UNIVERSITY OF
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The Role of Social Support in Youth Sport

Thesis submitted for the degree of Doctor of Philosophy,

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Abstract

This thesis aimed to extend knowledge concerning the role of social support in youth sport. A literature review was conducted to identify the current status of knowledge in the area through a systematic review of studies applicable to social support in youth sport. The findings provided up-to-date knowledge in the study area and informed a two-part intervention-based study designed to determine the feasibility of whether an intervention has the potential to be run again in a controlled trial. The first (quantitative) part of the study aimed to determine the effect of the intervention on participants and to address theoretically important considerations relating to the specific role of perceived and received support in a youth sport context. Results demonstrated that changes in pre and post intervention values (i.e. intentions to drop out, social identity, received support, encountered, basic needs satisfaction) were non significant except for perceived support. The findings relating to a change in perceived support demonstrated that higher perceived available support was significantly associated with lower levels of intentions to drop out at the end of the study. Furthermore, social identity emerged as a significant mediating factor in explaining the association between changes in perceived support and intentions to drop out. The first part of the study also examined the stress buffering effect of received support. Findings demonstrated that stress encountered had a significant main effect on intentions to drop out. Moreover, received support was shown to exert a significant but small buffering effect on the relationship between stress encountered on intentions to drop out. The purpose of the second (qualitative) part of the study was to examine whether the intervention needed to be refined or adapted to make it more acceptable to users or more relevant or useful to the specific context in which it was delivered. The findings revealed a range of key factors relating to perceived (e.g., access to games, games format) and received support (e.g., peer to peer support, increased confidence to participate, stress encountered, stress removed). The results of the pre and post analyses combined with the

qualitative findings in the study suggest that the social support intervention has the potential to be tested in a controlled trial. The discussion focuses on the current status of the research area, limitations, suggested practical implications and future research directions. The findings highlight the importance of developing perceived support and social identity in youth sport and received support in buffering stressors typically associated with youth sport drop out.

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To begin with, my family deserve a special thanks for their support throughout my education. My mother Bridie, father John and brothers Declan and Gary have been a great source of help and motivation during my entire development to date. A special thank you also goes to my wonderful wife Jeanne and my children Cora and Isabella. I have been incredibly lucky to share the PhD journey with such a supportive and loving family. I will always be in debt to you all.

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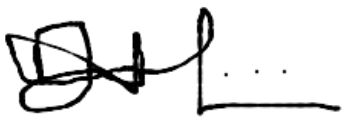
Publication from the Thesis

Chapter 2

Sheridan, D., Lavallee, D., Coffee, P. (2014). A systematic review of social support in youth sport. *International Review of Sport and Exercise Psychology, 7(1) 198 – 228.*

Declaration

I declare that I alone composed this thesis and that it embodies the results of my own research. Where appropriate, I have acknowledged the nature and extent of work carried out by others included in the thesis.



Signed: _____

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Chapter One

Introduction

Over the past two decades a proliferation of research has generated an increased awareness of social support within sport (Rees, 2016), which has led to recent work demonstrating links between social support and self-confidence (Rees & Freeman, 2007), processes underpinning performance (Rees & Hardy, 2004), and objective performance outcome (Rees & Freeman, 2008; Rees, Hardy, & Freeman, 2007), and injury recovery (Mitchell, Evans, Rees, Hardy, 2014).

Youth sport provides an important context for studying social support (Holt, 2008). Over the past decade a rapid increase of research has taken place concerning the role of social support in youth sport. The role of parents, coaches and teammates in creating a motivational climate that promotes and rewards effort and improvement over winning have been shown to predict continued participation in sport (Le Bars, Gernigon, & Ninot, 2009). Moreover, research has highlighted that youth sport participants are most likely to experience positive developmental outcomes when interactions with coaches and parents are characterized by positive and informational feedback, appropriate role modelling and autonomy-supportive engagement styles (Weiss & Wiese-Bjornstal, 2009). Research has highlighted that disengagement from youth sport has emerged to become a global trend with drop out rates exceeding 30% in some countries (Boiché & Sarrazin, 2009; Delorme, Chalabaev, & Raspaud, 2011). The key correlates of youth sport drop out point to a significant role that social support can play at an individual, institutional, community and policy level in addressing youth sport drop out (Balish, McLaren, Rainham & Blanchard, 2014).

Research has highlighted the need to further develop the conceptual basis underpinning the link between social support and key outcomes (Uchino, 2009). Social support has been conceptualized as a complex multi construct (Bianco & Eklund, 2001), encompassing structural and functional aspects of interpersonal relationships (Cohen & Wills, 1985). Functional support is divided into perceived availability of support

(perceived support) and support actually received (received support). Two principal models have used in the literature to explain how social support affects outcomes (Cohen, Gottlieb, & Underwood, 2000; Cohen & Wills, 1985): the stress-buffering model and the main effect model. The stress buffering model suggests that support protects people from the harmful effects of stress upon outcomes while the main effect model suggests that social support has a beneficial effect upon outcomes irrespective of levels of stress.

The distinction between perceived and received support (functional aspects of social support) has been highlighted as a key conceptual consideration in addressing the link between social support and key outcomes (Bianco & Eklund, 2001, Uchino, 2009). It is suggested that perceived support is primarily associated with the main effect model while received support is primarily associated with the stress-buffering model (Bianco & Eklund, 2001). Key findings within the sports literature have elucidated the effect mechanism underpinning perceived and received support on key outcomes such self-confidence (Rees & Freeman, 2007) and performance outcome (Freeman & Rees, 2008). The findings show that the main effect was primarily attributable to perceived support, and the stress buffering effect was primarily attributable to received support. This highlights the importance of incorporating measures of perceived and received support in the same study to understand their unique effects on key outcomes (Bianco & Eklund, 2001).

Although there is an increased awareness and promotion of social support in sport (Jowett & Lavallee, 2007), research to date has not explored the effect of functional aspects (perceived and received support) of social support in addressing the youth drop out. Researchers have identified the need for further evidence demonstrating which aspects of social support help and how (Rees & Hardy, 2004). The investigation of social support in a youth sport drop out context presents a unique opportunity to expand existing social support theory while unveiling important locations for interventions to decrease youth sport drop out (Balish, et. al., 2014).

Following this introductory chapter, Chapter 2 provides a review of social support in youth sport literature, with a focus on identifying appropriate theories and the key correlates of social support in order to develop future research directions and intervention strategies. This chapter provides the evidence for designing a two-part feasibility study that is grounded in social support theory. Chapter 2 then outlining three key research questions arising from the literature review, which aim to expand theoretical knowledge and address the feasibility of a social support intervention designed to reduce intentions to drop out from youth sport.

Chapter 3 presents a two-part feasibility study (hereafter referred to as the quantitative part and qualitative part of the GAA Study). The key contextual factors relating to a national sports organisation (Gaelic Athletic Association) who aimed to address a high rate of youth sport drop out are initially outlined. In order to assess whether the potential viability of the intervention to be tested in a full-scale trial, the quantitative part of the study investigated the effect of a change in perceived support on intentions to drop out at the end of a social support intervention. The quantitative part also examined the stress buffering effect of received support.

Chapter 4 presents the qualitative part of the GAA Study. Because it is critical to understand the perspectives of different stakeholders, this study was designed to examine whether the intervention needed to be refined or adapted to make it more acceptable to users or more relevant or useful to the specific context in which it is delivered.

Finally, Chapter 5 contains a general discussion of the thesis, including a summary of the study findings, theoretical implications, implications for social support intervention methodology, practical implications, feasibility recommendations, strengths and limitations and future research recommendations.

Chapter Two

Literature Review

2.1 Introduction

Research suggests social support involves "an exchange of resources between at least two individuals perceived by the provider or recipient to be intended to enhance the well being of the recipient" (Shumaker & Brownell, 1984, p.13). Support derived from key interpersonal relationships (e.g., coaches, parents, peers) in a sporting context has been identified as an important resource for athletes. The quality and type of social support an athlete perceives and receives is linked with recovery from injury, youth sport participation, burnout, self-confidence, and performance (Bianco & Eklund, 2001; Holt & Hoar, 2006; Rees, 2007).

Although there is an increased awareness and promotion of social support in sport (Jowett & Lavallee, 2007), research to date has not completed a systematic review of social support in a youth sport context. The aim of the current study therefore was to conduct a systematic review of social support in youth sport. The same systematic review protocol as used by Sallis et al. (2000), Goodger et al. (2007) and Park et al. (2012) was used to identify key research designs, sample characteristics and the key correlates relating to social support in a youth sport context. Hard copies of studies containing keyword combinations relating to social support in a youth sport context were gathered initially and assessed against a set of inclusion criteria. After sourcing the studies each study was assigned a bibliography number and samples were analyzed according to sample characteristic, research design and theoretical approach.

