773 parents (317 fathers, 456 mothers)	Athletes (5 – 19 years) were involved in a range of sports	None specified	None specified	Exploratory grounded theory (Charmaz, 2000; Glaser & Strauss, 1967) No sampling method described	Open-ended survey questions	Six-step thematic analysis with a grounded theory approach (Creswell, 2003)	Sample size (Creswell, 2003) Data triangulation Inter-rater reliability None specified
Peter (2011)	Explore parents' emotional investment in and behaviours in response to youth sport	US	115 parents between the age of 41 – 55 years	Children were high-level youth baseball athletes	None specified	None specified	Mixed methods case study No sampling method described	Open-ended survey questions and parent interviews	Assumed: Content analysis	None specified
Rafferty et al. (2018)	Describe parental perceptions of team snacks	US	22 parents (7 fathers, 15 mothers) between the age of 25 – 55 years	Children were high-level youth baseball athletes	None specified	None specified	No specific methodology described Convenience sampling	Semi-structured interviews	Thematic analysis (Braun & Clarke, 2006)	Critical friends
Snyder & Purdy (1982)	Explore the reverse and reciprocal nature of parent socialisation in sport	US	71 parents (43 fathers, 28 mothers)	Athletes were aged 15 years or younger and involved in organised sport	None specified	None specified	No specific methodology described Theoretical sampling (Glaser & Strauss, 1967)	Interviews and open-ended questions	Assumed: content analysis	None specified
Stefansen et al. (2018)	Further the understanding in the relationship between organised sports and the practice of parenthood	Norway	61 parents (24 fathers, 37 mothers) between the age of 40 – 55 years	Children were students in the 9 th grade who were enrolled in youth sport	None specified	A pragmatic approach guided data categorisation	No specific methodology or sampling method described	Semi-structured interviews	'Custom-built' thematic analysis based on categorization, interpretation, and theory (Creswell, 2007)	Peer debriefs Data immersion (Miles & Huberman, 1994)
Swanson (2009)	Focuses on the ways in which women, who are driven by upper-middle-class habitus, contest and construct their identity as mothers of young, soccer playing children	US	14 mothers with a mean age of 44 years	Children were U13 soccer players	None specified	None specified	Ethnographic methodology (Tedlock, 2000) No sampling method described	Fieldnotes, informal and formal interviews, group discussions	Five-step thematic analysis (Ritchie & Spencer, 1994)	Eight-month immersion in the research context

Tamminen et al. (2017)	Explore conversations between adolescent athletes 38 and parents during the car ride home following sport	Canada	26 parents (11 fathers, 15 mothers) with a mean age of 47.8 years	Children were aged 11 – 16 years and represented soccer, basketball, hockey, baseball, figure skating, and fencing	None specified	Relativist ontology and a transactional epistemology (Schwandt, 1994)	Interpretivist/constructivist approach (Smith et al., 2012) Purposeful sampling (Palinkas et al., 2015)	Semi-structured interviews	Thematic, structural, and performative narrative analyses (Reissman, 2008; Smith, 2015)	Pilot interviews Transparency of author positioning Data analysis log (Reissman, 2008)
Thrower et al. (2016)	Identify British tennis parents' education and support needs across contexts and developmental stages	UK	13 parents of junior tennis players	Children were junior tennis players aged 5 – 14 years	None specified	Pragmatism (Dewey, 1992)	Grounded theory (Corbin & Strauss, 2008; Weed, 2009) Purposeful sampling followed by theoretical sampling (Corbin & Strauss, 2008)	Field work and semi-structured interviews	Grounded theory approach to open, axial, and theoretical integration (Corbin & Strauss, 2008; Tamminen & Holt, 2012)	Member checking of the grounded theory model (Corbin & Strauss, 2008) Analytic memos (Corbin & Strauss, 2008) Expert and practitioner feedback
Todd & Edwards (2020)	Explore the various ways they provided support in elite youth hockey	Canada	11 parents of elite youth hockey players	Children were Midget (15 – 17 years) Triple A ice-hockey players	Phenomenology (Creswell, 2007; Patton, 2002)	None specified	Phenomenological descriptive approach (Morrow et al., 2015) No sampling method described	Semi-structured interviews	Descriptive phenomenological analysis (Colaizzi, 1978; Morrow et al., 2015)	Member checking
Trussell & Shaw (2012)	Explores how parenting ideologies are constructed by the discourses expressed by individuals in their everyday lives through their children's sport participation	Canada	13 parents (6 fathers, 7 mothers)	Children were sport participants aged 12 – 15 years	Feminism (Allen, 2004; Arendall, 2000)	Constructivist approach to grounded theory (Charmaz, 2005; Creswell, 2003)	Exploratory grounded theory approach Snowball or chain sampling (Creswell, 2003)	Semi-structured interviews	Constructivist grounded theory thematic analysis (Charmaz, 2006)	None specified