The case for conducting such a review of the evidence-base is strengthened due recent developments in the research field. The construct of social support has been diversified in order to consider the structural (number and type of relationships) and functional (perceived and received support) aspects of interpersonal relationships (Lakey, 2010). This multi-dimensional conceptualization of social support has recently generated a more diverse set of methods to examine the quantity and satisfaction of social support in a

sports context (Freeman, Coffee & Rees, 2011). Moreover, a review of the extant literature points to a rapidly evolving research area. In the 1990s, research into the theme of interpersonal relationships in sport was largely under developed (Iso – Ahola, 1995). Wylleman (2000) responded to this gap and reviewed the research area concerning interpersonal relationships in sport and exercise. The author found a lack of empirical evidence published in sport psychological journals and small number of psychometric instruments on relationships available to sports psychologists. Following this the research area has continued to expand, especially over the past 10 years. Jowett and Wylleman (2006) reported considerable progress in the quality and quantity of studies in the research area. The authors also identified a number of key challenges in studying the theme of interpersonal relationships in sport and exercise. Such challenges include expanding the theoretical approaches used to study relationships given the lack of theoretical diversity in the literature. Moreover, the authors called for the use of a lifespan approach to study how athletes' interpersonal relationships with coaches, peers, parents, siblings and significant others evolve before, during and after their sport career. Finally, the authors called for the development of more sophisticated statistical tools to measure the relationship data at different levels (individual, dyadic and group).

In more recent years, the literature has included several publications on social support and interpersonal relationships in sport (Jowett & Lavallee, 2007; Lavallee & Wylleman, 2007; Smith & Bar-Eli, 2007). During this period, several book chapters have been dedicated to the theme of youth sport and how key interpersonal relationships impact the development of youth participants (Ntoumanis, Vazou & Duda, 2007; Salmela, Young & Kallio, 2000; 2007; Smith, 2007; Smith, Smoll & Curtis, 2007; Weiss, Smith & Theeboom, 1996; White, 2007; Wylleman, De Knop, Ewing & Cumming, 2000, 2007; Wylleman, De Knop, Verdet & Cecic-Epic, 2007). Research has highlighted that youth sport participants are most likely to experience positive developmental outcomes when

interactions with coaches and parents are characterized by positive and informational feedback, appropriate role modelling and autonomy-supportive engagement styles (Weiss & Wiese-Bjornstal, 2009). Furthermore, positive relationships with teammates and friends are associated with favourable self-perceptions, emotions, self-determined motivation, and moral development (Smith & McDonough, 2008). These recent findings concerning the positive influence of social support in a youth sport context point to a strong basis for the completion of a systematic review in order to effectively share the best available evidence in the research area.

The purpose of the current study therefore was to conduct a systematic review of social support in youth sport focusing on examining the populations in which social support has been explored, the key questions that have been posed, and the research strategies that have been deployed. As highlighted by similar systematic reviews (Goodger, Gorely, Lavallee & Harwood, 2007; Park, Lavallee & Tod, 2012), this study offers an opportunity for researchers to share the available evidence by identifying appropriate theories to develop future research directions and intervention strategies, as well as raise awareness of the range of research methods employed in the study area. Specifically, the review aims to provide a summary of sample characteristics, the key relationships of social support, and research designs employed up to March 2013.

2.2 Method

2.2.1 Sources

The search strategy was initiated and completed in March 2013. The search initially included the use of the following electronic databases: Google Scholar; Science Direct; Scopus; PsycInfo; Proquest; and Pubmed. The rationale for using these databases relates to their prominent usage in other systematic reviews (Goodger et al., 2007; Park et al., 2012; Sallis, Prochaska, & Taylor, 2000) using a similar review protocol. Additional citations were subsequently gathered through reading the reference lists of articles already obtained.

Keyword combinations employed in the search strategy included the following ‘Youth Sport’, ‘Social Support’, ‘Interpersonal Relationship (s)’ ‘Transition’, ‘Systems’, ‘Networks’, ‘Athlete’, ‘Coach’, ‘Parents’ ‘Peers’ ‘Teammate’.

Studies needed to: (a) contain empirical data concerning youth sport samples mean age 10 – 22 years as there is a broad consensus within the research that the youth age category is from 10 – 22 years (Santrock, 2010); (b) be related to social support in youth sport; and (c) be peer reviewed and published in English. These inclusion criteria were applied to journal articles and published conference proceedings and imposed no limits on characteristics of samples and research designs.

2.2.2 Procedure

Hard copies of the studies were gathered initially and assessed against the inclusion criteria. After sourcing the studies, the same systematic review protocol as used by Sallis et al., (2000), Goodger et al.,(2007) and Park et al., (2012) was applied to this analysis. The rationale for applying this review protocol is reflected in its use across sport and exercise settings. The authors completed a systematic review of correlates of physical activity in a similar aged adolescent population, which enabled a full range of potential correlates to emerge during the review. Furthermore the review method enabled a range youth social support correlates involving siblings, teachers, parents, peers and coaches to emerge across a diverse range of studies.

The protocol for this review method included the creation of Table 1 and Table 2 in order to classify the: (a) research design; (b) sample characteristics; and (c) key correlates relating to social support in a youth sport context. As highlighted by Sallis et al. (2000), the rationale for this review method were to: (a) identify detailed methodological features of the studies in order to help researchers develop better methods in the future; (b) examine the characteristics of the sample populations in order to help identify sampling gaps; and (c) analyze the key factors related to social support in a youth sport context and identify

the evidence base for theories and models to provide practical implications for both future research directions and interventions strategies.

Table 1: Research Designs and Sample Characteristics

Study Characteristics	**Reference Number**	**Samples**	**K**
Design			
Quantitative	1, 2, 5, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17, 19, 20, 22, 23, 25, 26, 27, 29, 31, 32, 34, 35, 37, 38, 40, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 54, 55, 56, 57, 58, 59, 60, 62, 63, 64, 65, 67, 68, 69, 70, 73	55	54
Qualitative	3, 4, 6, 9, 18, 21, 24, 28, 30, 33, 36, 39, 41, 61, 66, 71, 72	17	
Combined	53	1	
Longitudinal	7, 35	2	
Cross Sectional	1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73	71	70
Data Collection			
Qualitative	3, 4, 6, 9, 18, 21, 24, 28, 30, 33, 36, 39, 41, 53, 61, 66, 71, 72	18	
Quantitative (Social Support)	1, 8, 11, 12, 14, 15, 23, 25, 26, 27, 38, 40, 43, 44, 45, 46, 47, 48, 49,	30	29

Study Characteristics	Reference Number	Samples	K
	50, 51, 52, 58, 63, 64, 65, 68, 69, 70, 73		
Quantitative (Psychology)	2, 5, 7, 10, 13, 16, 19, 22, 29, 32, 34, 35, 37, 42, 53, 54, 55, 56, 57, 59, 60, 62	22	
Quantitative (Other)	17, 20, 31, 67	4	
Theoretical Approach			
Cognitive	6, 19, 38, 42	4	
Behavioral	32, 67	2	
Motivational	1, 2, 8, 10, 11, 16, 22, 29, 34, 35, 40, 52, 55, 56, 57, 58, 62, 63, 64, 66	20	
Social	3, 7, 9, 14, 15, 17, 18, 20, 21, 23, 24, 25, 26, 27, 28, 31, 36, 37, 39, 43, 44, 45, 46, 47, 48, 49, 50, 51, 53, 60, 61, 65, 72, 73	34	
Developmental	4, 5, 12, 13, 30, 33, 41, 59, 68, 69, 70, 71	12	11
Not Evident	54	1	
Support Provider Relationship – Single Relational Level			
Athlete - Coach	1, 2, 10, 11, 23, 24, 25, 26, 32, 36, 38, 39, 45, 46, 47, 50, 51, 66	18	
Athlete - Parent	3, 5, 9, 17, 18, 20, 24, 29, 33, 40, 66, 72, 73	13	
Athlete - Peer	8, 21, 55, 56, 58, 65, 68, 69, 70, 71	10	

Study Characteristics	Reference Number	Samples	K
Support Provider Relationship – Multi Relational Level			
Athlete - Coach – Parent – Peer	30, 34, 35, 41, 73	3	
Athlete - Coach – Parent	12, 13, 24, 27, 28, 61, 66, 73	8	6
Athlete - Parent – Peer	5, 7, 63, 72	4	
Athlete - Coach – Peer	52, 62	2	
Sample Size			
1 – 10	4, 6, 9, 24, 39, 41, 66, 72	8	
11 – 50	18, 21, 28, 33, 45, 61, 71	7	
51 – 100	2, 5, 19, 30, 35, 38, 44, 46, 47, 53, 54, 59	12	
101 – 200	1, 7, 10, 14, 15, 17, 20, 25, 27, 29, 34, 36, 37, 48, 60, 62, 63, 64, 67, 68, 69, 70	22	
201 – 300	8, 11, 12, 16, 23, 26, 32, 37, 42, 43, 50, 51, 52, 56, 57, 58, 73	17	
301 – 500	13, 22, 49, 55, 65	5	
500 – 1,000	3, 31	2	
Over 1,000			
Not Identified			
Gender			
Male	4, 5, 29, 45, 53, 56, 62, 66	8	

Study Characteristics	Reference Number	Samples	K
Female	7, 21, 28, 65	4	
Combined	1, 2, 3, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 22, 23, 24, 25, 26, 27, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 46, 47, 48, 49, 50, 51, 52, 54, 55, 57, 58, 60, 61, 63, 64, 67, 68, 69, 70, 71, 72, 73	59	58
Not Identified	17, 59	2	
Competitive Level			
Recreational	9, 58, 68, 70, 71	5	
High School/College	57	1	
Club (Non Professional)	5, 10, 16, 21, 40, 42, 45, 52, 56, 61, 63, 64, 66, 67, 69	15	
Elite (Regional/National/International/Olympic)	3, 4, 6, 8, 17, 18, 19, 20, 22, 24, 28, 33, 36, 39, 41, 48, 73	17	
Professional	53, 62	2	
Amateur	44	1	
Mixed	1, 2, 11, 12, 13, 14, 15, 23, 25, 26, 27, 29, 30, 32, 34, 35, 38, 43, 46, 47, 49, 50, 51, 59, 60	25	24
Not Identified	7, 31, 37, 54, 55, 65, 72	7	

Study Characteristics	Reference Number	Samples	K
Type of Sport			
Team	4, 5, 9, 16, 21, 22, 29, 45, 52, 53, 56, 62, 63, 64, 66, 69	16	
Individual	1, 2, 10, 17, 18, 19, 20, 24, 28, 33, 34, 35, 38, 39, 40, 41, 42, 44, 48, 54, 67	21	
Combined	3, 6, 8, 11, 12, 13, 14, 15, 23, 25, 26, 27, 30, 32, 36, 37, 43, 46, 47, 50, 51, 57, 58, 59, 60, 61, 71, 72, 73	29	28
Not Identified	7, 31, 49, 55, 65, 68, 70	7	
Age Profile			
10	40, 69, 70, 72	4	
11	10, 56, 68	3	
12	7, 31, 63, 64, 71	5	
13	20, 21, 30, 47	4	
14	2, 5, 9, 29, 37, 52, 55, 59, 60, 62	10	
15	16, 22, 42	3	
16	19, 28, 61	3	
17	4, 41, 53, 57	4	
18	6, 27, 34, 35, 38, 48, 54, 73	8	
19	14, 25, 26, 39, 44	5	
20	8, 11, 13, 43, 45, 46, 49, 50	8	

Study Characteristics	Reference Number	Samples	K
21	1, 12, 15, 33, 36, 51	6	5
22	23, 32	2	
Mean Age Not Identified	3, 6, 17, 18, 24, 65, 66, 67	8	
Location			
North America	4, 6, 7, 8, 9, 10, 16, 17, 18, 19, 20, 21, 33, 40, 42, 52, 55, 58, 59, 60, 61, 63, 64, 65, 66, 67, 68, 69, 70	29	
Europe	1, 2, 3, 5, 11, 12, 13, 14, 15, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 34, 35, 36, 38, 39, 41, 43, 44, 45, 46, 47, 48, 49, 50, 51, 53, 54, 56, 57, 62, 72, 73	41	40
Australia	37	1	
Other Nations	2 (Japan)	1	
Not Identified	32, 71	2	

*Note*s. k = number of sample populations

1 = Adie, J. W., & Jowett, S. (2010); 2 = Alfermann, D., Geisler, G., & Okade, Y. (2013); 3 = Baxter-Jones, A. D. G., & Maffulli, N. (2003); 4 = Bruner, M. W., Munroe-Chandler, K. J., & Spink, K. S. (2008); 5 = Carr, S. (2009); 6 = Côté, J. (1999); 7 = Davison, K. K., & Jago, R. (2009); 8 = DeFreese, J. D., & Smith, A. L. (2013); 9 = Dorsch, T. E., Smith, A. L., & McDonough, M. H. (2009); 10 = Douglas Coatsworth, J., & Conroy, D. E. (2006); 11 = Felton, L., & Jowett, S. (2012); 12 = Felton, L., & Jowett, S. (2012); 13 = Felton, L., & Jowett, S. (2013); 14 = Freeman, P., Coffee, P., & Rees, T. (2011); 15 = Freeman, P., Coffee, P., & Rees, T. (2011); 16 = Gould, D., Flett, R., & Lauer, L. (2012); 17 = Gould, D., Lauer, L., Rolo, C., Jannes, C., & Pennisi, N. (2006); 18 = Gould, D., Lauer, L., Rolo, C., Jannes, C., & Pennisi, N. (2008); 19 = Gould, D., Tuffey, S., Udry, E., & Loehr, J. (1996); 20 = Hellstedt, J. C. (1990); 21 = Holt, N. L., Black, D. E., Tamminen, K. A., Fox, K. R., & Mandlgo, J. L. (2008); 22 = Isoard-Gautheur, S., Guillet-Descas, E., & Duda, J. L. (2013); 23 = Jowett, S. (2006); 24 = Jowett, S. (2008); 25 = Jowett, S. (2009); 26 = Jowett, S. (2009); 27 = Jowett,

S., & Cramer, D. (2010); 28 = Jowett, S., & Timson-Katchis, M. (2005); 29 = Kavussanu, M., White, S. A., Jowett, S., & England, S. (2011); 30 = Keegan, R., Spray, C., Harwood, C., & Lavallee, D. (2010); 31 = Keresztes, N., Piko, B. F., Pluhar, Z. F., & Page, R. M. (2008); 32 = Lafrenière, M. A. K., Jowett, S., Vallerand, R. J., & Carbonneau, N. (2011); 33 = Lauer, L., Gould, D., Roman, N., & Pierce, M. (2010); 34 = Le Bars, H., Gernigon, C., & Ninot, G. (2009); 35 = Le Bars, H., Gernigon, C., & Ninot, G. (2009); 36 = Lorimer, R., & Jowett, S. (2009); 37 = Lubans, D. R., Morgan, P. J., & McCormack, A. (2011); 38 = Nicolas, M., Gaudreau, P., & Franche, V. (2011); 39 = Philippe, R. A., Sagar, S. S., Huguet, S., Paquet, Y., & Jowett, S. (2011); 40 = Power, T. G., & Woolger, C. (1994); 41 = Pummell, B., Harwood, C., & Lavallee, D. (2008); 42 = Raedeke, T. D., & Smith, A. L. (2004); 43 = Rees, T., & Freeman, P. (2007); 44 = Rees, T., & Freeman, P. (2010); 45 = Rees, T., Freeman, P., Bell, S., & Bunney, R. (2012); 46 = Rees, T., Freeman, P., Bell, S., & Bunney, R. (2012); 47 = Rees, T., Freeman, P., Bell, S., & Bunney, R. (2012); 48 = Rees, T., & Hardy, L. (2004); 49 = Rees, T., Hardy, L., & Evans, L. (2007); 50 = Rhind, D., & Jowett, S. (2012); 51 = Rhind, D., & Jowett, S. (2012); 52 = Riley, A., & Smith, A. L. (2011); 53 = Sagar, S. S., Busch, B. K., & Jowett, S. (2010); 54 = Salguero, A., Gonzalez-Boto, R., Tuero, C., & Marquez, S. (2003); 55 = Smith, A. L. (1999); 56 = Smith, A. L., Balaguer, I., & Duda, J. L. (2006); 57 = Smith, A. L., Gustafsson, H., & Hassmén, P. (2010); 58 = Smith, A. L., Ullrich-French, S., Walker II, E., & Hurley, K. S. (2006); 59 = Strachan, L., Côté, J., & Deakin, J. (2009); 60 = Strachan, L., Côté, J., & Deakin, J. (2009); 61 = Tamminen, K. A., & Holt, N. L. (2012); 62 = Taylor, I. M., & Bruner, M. W. (2012); 63 = Ullrich-French, S., & Smith, A. L. (2006); 64 = Ullrich-French, S., & Smith, A. L. (2009); 65 = Voorhees, C. C., Murray, D., Welk, G., Birnbaum, A., Ribisl, K. M., Johnson, C. C., Jobe, J. B. (2005); 66 = Weiss, M. R., & Fretwell, S. D. (2005); 67 = Weiss, M. R., Kimmel, L. A., & Smith, A. L. (2001); 68 = Weiss, M. R., & Smith, A. L. (1999); 69 = Weiss, M. R., & Smith, A. L. (1999); 70 = Weiss, M. R., & Smith, A. L. (1999); 71 = Weiss, M. R., Smith, A. L., & Theeboom, M. (1996); 72 = Wheeler, S. (2012); 73 = Wylleman, P., De Knop, P., Sloore H., Vanden Auweele, Y. & Ewing, M. (2003)