Wall et al. (2019)	Understand the nature of the coach-parent relationship in Canadian competitive figure skating	Canada	12 mothers ($M_{age} = 46$ years) of competitive youth figure skaters	Children were male and female competitive figure skaters with a mean age of 14 years	None specified	Naturalistic inquiry embedded in constructivism (Lincoln & Guba, 1985; Thorne, 2008)	Interpretive description (Thorne, 2008) Purposeful sampling	Semi-structured interviews	Thematic analysis Reflective memos, conventional content analysis (Hsieh & Shannon, 2005), constant comparative analysis (Thorne, 2008), and concept mapping (Hunt, 2009)	Following Thorne (2008): Epistemological integrity (i.e., logical flow) Representative credibility (i.e., sampling variability) Analytic logic (i.e., audit trail) Interpretive authority (i.e., journaling for reflexivity)
Warner et al. (2015)	Examines the role a youth sport program plays in fostering a sense of community for parents	US	36 parents (20 fathers, 16 mothers) with children in a faith-based sport organization	Children were basketball sport participants aged 5 – 12 years	None specified	None specified	Interpretive approach (Creswell, 2013) No sampling method described	Semi-structured focus groups	Thematic analysis (Munhall, 2007; Neuman, 2000)	Member checking (Miles & Huberman, 1994)
Wiersma & Fifer (2008)	Understand the positive and negative aspects of parental involvement in youth sports	US	55 parents (16 fathers, 39 mothers) with a mean age of 40.98 years	Children ranged from 4 – 18 years of age and represented baseball, softball, and soccer	None specified	None specified	No specific methodology described Naturalistic sampling (Patton, 2002)	Semi-structured focus groups	Inductive content analysis (Krueger, 1998; Maykut & Morehouse, 1994; Patton, 2002)	Pilot focus groups (Patton, 2002) Critical friend
Wolfenden & Holt (2005)	Examine players,' parents,' and coaches' perceptions of talent development in elite junior tennis	UK	4 parents (3 mothers and 1 father)	Children were elite youth tennis athletes	None specified	None specified	No specific methodology or sampling method described	Semi-structured interviews	Thematic analysis (Maykut & Morehouse, 1994; Strauss & Corbin, 1998)	Following a non-foundational approach (Sparkes, 1998):

Pilot
interviews

Reflexive
journal

Peer debriefs

Member
checking

Audit check

Data
triangulation

Appendix D: Confirmation of PROSPERO Registration

NIHR | National Institute
for Health Research

PROSPERO
International prospective register of systematic reviews

A systematic-review on parent-specific outcomes in youth sport

From	To	Date	Subject
CRD-REGISTER	"js545@uowmail.edu.au"	Thu, 12 Dec 2019 23:41:37 +0000	PROSPERO acknowledgement of receipt [152199]

Appendix E: List of Variables Used from the LSAC

Predictor Variables: Sport Participation Metrics

- 1) Sport provider: 1) School or 2) Other organization
- 2) Sport type: 1) Team or 2) Individual or 3) No sport or 4) Both types
- 3) Time spent in sport: Days/week & Hours/day

Mental Health & Wellbeing Outcome Variables:

- 1) Global health measure: In general, how would you say your health is? (Poor to excellent)
- 2) How difficult do you feel your life is at present? (1) No problems or stresses to (5) Very many problems and stresses)
- 3) How often do you feel rushed or pressed for time? (1) Never to (5) Always
- 4) Kessler K-6: In the past 4 weeks, how often did you feel... (1-5)
 - a. nervous?
 - b. hopeless (that is, without hope)?
 - c. restless or fidgety?
 - d. that everything was an effort?
 - e. so sad that nothing would cheer you up?
 - f. worthless?