Table 2: Correlates Associated with Social Support in Youth Sport

Correlate	Reference Number	No. of studies	Association % +	-	0	?	Sum Code
			Factors related to social support in youth sport				
Social Support Provider Category 1 – Coach Support Correlates							
Quality of Athlete Relationship	23+, 24=, 25+, 26+, 32+, 36+, 39+, 45+, 46+, 47+, 50+, 51+	12	11(92)			1(8)	+
Athlete Motivation	1+, 2=, 11+, 12=, 13=, 16+, 22=, 30=, 52+, 56+ (m), 62+ (m),	11	7 (64)			4 (36)	+
Elite Sport Participation	3+, 4 =, 34+, 35+, 41+	5	4 (80)			1(20)	+
Athlete Burnout	19+, 22+, 59=	3	2 (67)			1(33)	+
Athlete Satisfaction	32+, 36+, 66= (m)	3	2 (67)			1(33)	+
Athlete Drop Out	34+, 35+, 54+	3	3(100)				+
Athlete	16+, 39+, 73+	3	3(100)				+

Correlate	Reference Number	No. of studies	Association % +	-	0	?	Sum Code
Development							
Social Support Provider Category 2 – Parent Support Correlates							
Athlete Motivation	12-, 13-, 29+ (m-elite), 30+, 63+, 64+	6	4 (67)	2 (33)			+
Elite Sports Participation	3+, 6+, 20-, 34-, 35-, 41+	6	3 (50)	3 (50)			?
Athlete Development	17=, 18=, 33=, 41+, 73+	5	2 (40)			3(60)	?
Physical Activity	7=(f), 31=, 72+	3	1 (33)			2(67)	+
Athlete Drop Out	34+, 35+, 54+	3	3 (100)				+
Social Support Provider Category 3 – Peer (Friends, Siblings, Teammates) Support Correlates							
Athlete Motivation	8+ (Team-mate), 30+, 52+, 56+ (m), 58+, 62+ (m), 63+, 64+	8	8 (100)				+
Elite Sport	4+(m) (Team-mate), 6=	4	3 (75)			1(25)	+

			Association %				
Correlate	**Reference Number**	**No. of studies**	**+**	**-**	**0**	**?**	**Sum Code**
Participation	(Sibling), 34+, 35+						
Friendship Quality	68+, 69+, 70+, 71=	4	3 (75)			1 (25)	+
Physical Activity	7+ (f), 31+ (classmates), 55+, 65+ (f)	4	4 (100)				+
Athlete Drop Out	34+, 35+, 54+	3	3 (100)				+

2.2.2.1 Assignment of bibliography numbers. As part of the analysis process, each study was assigned a bibliography number. These numbers were based on the number of independent samples as contained in the article. If an article contained more than one independent sample then each independent sample contained in the article was given a separate bibliography number. For instance, when the same data was published more than once, each independent sample was assigned the same bibliography number.

2.3 Research Designs, Sample Characteristics, Theoretical Approaches

Samples were analyzed by size, gender, competitive level, type of sport, age, type of support provider and location. Studies were also classified by data collection method, research design and theoretical approach. The data collection method category enabled the review process to take into account the reliability/validity of the social support measures used. Moreover the theoretical approach category enabled a review of the guiding theoretical framework underpinning the research design. Additionally if a sample was published more than once but assessed a different correlates on each occasion, I assigned the same bibliography number with an attached sub number.

2.3.1 Correlates of Social Support in a Youth Sport Context

The selection and analysis of the studies was monitored throughout the review process. The authors met on three occasions in March 2013 to review an initial search long list containing 104 articles. Each article was examined for key variables and their association with social support (cf. Sallis et al., 2000). This review process involved an individual study analysis whereby each study was assessed against the agreed inclusion criteria. Key references to social support in both the study abstract and methodology were discussed and agreed. As a result 39 articles (38% of the initial studies) were excluded during this process.

Table 2 provides a summary of the key correlates relating to social support in a youth sports context. Only correlates containing more than three independent samples are

included in Table 2. Some correlates that were conceptually similar were combined if there were not enough studies to examine the variables individually. Finally, the dyadic aspect of the social support determinants were reflected in the creation of key social support provider categories. The following three social support provider categories were included: coaches; parents; and peers. Once the correlates were categorized appropriately, I examined the direction of association of the variables based on study findings. In order to gauge the direction of the correlate, the following coding rules were applied if the correlate was positive (+), negative (-), no association (0), or indeterminate (?). The last stage of the analysis was to determine the strength of the association for each correlate by calculating the percentage of samples supporting the direction of the association. The guidelines for weighting the strength of these associations were provided by Sallis et al. (2000). Correlates with a strength weighting between the following percentage bands were labeled as follows: 0-33% = no association, 34-59% = indeterminate or inconsistent and 60-100% = positive or negative association.

2.4 Results

2.4.1 General Findings

A total of 104 articles were identified from the initial research process. This was reduced to a final list of 65 articles, which met the inclusion criteria. These articles were published in peer-reviewed publications. Among the 65 papers, four articles contained two independent samples (Freeman, Coffee, & Rees, 2011, Jowett, 2009, Le Bars, Gernigon, & Ninot 2009; Rhind, & Jowett 2012) whilst two articles contained three independent samples (Rees, Freeman, Bell & Bunney 2012; Weiss & Smith, 1999). As a result, a total of 73 studies were reviewed and reflected in a final bibliography table as contained in Table 1 and Table 2. Among 65 articles, 6 were published in the 1990s, with the remaining 59 articles published between 2000 and 2013.

2.4.2 Research Designs

Table 1 represents the study design and sample characteristics across the 73 studies. Researchers have used quantitative (55), qualitative (17) or a combination of both (1) to examine the social influences across a series of key youth sport relationships. Sagar, Busch, and Jowett (2010) was the only study to use a mixed approach using both qualitative and quantitative methods. Two studies employed a longitudinal approach while cross sectional methods were employed in the remaining 63 studies. Well over two thirds of the studies (47) collected data via questionnaires and the rest (18) via interviews. The questionnaires used can be divided into three categories: (a) questionnaires relating to social support (23), (b) instruments which examine general psychological variables (21); and (c) surveys which were considered non related to social support or general psychology (4). The most frequently used questionnaire was the Coach Athlete Relationship Questionnaire (CART-Q; Jowett & Ntoumanis, 2004). This questionnaire was used in six studies (Adie & Jowett, S. 2010; Felton & Jowett, 2012; Jowett, 2006, 2009; Lafrenière, Jowett, Vallerand, & Carbonneau, 2011; Riley, & Smith 2011). Across all the studies, 29 employed a social theoretical approach followed by a motivational approach (19), developmental approach (10), cognitive approach (4), and behavioral approach (2). One study did not indicate a theoretical approach.

2.4.3 Sample Characteristics

The total number of participants was 11,847. This participant profile was broken down into 3 main relationship consistencies; athletes (10,975), coaches (467) and parents (405). The range of sample sizes was between 1 and 564. The number of studies with fewer than 50 participants was 15, and 44 studies were conducted with samples between 51 and 300. Five studies had samples between 301 and 500 and two studies examined population sizes greater than 500 participants.

Across the studies, 59 included both genders, 8 included male participants only, 4 included female participants and gender was not specified in 2 studies. Studies contained in the review reflected a wide range of competition levels, including recreational (5), high school/college (1), club (15), elite (17), professional (2), amateur (1). Mixed level competition was examined in 25 studies while in seven studies the competition level was not identified.

Researchers have investigated individual sports (21), team sports (16), or a combination of both (29) and seven did not report any type of sport. In 36 studies the athletes were aged between 10 and 17, in 29 studies athletes were aged between 18 and 22 while 8 studies did not report the age of participants. The majority of studies were completed were conducted in Western countries (41 in Europe, 29 in North America and 1 in both Australia and Japan). Two studies did not identify the origin of the sample population.