Social Support Outcome Variables:

- 1) MOS Social Support Survey: People sometimes look to others for companionship, assistance, or other types of support. How often are each of the following kinds of support available to you if you need it?
 - a. Someone you can count on to listen to you
 - b. Someone to confide in or talk to about
 - c. Someone to share your most private worries
 - d. Someone to turn to for suggestions about how to deal with a problem
 - e. Someone to help you if you were confined to bed
 - f. Someone to take you to the doctor if you needed it
 - g. Someone to prepare your meals for you were unable to do it yourself
 - h. Someone to help with daily chores if you were sick
 - i. Someone who shows you love and affection
 - j. Someone who hugs you
 - k. Someone to have a good time with
 - l. Someone to get together with for relaxation
 - m. Someone to do something enjoyable with
 - n. Someone to do things with to help you get your mind off things

Appendix F: Ethical Approval for Chapters 2 and 3

Dear Dr Vella,

I am pleased to advise that the application detailed below has been **approved**.

Ethics Number: 2019/473
 Approval Date: 03/12/2019
 Expiry Date: 02/12/2020
 Project Title: Using the Longitudinal Study of Australian Children (LSAC) to better understand parent health and wellbeing in youth sport
 Researcher/s: Sutcliffe Jordan; Vella Stewart
 Documents Approved:

- UOW Ethics Application V1 19112019
- LSAC Ethics Approval with Human Participants (Submitted 27/09/2019)
- Study Variables to be Used from LSAC Dataset V1 19112019
- LSAC Full Questionnaire (from growingupinaustralia.gov) [Submitted 1/10/2019]
- Australian Government Application for LSAC Data (Submitted 27/09/2019)
- Ethics Training Certificate - Jordan Sutcliffe
- Ethics Training Certificate - Stewart Vella

Sites:

Site	Principal Investigator for Site
Data Analysis Only (from Existing Data Set)	Jordan Sutcliffe

The HREC has reviewed the research proposal for compliance with the *National Statement on Ethical Conduct in Human Research* and approval of this project is conditional upon your continuing compliance with this document. Compliance is monitored through progress reports; the HREC may also undertake physical monitoring of research.

Approval is granted for a twelve month period; extension of this approval will be considered on receipt of a progress report **prior to the expiry date**. Extension of approval requires:

- The submission of an annual progress report and a final report on completion of your project.
- Approval by the HREC of any proposed changes to the protocol or investigators.
- Immediate report of serious or unexpected adverse effects on participants.
- Immediate report of unforeseen events that might affect the continued acceptability of the project.

If you have any queries regarding the HREC review process or your ongoing approval please contact the Ethics Unit on 4221 3386 or email ethics@uow.edu.au.

Yours sincerely,

Emma Barkus

Appendix G: Approval from the LSAC

**LSAC**

October 16, 2019 at 4:27 PM

ADA Dataverse: You have been granted access to dataset: "Growing Up in Australia: Longitudinal Study of Australian Childre...

[Details](#)

To: Jordan Sutcliffe

Hello,

You recently applied for access to controlled access files in dataset: Growing Up in Australia: Longitudinal Study of Australian Children (LSAC) Release 7.2 (Waves 1-7). We are pleased to advise that your application for access has been approved.

Your obligations as an Authorised Data User are contained in the Terms and Conditions of Use.

You can now view and download files from the dataset at this link: <https://dataverse.ada.edu.au/dataset.xhtml?persistentId=doi:10.26193/F2YRL5>.

(Please note that you will need to login to Dataverse to see your updated access, and to download controlled access files.)

If you have any queries in relation to the data please refer to the supporting documentation for Growing Up in Australia: Longitudinal Study of Australian Children (LSAC) Release 7.2 (Waves 1-7), or click on the email icon from anywhere in Dataverse to submit a query.

Thank you,

The Australian Data Archive

on behalf of the data owner(s): Department of Social Services (Australian Government); Australian Institute of Family Studies (Australian Government); Australian Bureau of Statistics (Australian Government).