2.4.4 Correlates of Social Support in Youth Sport

Across the studies I identified 23 correlates related to social support in a youth sport context. These variables were reduced to 16 during the analysis. The majority of studies (59) examined positive aspects concerning social support while 12 studies examined negative social support dimensions concerning burnout (5), drop out (3), interpersonal conflict (3) and fear of failure (1). One quarter (16) of the studies investigated the link between social support and athlete motivation. The other remaining studies examined a range of intrapersonal constructs (self esteem, self confidence, and self concept) and key developmental outcomes (sports participation, physical activity, talent development and friendship) concerning social support in youth sport. The athlete coach relationship was the most examined single dyadic support relationship with 18 studies examining the determinants of this key support relationship. The parent support relationship was exclusively examined in 13 studies while peer/team mate support was

examined in 10 studies. Coach and parent support was the most examined multi relational support influence with eight studies examining this social support context. Only one study (Jowett & Timson-Katchis, 2005) examined the direct effect that a dyadic support relationship had on another dyadic support relationship. Moreover, five studies examined an athlete's perception of a key triadic support network including parents, coaches and peers (Keegan, Spray, Harwood, & Lavallee 2010; Le Bars, Gernigon & Ninot, 2009; Pummell, Harwood & Lavallee, 2008; Wylleman, De Knop, Sloore, Vanden Auweele, & Ewing, 2003)

2.4.5 Factors Relating to the Type and Quality of Social Support in Youth Sport

I identified three main social support provider categories relating to the exchange of support resources across three key support constituents namely coaches, parents, and peers. The basis for this categorization is reflected in the athlete lifespan model, which identifies parents, peers and coaches as key support sources at the psychosocial development level during adolescent development (Wylleman & Lavallee, 2004).

2.4.5.1 Coach support. Coaches play a critical role in influencing the experiences of young people with whom they interact (Greendorfer, 2002). Coaches can offer support and guidance to athletes that ultimately facilitate the formation of strong bonds (Jowett & Poczwardowski, 2007). This support has been shown to impact enjoyment, motivation and the development of key competences (Côté & Fraser-Thomas, 2007).

Social support provided by coaches accounted for the highest number of correlates (7) across the review. Table 2 shows that the social support correlates and their directions relative to coach support. I identified 7 variables associated with the athlete coach relationship, including quality of the athlete relationship, athlete motivation, elite sport participation, burnout, athlete satisfaction, drop out and athlete development. These variables are presented below in the order of the number of studies, which examined each correlate.

Furthermore the findings from this review show that coaches interacted with parents and peers in some similar and some unique ways. For example Keegan et al. (2010) identified that parents and coaches influencing player motivation displayed similarities across a series of key support behaviors including leadership style, evaluative feedback, emotional and affective responses and pre performance motivating behaviors. Findings from Taylor and Bruner (2012) demonstrated that a coach's ability to establish rapport with a group of players reduced social exclusion amongst a group of youth participants.

2.4.5.1.1 Quality of athlete relationship. A total of 12 independent studies demonstrated links between coach support and the quality of the athlete coach relationship. Eleven studies indicated that the overall association between coach support and the quality of the athlete relationship was positive. Five studies examined the athlete coach relationship as conceptualized through the 3Cs Athlete Coach Relationship Model (Jowett, 2007) highlighting closeness, commitment and complementarity as three key constructs reflecting the quality of the athlete coach relationship. The Quality of Relationship Inventory (QRI) (Pierce, Sarason, Sarason, Solky-Butzel & Nagle, 1997) was used by two studies (Jowett, 2009) to validate the 3Cs model in a sample of student athletes.

The athlete perception of the quality of coaching support was examined by three studies (Rees et al. 2012). A self reported questionnaire (Freeman & Rees, 2009) was used to assess emotional, esteem and informational forms of coaching support designed to reflect the supportiveness of coaches. Results show that support perceptions were reflected in all three components however the largest contributor to the perception of the quality of the relationship was in the relational component between the athlete and coach. This article helped to inform our understanding of perceived coach support by demonstrating the relative contributions of perceiver, target, and relational components towards the quality of the athlete relationship.

Two studies examined the key strategies for maintaining the quality of the coach athlete relationship (Rhind & Jowett, 2012). This article developed initial evidence for the reliability and validity of a measure for the use of strategies designed to maintain the athlete coach relationship. The Coach Athlete Relationship Maintenance Questionnaire (CARM – Q) was developed in order to examine the use of maintenance strategies for maintaining the quality of the athlete coach relationship. This article found that conflict management, openness, motivation, positivity, advice, support, and social networks are key strategies for maintaining the quality of coach-athlete relationships.

2.4.5.1.2 Athlete motivation. Motivation concerns why people think and behave as they do (Weiner, 1992). Eleven studies examined the influence that coaching support had on athlete motivation. The overall association was positive with four studies reporting varied correlation strength weightings. Self-determination theory (Deci & Ryan, 1985; Ryan & Deci, 2000) was adopted by six studies to investigate the link between the perception of the coach athlete relationship and an athletes' motivation. Five studies highlighted a positive association between coaching support and an athlete's ability to feel autonomous and competent (Adie & Jowett, 2010; Gould, Flett & Lauer, 2012; Riley & Smith, 2011; Smith, Balaguer & Duda, 2006; Taylor & Bruner, 2012). Specifically, these studies highlighted a coaching approach that focused on a task or mastery approach that enabled athletes to view their coaches as more cooperative, committed and close in their relationships. Conversely, Isoard - Gautheur et al. (2013) contended that young talented athletes perceiving an ego-involving coaching climate that emphasized mastery avoidance goals at the beginning of the season had a higher risk of experiencing burnout symptoms at the season's end.

Felton and Jowett (2012, 2013) examined the mediating role of social factors on the associations between attachment styles and basic psychological needs satisfaction within both the coach and parent relational contexts. Results demonstrated a varied correlation

strength across both relational contexts. However, it appears that positive and supportive behaviors from both the coach (social and autonomy support) and parent (non conflict and non controlling support) are associated with a mechanism that helps 'avoidantly attached' athletes engage in a supportive interpersonal environment.

The cultural difference between athletes from western countries and eastern countries was examined by Alfermann, Geisler, and Okade (2013). The authors examined key aspects of both athlete communities concerning their goal orientation and perception of coaching support. Results demonstrated a varied correlation in that German athletes reported more instruction, positive feedback and social support in comparison to their Japanese counterparts. However, Japanese athletes perceived their training environment to be more performance oriented in comparison to the German athletes. The authors contented that this difference was due to the socialization of young Japanese athletes into sport whereby a winning mindset is developed.

Keegan et al. (2010) completed the only qualitative study examining the motivational atmosphere (i.e., psychological environment that the coach creates by designing sessions which provide instructions and feedback that will help to motivate athletes in training and competition) in youth sport across the coach, parent and peer triad support system. The focus group approach offered detailed and important insights into the specific support behaviors influencing the motivation of athletes. For example the findings demonstrated the motivational influence arising from coaches' and parents' were related to their specific support role. Coaches motivated athletes by instruction/assessment, whilst parents motivated athletes through their support and facilitation actions. The study also demonstrated peers influenced athlete motivation through competitive behaviors, collaborative behaviors, evaluative communications, and through their social relationships. However the authors noted that it was impossible to establish any direct or corresponding link between the 3 relationship sources and an effect on athlete motivation.

***2.4.5.1.3 Elite sports participation*.** Participation in elite sport can offer a substantial challenge to young athletes both from a physical and psychological perspective (Hollander, Myers, & LeUnes, 1995). Five studies examined the association between coaching support and elite sport participation. Four studies identified a positive association while the remaining study was deemed inconsistent (Bruner, Munroe-Chandler & Spink, 2008). Coaches were deemed to play a positive role in facilitating an athlete's transition from recreational sport into elite sport (Baxter-Jones & Maffulli, 2003; Pummell et al., 2008). Le Bars et al. (2009) identified that the motivational climate created by a coach was a predictor of elite sport continuation. This longitudinal study suggested that coaches who created a task-involving climate had a positive effect on an athlete's persistence in elite sport.

In contrast, Bruner et al. (2008) identified an inconsistent associated between coaching support and elite sport participation. This qualitative study completed a preliminary examination of the transition experience of young athletes starting a career in elite sport. Athletes identified coaches as an important support during the transition into elite sport. However, several athletes perceived coaching feedback as over critical and as a result a negative influence on the athlete confidence was identified.