Appendix H: Ethical Approval for Chapters 5 and 6

Ethics Number: 2020/170
 Approval Date: 21/04/2020
 Project Expiry Date: 20/04/2021
 Project Title: A mixed-methods exploration of the relationship between youth sport participation and parental mental health
 Researchers: Sutcliffe Jordan; Vella Stewart
 Documents Approved:

- HREC Application Form rec. 01/04/2020
- Response to Review rec. 17/04/2020
- Participant Information Sheet V2, 15/04/2020
- Parental Informed Consent (Interview) V1, 31/03/2020
- Parent Information Letter (Survey and Interview Components) V1, 31/03/2020
- Oral Recruitment Script V1, 31/03/2020
- Social Media Recruitment Script V1, 31/03/2020
- Ethics Training Certificates

Sites:

Site	Principal Investigator for Site
Various Sporting Locations	Jordan Sutcliffe
University of Wollongong	Stewart Vella

The HREC has reviewed the research proposal for compliance with the *National Statement on Ethical Conduct in Human Research* and approval of this project is conditional upon your continuing compliance with this document. Compliance is monitored through progress reports; the HREC may also undertake physical monitoring of research.

Approval is granted for a twelve month period; extension of this approval will be considered on receipt of a progress report **prior to the expiry date**. Extension of approval requires:

- The submission of an annual progress report and a final report on completion of your project.
- Approval by the HREC of any proposed changes to the protocol or investigators.
- Immediate report of serious or unexpected adverse effects on participants.
- Immediate report of unforeseen events that might affect the continued acceptability of the project.

If you have any queries regarding the HREC review process or your ongoing approval please contact the Ethics Unit on 4221 3386 or email ethics@uow.edu.au.

Yours sincerely,

Emma Barkus

Appendix I: Parent Information Letter (Survey Component)

Parent Experiences in Youth Sport

Investigator: Stewart Vella, Ph.D. (stvella@uow.edu.au)

Co-investigators: Jordan Sutcliffe (js545@uowmail.edu.au)

You have been invited to take part in a research study that aims to understand how youth sport participation affects your wellbeing as a parent. This project is being led by Dr. Stewart Vella, a Senior Lecturer in the School of Psychology at the University of Wollongong. This is a PhD project for the candidature of Jordan Sutcliffe, a student in the School of Psychology. Through this research we hope to gain valuable information regarding how your child's sport participation affects your wellbeing.

INFORMATION

We are looking to recruit approximately 500 parents of youth sport participants between the age of 12 and 18 years. Your participation in this study first involves reading this informed consent statement, which will take about 5 minutes. As the survey is anonymous, we will consider that you have consented to participate in the study through the completion and submission of the survey. The survey includes general demographic questions (e.g., age, gender) and questions about how your child's sport participation affects your overall wellbeing. The total duration of the study is expected to take 20 minutes.

Participation is completely voluntary, and participants can withdraw from the study at any time. Considering the survey is completed anonymously, you will not be able to withdraw your data once it is submitted.

In addition, we will be seeking approximately 20 parents to participate in a follow-up interview to discuss experiences as a parent in youth sport. The interview will take around 1 hour at a convenient time and place for you. There will be an area on the questionnaire where you can indicate whether you are interested in considering an interview or not. This is also completely voluntary. If you do not wish to participate in the survey or the interview, this will not affect your relationship with your sports club or the University of Wollongong in any way.

RISKS

There are minimal risks associated with participation in this study. If you find anything discussed to be distressing, or if you would like any further information on mental health, you can call **Lifeline on 13 11 14**, or **Beyond Blue at www.beyondblue.org.au or by phone 1300 22 4636**, or visit **<http://www.wayahead.org.au/>**.

BENEFITS

Participants will have the opportunity to experience psychology research first-hand, which is an educational experience. Participants will also have the opportunity to learn more about psychological research through the summary received upon completion of the study. Although you will not receive direct benefits from participating in this research,

the findings from this research will be extremely valuable in contributing to our understanding of parents' wellbeing as a function of youth sport participation.

CONFIDENTIALITY

All information provided is considered anonymous. Your name will not be included or in any other way associated with the data collected in the study. However, participants will make themselves known to the researchers and other team members involved by agreeing to participate and undergo the study procedures. All hard copies of the survey be locked in a filing cabinet in the School of Psychology at the University of Wollongong, which will also be locked. All electronic files will be stored on a password protected computer and maintained indefinitely. All potentially identifying data (i.e., informed consent) will be shredded and destroyed by Dr. Stewart Vella five years post-publication.

FEEDBACK AND PUBLICATION

It is anticipated that the results of this study will be communicated at academic conferences, at community workshops, and within written scientific journal articles. We may re-analyse these data for future work. A summary of the study results will be sent to all individuals who indicate interest below and provide their e-mail address.

FURTHER INFORMATION

If you have any questions about the research, you can contact the lead researcher Mr Jordan Sutcliffe (or js545@uowmail.edu.au) or Dr Stewart Vella (02 42215516 or stvella@uow.edu.au).

If you have any concerns or complaints regarding the way this research has been conducted, you can contact the University of Wollongong Ethics Officer on (02) 4221 3386 or email rso-ethics@uow.edu.au

Appendix J: Study Questionnaire from Chapter 5

What is your child's primary sport(s)? _____

List any other sports that your child is involved in: _____

What level of competition is your child engaged in for their primary sport(s) (please circle)?

- a. Competitive (i.e., your child went through a selection process to be on this team)
- b. Recreational (i.e., your child did not have to be selected to play on this team)

How many years has your child been playing his/her primary sport(s)? _____
Would you consider your child a sport sampler or specialiser (please circle one)?

Sampler (i.e., involved in multiple sports year-round)

Specialiser (i.e., is committed to one sport and avoids playing other sports)

What is your age? (parent age) _____

What is your gender: Male () Female () Other ()

What is your child's age? _____

What is your child's gender: Male () Female () Other ()

Do you have other children involved in sport?

Yes No

If you answered yes to the question above, please indicate how many other children you have that compete in sport: _____

Did you play organised sport in your youth (please circle)?

Yes No

Social Identity Questionnaire for Sport (Bruner & Benson, 2018)

The following questions are designed to reflect **how you feel about being a part of your child's team**. Please CIRCLE a number from 1 to 7 to indicate your agreement with each of the statements

1. I feel strong ties to other parents on my child's team.

1	2	3	4	5	6	7
STRONGLY DISAGREE						STRONGLY AGREE

2. I find it easy to form a bond with other parents in this team.

1	2	3	4	5	6	7
STRONGLY DISAGREE						STRONGLY AGREE

3. I feel a sense of being "connected" with other parents in this team.

1	2	3	4	5	6	7
STRONGLY DISAGREE						STRONGLY AGREE

4. Overall, being a member of this team has a lot to do with how I feel about myself.

1	2	3	4	5	6	7
STRONGLY DISAGREE						STRONGLY AGREE

5. In general, being a member of this team is an important part of my self-image.

1	2	3	4	5	6	7
STRONGLY DISAGREE						STRONGLY AGREE

6. The fact that I am a member of this team often enters my mind.

1	2	3	4	5	6	7
STRONGLY DISAGREE						STRONGLY AGREE

7. In general, I'm glad to be a member of this team.

1	2	3	4	5	6	7
STRONGLY DISAGREE						STRONGLY AGREE

8. I feel good about being a member on this team.

1	2	3	4	5	6	7
STRONGLY DISAGREE						STRONGLY AGREE

9. Generally, I feel good when I think about myself as a member of this team.

1	2	3	4	5	6	7
STRONGLY DISAGREE						STRONGLY AGREE

Kessler Psychological Distress Scale (K6; Kessler et al., 2002)

The following questions ask about how you have been feeling during the past 30 days. For each question, please circle the number that best describes how often you had this feeling

In the past 30 days...	None of the Time	A Little of the Time	Some of the Time	Most of the Time	All of the Time
About how often did you feel nervous?	1	2	3	4	5
About how often did you feel hopeless?	1	2	3	4	5
About how often did you feel restless or fidgety?	1	2	3	4	5
About how often did you feel so depressed that nothing could cheer you up?	1	2	3	4	5
About how often did you feel that everything was an effort?	1	2	3	4	5
About how often did you feel worthless?	1	2	3	4	5

Social Support Questionnaire (Shelbourne & Stewart, 1991)

People sometimes look to others for companionship, assistance, or other types of support. How often is each of the following kinds of support available to you **in your child's sport** if you need it? Choose one number from each line.