2.4.5.1.4 Athlete burnout. Athlete burnout is a multi dimensional psychological syndrome characterized by dimensions of emotional and physical exhaustion, reduced sense of accomplishment and a devaluation of the sporting context (Raedeke, 1997; Raedeke & Smith, 2001, 2009). Three studies examined the link between coaching support and athlete burnout (Gould, Tuffey, Udry & Loehr, 1996; Isoard-Gautheur, Guillet-Descas & Duda, 2013; Strachan, Côté & Deakin, 2009). Two studies indicated a positive correlation between coaching support and athlete burnout. Coaches who lessened athlete input into training were deemed to have a negative influence on athlete motivation (Gould et al., 1996). While Isoard-Gautheur et al. (2013) extended the link between athlete

motivation and burnout and examined the influence of the coaching climate on athlete burnout. Findings indicated that young athletes perceiving an ego-involving climate emphasizing mastery avoidance goals at the beginning of a season had a higher risk of burnout by the end of the season. Such a coach support climate corresponds to a focus on not doing worse than previous performance or not making mistakes (Elliot & McGregor, 2001).

In contrast to the psychological dimensions of burnout, Strachan et al. (2009) identified that physical exhaustion was a key differentiator in influencing burnout for those athletes specializing in sport. Although coaching support was not identified as a key association with both physical exhaustion and burnout, the study authors did highlight a coach's responsibility to consider the psychological and social outcomes of an athlete's involvement in elite sport.

2.4.5.1.5 Athlete satisfaction. Three articles examined the relationship between perceived athlete satisfaction and coaching support. The association was largely positive with one study reporting an inconsistent relationship between coaching support and athlete satisfaction. Lorimer and Jowett, (2009) investigated the empathic accuracy of 60 coach-athlete dyads, its antecedents (meta-perceptions of relationship) and consequences (perceptions of satisfaction). The results indicated an association between meta-perceptions of the athlete coach relationship and increased empathic accuracy. Increased empathic accuracy was in turn associated with higher levels of relationship satisfaction. Moreover, Lafrenière et al. (2011) reported a positive association between the athlete coach relationship and general athlete happiness. Through assessing a coach's passion for coaching, results demonstrated that harmonious passion for coaching positively predicted autonomy-supportive behaviors toward their athletes, while obsessive passion for coaching positively predicted controlling behaviors. Moreover, autonomy-supportive behaviors predicted high quality coach athlete relationships as perceived by athletes that, in turn,

positively predicted athletes' general happiness. In contrast Weiss and Fretwell, (2005) explored the contentious nature of a parent coach/child athlete relationship. Results demonstrated an indeterminate association between the athlete coach relationship and athlete satisfaction. Multiple costs and benefits of being coached by one's father were identified.

2.4.5.1.6 Athlete drop out. Drop-out refers to the premature sport career termination among young athletes before they reach their full potential (Alfermann, 1995). All three studies that examined the relationship between athlete drop out from sport indicated a positive association with coaching support. Le Bars et al. (2009) completed two studies stressing the importance of coaches, peers and parents in creating a motivational climate that safeguards athlete persistence in sport. Findings indicate that a task-involving climate involving all social support agents predicted athlete persistence in sport. Such a support climate corresponds with key support behaviors including challenging task choice and the promotion of greater effort and persistence regardless of perceived ability. Salguero, Gonzalez-Boto, Tuero and Marquez (2003) examined the reasons for drop out among 62 swimming drop outs. Athletes reported a main reason for dropping out concerned the fact that they 'did not like the pressure' and 'did not like their coach'. The study supports the previous association between coaching support and athlete drop out. The study determined that a disliking for the coach was ranked seventh amongst a list of 29 reasons for dropping out.

2.4.5.1.7 Athlete development. Previous coaching motivational (Smith, Smoll, Cumming, 2007) and caring climate research (Fry & Gano-Overway, 2010) suggests that coaching support has an important impact on the personal and social development of young people. Three studies indicated a positive relationship between athlete development and coaching support. Gould et al. (2012) assessed the relationship between psychosocial development and the sports climate and found that the more coaches create a caring,

mastery oriented environment the more likely positive youth developmental gains emerge. Philippe et al. (2011) took a qualitative approach and explored the evolving nature of the athlete coach relationship. The authors concluded that the development of the athlete coach relationship was beneficial to an athletes' personal growth, mental strength and athletic development. Wylleman et al (2003) examined the athlete perception of athlete coach parent relationships in their psychological network. The study deemed that both coach and parent relationships to be positive and constructive from an athlete development perspective.

2.4.5.2 Parent support. Parents play a role in the development of youth participants in sport. Research to date has examined multiple ways in which parents can support the development of talent (Bloom, 1985, Côté, 1999; Csikszentmihalyi, Rathunde, Whalen, & Wong, 1993; Durand- Bush, Salmela, & Thompson, 2004; Gould, Dieffenbach, & Moffet, 2002). However their involvement often has negative outcomes including stress for youth-sport participants (Gould, Eklund, Petlichkoff, Peterson, & Bump, 1991; Gould, Wilson, Tuffey, & Lochbaum, 1993; Scanlan & Lewthwaite, 1984). Table 2 shows that the social support correlates and their directions relative to parent support. We identified 5 variables associated with the athlete parent relationship, including, athlete motivation, elite sport participation, athlete development, physical activity and drop out. These variables are presented overleaf in the order of the number of studies, which examined each correlate.

Furthermore, the findings also indicated that parents interrelate with coaches and peers in shaping the environment experienced by youth participants. For example Jowett and Timson-Katchis (2005) explored the influence that parents have on athlete coach relationship. The study concluded that parents provided a range of information, opportunities and emotional support, which positively impacted the athlete coach relationship. Carr (2009) investigated the link between the parent athlete relationship and

peer friendship. Athlete parent relationships that displayed secure and attached characteristics had a positive effect on sporting friendships amongst youth peers.

2.4.5.2.1 Athlete motivation. In the studies examined in this review, parent support was positively associated with athlete motivation. Four studies indicated a positive relationship between parent support and athlete motivation (Kavussanu et al., 2011; Keegan et al., 2010; Ullrich-French & Smith, 2006, 2009). In a qualitative study, Keegan et al. (2010) highlighted parent spectating as motivationally relevant factor for young athletes. Moreover, the motivational climate that parents created was identified as another key factor in influencing athlete motivation. Findings suggest that a parent initiated motivational climate focused on a task orientation approach has a positive influence on athlete motivation and resultant sport achievement (Kavussanu et al., 2011). This finding was further backed by Ullrich-French and Smith (2006) when findings demonstrated that a positive perception of parent support was associated with positive motivational outcomes. A subsequent study completed by the same authors in 2009 examining the social and motivational predictors of continued youth sport participation found that the combination of mother relationship quality and peer relationships successfully predicted sports continuation on the same team.

In contrast, research assessing the attachment characteristics between parents and athletes identified a negative association between an insecure attachment style and athlete motivation (Felton & Jowett 2012, 2013). Such a finding can assist athletes over time to realize that parents are there to help and not necessarily threaten or interfere with their independence.

2.4.5.2.2 Elite sports participation. Although 6 studies examined the association between parent support and elite sport participation, the overall association was indeterminate. Three out of the six studies found that parental support positively influenced elite sports participation. Parents were deemed to play a key role in introducing their

children to elite sport (Baxter-Jones & Maffulli, 2003). This finding was supported by Côté (1999) who examined the influence of family on talent development in sport. The study identified that parents offered further support across the subsequent stages of an athlete's career. Such supports include tangible (Finance, Time, Logistics) and emotional support (listening support during key set backs). This finding was supported by Pummell et al. (2008) when the entry career experiences of elite athletes were examined in a qualitative study.

In contrast three studies examined the negative association between parent support and elite sports participation. Le Bars et al. (2009) highlighted the negative role that parents can play in influencing drop out from elite sport. Athletes perceiving their parents, peers and coaches as less task involving and less task orientated were more likely to drop out from elite sport participation. This finding stresses the importance of the goal perspective that is promoted by parents in an athlete's environment. As highlighted by Hellstedt, J. C. (1990) parent pressure can play a key role in affecting a negative emotional response and lead to a withdrawal from sport.

2.4.5.2.3 Athlete development. Several authors have discussed the important role that parents play in the development of talent in sport. (Bloom, 1985; Brustad, 1993; Hellstedt, 1987, 1995; Woolger & Power, 1993). Five studies assessed the association of parent support with athlete development outcomes. The analysis generated a varied association between the key variables of interest. Three studies completed in elite tennis between 2006 and 2010 analyzed a range of positive and negative parental support behaviors. Interestingly elite tennis coaches perceived the majority of parents as having a positive influence on their player's development. However, the respondents also felt that 36% of parents negatively influenced their child's development. Positive parental behaviors examined included providing logistical, financial, and social-emotional support, as well as tennis opportunities and unconditional love. Negative parent behaviors

examined included overemphasizing winning, holding unrealistic expectations, and criticizing their child (Gould et al., 2006; Gould et al., 2008). Lauer, Gould, Roman and Pierce (2010) examined how specific parental behaviors exhibited changed as a function of the stage of athlete development. Analysis revealed a key trend across the stages of development. It was found that parents created a positive experience in the early stages of the athlete career however with mounting pressure in the middle years more conflicts occurred with the players and negative parenting manifested itself often in controlling and pushing behaviors. As a result parents were less involved in the senior elite years.