Another parent from my child's team/sport has been...	NONE OF THE TIME	A LITTLE OF THE TIME	SOME OF THE TIME	MOST OF THE TIME	ALL OF THE TIME
1. Someone you can count on to listen to you when you talk					
2. Someone to give you information to help you understand a situation					
3. Someone to give you good advice about a crisis					
4. Someone to confide to in or talk to about yourself or your problems					
5. Someone whose advice you really want					
6. Someone to share your most private worries and fears with					
7. Someone to turn to for suggestions about to deal with a personal problem					
8. Someone who understands your problems					
9. Someone to help you if you were confined to bed					
10. Someone to take you to the doctor if your needed it					
11. Someone to prepare your meals if you were unable to do it yourself					

12. Someone to help with daily chores if you were sick					
13. Someone who shows you love and affection					
14. Someone to love and make you feel wanted					
15. Someone who hugs you					
16. Someone to have a good time with					
17. Someone to get together for relaxation					
18. Someone to do something enjoyable with					

PARENT-CHILD RELATIONSHIP SCALE (Pianta, 1992)

Please reflect on the degree to which each of the following statements currently applies to your relationship with your child. Using the scale below, circle the appropriate number for each item.

	Definitely does not apply	Not really	Neutral, not sure	Applies somewhat	Definitely applies
1. I share an affectionate, warm relationship with my child	1	2	3	4	5
2. My child and I always seem to be struggling with each other	1	2	3	4	5
3. If upset, my child will seek comfort from me	1	2	3	4	5
4. My child is uncomfortable with physical affection or touch from me	1	2	3	4	5

5. My child values his/her relationship with me	1	2	3	4	5
6. When I praise my child, he/she beams with pride	1	2	3	4	5
7. My child spontaneously shares information about himself/herself	1	2	3	4	5
8. My child easily becomes angry at me	1	2	3	4	5
9. It is easy to be in tune with what my child is feeling	1	2	3	4	5
10. My child remains angry or is resistant after being disciplined	1	2	3	4	5
11. Dealing with my child drains my energy	1	2	3	4	5
12. When my child is in a bad mood, I know we're in for a long and difficult day	1	2	3	4	5
13. My child's feelings toward me can be unpredictable or can change suddenly	1	2	3	4	5
14. My child is sneaky or manipulative with me	1	2	3	4	5
15. My child openly shares his/her feelings and experiences with me	1	2	3	4	5

I would be willing to consider participating in a follow-up interview to discuss my experiences as a parent in youth sport at a later date:

If you are open to a follow-up interview, please write your preferred contact number below.

Phone number: _____

Appendix K: Parent Information Letter (Interview Component)

Parent Experiences in Youth Sport

Investigator: Stewart Vella, Ph.D. (stvella@uow.edu.au)

Co-investigators: Jordan Sutcliffe (js545@uowmail.edu.au)

You have been invited to take part in a research study that aims to understand how youth sport participation affects your wellbeing as a parent. This project is being led by Dr. Stewart Vella, a Senior Lecturer in the school of Psychology at the University of Wollongong. This is a PhD project for the candidature of Jordan Sutcliffe, a student in the school of Psychology. Through this research we hope to gain valuable information regarding how your child's sport participation affects your wellbeing.

INFORMATION

We are seeking approximately 20 parents to participate in a follow-up interview to discuss experiences as a parent in youth sport. Interviews typically last around 60 minutes, and can be conducted face-to-face, or via Skype or telephone. The interview will be conducted and audiorecorded by a member of the research team. Typical questions include: "What does a typical week of sport look like for you and your family?", "How does sport affect your free time outside of work/school?", "Does your child play any sports year-round? Or does he/she play many sports on a seasonal basis?", "Walk me through a typical day/evening when your child has training and/or competition."

RISKS

There are minimal risks associated with participation in this study. If you find anything discussed to be distressing, or if you would like any further information on mental health, you can call **Lifeline on 13 11 14**, or **Beyond Blue at www.beyondblue.org.au** or by **phone 1300 22 4636**, or visit **<http://www.wayahead.org.au/>**.

BENEFITS

Participants will have the opportunity to experience psychology research first-hand, which is an educational experience. Participants will also have the opportunity to learn more about psychological research during the summary received upon completion of the study. Although you will not receive direct benefits from participating in this research, the findings from this research will be extremely valuable in contributing to literature about parents' wellbeing as a function of youth sport.