Evidence arising from a range of other sports indicated a positive association between parental support and athlete development outcomes. Pummell et al. (2008) identified a range of tangible, emotional and esteem supports provided by parents in event riding. This positive association was supported by Wylleman et al. (2003) in a multi sport study that revealed talented athletes perceive parental support to remain salient throughout development of their athlete career.

2.4.5.2.4 Physical activity. The relationship between parental support and physical activity resulted in varied levels of association across the three studies identified (Davison & Jago, 2009; Keresztes, Piko, Pluhar & Page, 2008; Wheeler, S., 2012). In an all female longitudinal study, Davison and Jago (2009) revealed an inconsistent relationship between parent support and physical activity. Results suggest that girls who maintained physical activity levels during adolescence had parents who had reported higher modeling of physical activity across all ages and sustained levels of logistical support. This is in contrast to consistently lower levels of parental modeling and declining level of logistical support for girls who did not maintain physical activity. This finding was further supported by Keresztes et al. (2008) in a mixed subject study examining the social influences in sports activity amongst adolescents. The study revealed that over 85% of parents do not complete regular physical activity indicating a negative influence on physical activity

levels. The study pointed to a key gender difference in the social influence by highlighting that adolescent female participation in sport was more likely to be influenced by peers in comparison to males.

In contrast, parents were shown to deploy a set of goals, practices and strategies designed to positively impact their children's participation in sport (Wheeler, S., 2012). It is suggested that these support behaviors are shaped by a parent's developmental history as well as their relationship with other parents.

2.4.5.2.5 Athlete drop out. All three studies that examined the relationship between athlete drop out from sport indicated a positive association with parental support. Le Bars et al. (2009) completed two studies stressing the importance parental in creating a motivational climate that influences athlete persistence in sport. Findings indicate that a task-involving climate involving parental predicted athlete persistence in sport. Such a support climate corresponds with key support behaviors including challenging task choice and the promotion of greater effort and persistence regardless of perceived ability. Salguero et al. (2003) examined the reasons for drop out among 62 swimming drop outs. The study supports the previous association between coaching support and athlete drop out. The study determined that 'parental influence' was ranked twenty sixth amongst a list of 29 reasons for dropping out.

2.4.5.3 Peer support. Peer relationships have been shown to contribute to the quality of physical activity experiences of children and adolescents (Smith, 2003). Friendship and peer acceptance in the physical context have been linked with positive motivation – related outcomes (Smith, 2003, 2004; Weiss & Struntz, 2004). Table 2 presents the social support correlates and their directions relative to peer support. I identified five variables associated with the athlete peer relationship, including athlete motivation, elite sport participation, friendship quality, physical activity and drop out.

These variables were all positively associated with athlete peer support. These associations are presented below in the order of the number of studies, which examined each correlate.

Furthermore findings from the review demonstrated a series of interactive links between the role of peers, parents and coaches. Ullrich-French and Smith (2009) investigated if parent and peer support affected player motivation and sport continuation in 148 players aged 10-14 years. Results demonstrated that a combination of perceived mother relationship quality and perceived friendship quality predicted sports continuation. Riley and Smith (2011) demonstrated that higher perceptions of the athlete coach relationship positively impacted friendship quality and perceived per acceptance.

2.4.5.3.1 Athlete motivation. Peer support was positively associated with athlete motivation as across all eight of the studies reviewed. Three studies examined the association between a single athlete peer relationship and athlete motivation (DeFreese & Smith, 2013; Smith, Balaguer, & Duda, 2006; Smith, Ullrich-French, Walker & Hurley, 2006). Two studies examined peer support from a teammate perspective and a positive association between a positive perception of team mate support and athlete motivation was found (DeFreese, & Smith, 2013; Smith et al., 2006). Smith et al. (2006) examined peer support through sports contextualized measures of perceived friendship quality and perceived peer acceptance. The authors found that sports participants who were in adaptive peer relationships were more likely to experience more adaptive motivation related responses in their sport.

The athlete peer relationship in the context of other key support relationships with a coach or parent was examined in four studies (Riley & Smith, 2011; Taylor, & Bruner, 2012; Ullrich-French & Smith 2006; Ullrich-French & Smith, 2009). Both Riley and Smith, (2011) and Taylor and Bruner (2012) examined the combined positive influence of coach and peer support relationships on athlete motivation. While Ullrich-French and

Smith, (2006) and Ullrich-French and Smith (2009) found a positive correlation between coach and peer support and its influence on athlete motivation.

Keegan et al. (2010) examined key support relationships involving coaches, peers and parents in a qualitative study. A positive association between these relationships and athlete motivation was found however the authors commented that it was almost impossible to establish any direct and exclusive correspondence between the behavior of a coach, parent, or peer and the effect on athlete motivation.

2.4.5.3.2 Elite sport participation. Three studies reported positive association between peer support and elite sport participation. All three studies explored peer support from a teammate perspective and found that team support was positively associated with participation elite sport. In an all male study, Bruner et al. (2008) found that teammate support was critical during the entry into elite sport. Teammate support was also determined to play a key role in predicting athlete continuation in elite sport (Le Bars et al., 2009). In a longitudinal study lasting two years, the authors found that athlete perceptions of an ego involving motivational climate involving parents, coaches and peers increased in tandem with an increased intention of dropping out from elite sport.

In contrast, Côté, (1999) examined the role of an athlete's sibling in supporting an athlete's participation in elite sport. This qualitative study demonstrated varied association between sibling support and elite athlete participation in sport. Older siblings acted as a role model of work ethic while younger siblings demonstrated bitterness and jealousy towards their older sibling's achievement.

2.4.5.3.3 Friendship quality. As cited by Carr, (2009), research has identified positive dimensions of children's friendship quality to be associated with a variety of variables such as increased satisfaction with peer relations, positive contextual emotional responses, peer acceptance, enhanced motivation, and enhanced achievement (e.g., Ladd, 1999; Newcomb & Bagwell, 1995; Parker & Asher, 1993; Parker & Gottman, 1989). In

contrast negative dimensions of friendship quality have been linked to maladaptive consequences such as negative attitudes, peer rejection, and behavioral difficulties (e.g., Coie & Cillessen, 1993; Hartup, 1989). Four studies examined the association between peer support and friendship quality. A positive association between the variables of interest was found through three studies, which examined a measurement development for the quality of friendships in a youth sport population (Weiss & Smith, 1999).

In contrast, a qualitative study completed by Weiss, Smith and Theeboom (1996) reported an indeterminate association between perception of peer relationships and friendship quality. The study reported twelve positive friendship dimensions including: companionship, pleasant play/association, self-esteem enhancement, help and guidance, pro-social behavior, intimacy, loyalty, things in common, attractive personal qualities, emotional support, absence of conflicts, and conflict resolution. In contrast four negative friendship dimensions were reported including conflict, unattractive personal qualities, betrayal, and inaccessible. These conceptions of friendship were both similar and unique to friendship conceptions found in mainstream developmental research.

2.4.5.3.4 Physical activity. As cited by Davison and Jago (2009), physical activity has been associated with positive physical (Jago, Wedderkopp & Kirstensen, 2008; Leary, Ness & Smith 2008; Ness, Leary & Mattocks, 2007) and mental health (Schmalz, Deane, Birch & Davison, 2007) among youth populations. Although there is some debate on gender differences concerning the rate of decline in physical activity amongst adolescents, there is considerable evidence that girls are less active than boys of all ages (Nader, Bradley, Houts & O'Brien, 2008; Troiano, Berrigan, Dodd, Masse, Tilert & McDowell, 2008).

Four studies reported a positive association between peer support and physical activity. Peer support was positively associated with adolescent physical activity levels in two studies focusing exclusively on female participation (Davison & Jago, 2009; Voorhees

et al., 2005). Voorhees et al. (2005) noted that that the frequency of physical activity with friends was an important correlate of physical activity levels in young female adolescents studied.

In mixed subject sample, Keresztes et al. (2008) found that in comparison to other significant others (parents and siblings), classmates generated the most noteworthy social influence on physical activity levels. Smith (1999) examined the relationship between peer support and adolescent physical activity motivation. The study found a positive association between peer support and key affective responses towards physical activity motivation.