CONFIDENTIALITY

All information provided is considered confidential. However, interview participants will make themselves known to the researchers and other team members involved by agreeing to participate. All hard copies of the transcripts and consent form will be locked in a filing cabinet in the School of Psychology at the University of Wollongong, which will also be locked. All electronic audio files will be stored on a password protected computer, and the de-identified electronic data (i.e., files that have been assigned a unique code) will be maintained indefinitely. All potentially identifying data (i.e., informed consent) will be shredded and destroyed by Dr. Stewart Vella five years post-publication.

FEEDBACK AND PUBLICATION

It is anticipated that the results of this study will be communicated at academic conferences, at community workshops, and within written scientific journal articles. We may re-analyse these data for future work. A summary of the study results will be sent to all individuals who indicate interest below and provide their e-mail address.

FURTHER INFORMATION

If you have any questions about the research, you can contact the lead researcher Mr Jordan Sutcliffe or js545@uowmail.edu.au or Dr Stewart Vella (02 42215516 or stvella@uow.edu.au).

If you have any concerns or complaints regarding the way this research has been conducted, you can contact the University of Wollongong Ethics Officer on (02) 4221 3386 or email rso-ethics@uow.edu.au.

Appendix L: Parental Informed Consent (Interview Component)

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any time. You have the right to omit any question(s) you choose. Should you wish to withdraw, simply alert one of the researchers and data collection will halt immediately. Then, every attempt will be made to remove and destroy your data.

I have read the attached information sheet and the above information describing the research study, and I agree to participate. I understand my participation is voluntary, and that I can withdraw from the study at any time for any reason. My signature below shows that I consent to participate in the study. I understand that I have not waived any rights to legal recourse in the event of research-related harm.

I confirm that I have had the opportunity to ask questions about the research

I consent to participate in this research study, which will include an interview around my experiences in youth sport and how they affect my wellbeing

Participant Name: _____(Please print)

Participant Signature: _____

Date: _____

Appendix M: Interview Schedule

Demographics	
Age	
Sport	
Years playing this sport	
Frequency of participation in this sport	
Type of competition	

Section	Questions
Rapport Building	Find common ground on sporting interests (e.g., did you play sports in your youth? how did your child come about playing this particular sport?). Questions aimed at breaking ice and building initial rapport.
Context	<ul style="list-style-type: none"> a) What does a typical week of sport look like for you and your family? b) Would you say that sport fills most of your free time outside of work/school? c) Does your child play any sports year-round? Or does he/she play many sports on a seasonal basis? d) Walk me through a typical day/evening when your child has training and/or competition.
Experience	<ul style="list-style-type: none"> a) Tell me what you think of the financial cost of youth sport? b) Has youth sport ever caused financial hardship for you and your family? c) How is your time management in the context of youth sport? d) Do you find that you are lacking important personal time? What are some examples of things that youth sport keeps you from doing? e) Do you ever get help regarding facilitation of youth sport? For example, help from other parents or extended family members? f) How does youth sport affect your relationships? (probe spousal and child relationships) g) Do you feel as though you are a member of your child's team? Tell me about how involvement in this team is important to you. h) Do you typically make new friends through your child's sport? i) Do you keep in touch with parents from previous teams?
Outcomes Note: Questions will go in the direction (i.e., positive or negative on mental health) based on preliminary questions	<p>Based on the experiences we just discussed, I'd like to know how these experiences influences your mental health and wellbeing. Please let me know if you'd like to skip any particular question.</p> <ul style="list-style-type: none"> a) How does youth sport make you feel? b) Do you enjoy parenting in sport? c) Would you say that youth sport is beneficial or detrimental for your mental health? d) Have you ever felt worn down, or fatigued from youth sport? e) Have you ever experienced a mental health problem because of youth sport, such as anxiety or depression? f) Conversely, has youth sport ever felt protective against anxiety or depression? g) What specific aspects make you feel this way?
Possible interventions	<ul style="list-style-type: none"> a) If you were to change anything about youth sport for the benefit of your mental health, what would it be? b) Would you ever consider engaging in parent-only team events? What would those look like?

	<p>c) Would you ever consider doing group exercise and/or recreational sport during your child's training? Or is watching your child train important to you?</p> <p>d) Do you have any other thoughts on how parents can become happier as a result of having children in sport?</p>
Conclusion	Is there anything further that you would like to add at this point that you feel is relevant?