2.4.5.3.5 Athlete drop out. The association between peer support and athlete drop out was examined in three studies. All three studies reported a positive correlation between peer support and disengagement from sport. Le Bars et al. (2009) completed a longitudinal study examining the association of parent, peer and coach related motivational climates to athlete persistence in elite sport. The authors reported a positive association between a coach, parent and peer induced ego-involving climate and drop out from elite sport. Salguero et al. (2003) examined drop out reasons in young competitive swimmers. Teammate related nonsupport was listed in 3 main drop out reasons and a lack of access to new friends was highlighted a reason for discontinuing sport participation.

2.5 Discussion

The present study aimed to provide a systematic review of social support in a youth sport context. Specifically, the review aims to provide a summary of sample characteristics, the key relationships of social support, and research designs employed up to March 2013. A total of 73 studies met the inclusion criteria and the results demonstrate that the study area has grown steadily over the past two decades. Researchers have used both qualitative and quantitative methods across both genders and various types of sports. The current review identified 16 variables relating to the quality of social support provided by coaches, parents and peers.

2.5.1 Theories and Models

Across all the studies, 34 employed a social theoretical approach followed by a motivational approach (19), developmental approach (10), cognitive approach (4), and behavioral approach (2). The findings indicate that the research area has expanded its theoretical base in accordance with recommendations contained in Jowett and Wylleman (2006). This theoretical diversity can shed light on relationship-related research questions from well-defined yet distinct angles.

The most exceptional feature of the social support studies (29) is best captured in the volume of recent publications (27) over the past 10 years. Only two studies (Baxter-Jones & Maffulli, 2003; Hellstedt, 1990) were identified outside of this period. Rees and Hardy (2004) was first paper in the review to explore two principal models from the social psychology literature: the stress-buffering model and the main effect model (Cohen & Wills, 1985). The stress-buffering model suggests that support is related to outcomes for those persons under stress while the main effects model proposes that social support has a benefit regardless if a person is under stress (Jowett & Lavallee, 2007). These social support models signaled a new departure within the literature by offering researchers the opportunity to identify the conditions under which social support influences key outcomes. This review has identified that researchers have used these models to good effect bridging the link between social support and a range of key outcomes including performance (Rees & Freeman, 2010; Rees & Hardy, 2004); self confidence (Rees & Freeman, 2007); perceived available support (Freeman, et al., 2012).

Researchers have identified the need for further evidence demonstrating which aspects of social support help and how (Rees & Hardy, 2004). One such suggestion is that social support may help by moderating the effect of stress on key outcomes. This stress-buffering hypothesis is aligned with existing models concerning stress process, appraisal and coping. The most significant suggestion offered by Rees and Hardy (2004) is that

social support leads to better coping with stress as coping is enhanced by the supportive actions of others. The authors highlight that social support be viewed as a multidimensional construct in order to address what type of supports are beneficial under what stress related conditions. One such future research direction suggests that researchers carefully match specific types of social support to specific stressors (Cutrona & Russell, 1990). It is suggested that such an approach will aid understanding of which specific types of social support help to buffer people from the harmful effects of specific types of stressors (Cutrona & Russell, 1990). Such an approach presents a useful future research direction given the recent evidence concerning the definition of social support (Rees & Hardy, 2000) and the use of recently validated measurement tools (e.g., PASS – Q; Freeman et al., 2011) designed to assess the functional aspects of social support.

Building on the previous research direction, several investigators have examined adolescent coping strategies in response to key stressors (Gould et al., 1996; Nicolas et al., 2011; Raedeke & Smith, 2004; Sagar et al., 2010; Tamminen & Holt, 2010, 2012). Results show how social influences on coping shape the development of adaptive or maladaptive coping responses. Identifying processes by which athletes learn about coping may provide practical information for parents, coaches, and sport practitioners to be better positioned to help young athletes develop effective coping strategies. By developing effective coping strategies, young athletes may be better equipped to manage the demands of competitive sport. However, research examining social influences on athlete coping is relatively unstudied (Tamminen & Holt, 2012). The review points to a research direction, which may yield some positive impact concerning what types of supports are beneficial towards athlete coping and under what stress related conditions.

The support role concerning coaches, parents and teammates has also been recently explored through 2 contemporary theories of motivation: achievement goal theory (Ames, 1992, Nicholls, 1989) and self-determination theory (Deci & Ryan, 1985, 2000). These

theoretical approaches identify key dimensions of the sports environment (i.e. which support provider behaviors hold motivational significance) and also the motivational mechanisms via which support provided by others impacts upon how sport participants think, feel, and act. 13 studies identified in the review have explored this theoretical approach over the past 5 years alone. This theoretical approach has allowed researchers to explore the link between the behavior of support providers and key youth participation outcomes including burn-out (DeFreese & Smith, 2013; Isoard-Gautheur, et al., 2013; Smith et al., 2010), drop out (Le Bars, et al., 2009), motivation (Adie & Jowett, 2010; Felton & Jowett, 2012; Kavussanu et al., 2011; Riley & Smith, 2011; Smith et al., 2006; Taylor & Bruner, 2012); fear of evaluation (Alfermann et al., 2013), and sport continuation (Ullrich-French & Smith, 2009).

Defreese and Smith (2013) highlights the need to continue the use and application of self-determination theory in order to grow the knowledge base concerning the psychosocial experiences of young people in sport. Furthermore, the authors highlight the need for researchers to draw upon broader social support literature that utilize existing conceptualizations or components of social support including the main effect models and the stress-buffering model. The authors identify the need for future research to address how specific aspects of social support (perceived and received support) and negative social interactions jointly shape psychological outcomes in sport.

2.5.2 Sample Characteristics

Research findings across the studies have indicated that athletes who are at different ages during their development present different support needs as a result of their individual stage of development (Côté, 1999; Lauer et al., 2010, Voorhees et al., 2005). Examining differences in age related variables might help practitioners to provide appropriate age related support for athletes at different stages of development. Moreover such age related differences may assist other support providers (e.g. parents) provide

appropriate support as their child progresses through the various stages of talent development.

Gender differences have been identified in the review as a noteworthy sample related characteristic. Gender related differences were identified across key variables including self-esteem (Douglas Coatsworth, & Conroy, 2006), physical activity (Keresztes et al. 2008), parental modeling (Power & Woolger, 1994), athlete motivation (Ullrich-French & Smith, 2006), stress (Ullrich-French & Smith, 2006). Examining gender differences across the coach, parent and peer support network may assist each support provider to provide the gender specific support that meets the needs of adolescent participants.

As highlighted by Alfermann et al. (2013), research in youth sport has largely been carried out in Western Countries. Few studies have addressed important variables for successful sports development in non-Western countries and whether athletes from diverse cultures differ in those variables. It is clear from the review that there is more to be learned about key social support factors that influence the development of athletes from culturally diverse backgrounds. As highlighted by Park et al. (2013), investigating cultural diversity could assist in testing the generality and validity of existing knowledge and theories and lead to practical implications, such as providing suitable and appropriate support in applied work.

2.5.3 Key Methodological Features

In terms of research design, the review findings indicate that there is now a more diverse theoretical approach applied to the study of interpersonal relationships with five different theoretical approaches described in this review. The diversity of sport type and competition level demonstrated in the review show that the research field has taken into account the social context that impacts the interpersonal relationship under investigation. Although previous researchers have highlighted the need to adopt a lifespan approach, this

review has identified a lack of longitudinal studies measuring key changes in an athlete's psychological network throughout their career. Moreover, the finding from the review also point to a lack of group level analysis across key relationships in an athlete's social network. For example an investigation of how coaches, parents and peers interact over time in a youth sport context would prove a useful contribution to the literature. The current review supports the previous calls for more longitudinal studies investigating the how athletes' interpersonal relationships with coaches, parents, siblings, partners, and other significant others, evolve before, during, and after their sport career (Wylleman & Lavallee, 2004).

Based on the review findings, several research directions can be identified with regard to research design. For example the majority of researchers have used retrospective data collection methods, which may have negatively affected the data recall process. Employing a prospective longitudinal designs to study how an athlete's social support network evolve before, during and after their sports career would allow researchers to examine dynamic interpersonal support processes over time. Therefore, more prospective longitudinal studies are required in the study area.

Numerous authors (e.g., Felton & Jowett, 2012) have discussed the need for intervention strategies to target the provision of certain social support behaviors towards youth athletes. However, only one study (Douglas Coatsworth & Conroy, 2006) has used an intervention-based approach to assess the effectiveness of a specific intervention or training program for providing effective support to youth athletes. Further research is required into whether specific psychological interventions can assist practitioners in facilitating the development of more effective forms of social supports across the varied social actors in an athlete's psychological network.

Nearly half of the studies in the review used different social support related questionnaires (13), which reflect the varied conceptualization and measurement of social

support. Previous authors have commented on the lack of consensus regarding the nature and definition of social support constructs (Rees & Hardy, 2000). The review indicates that there is greater clarity concerning the definition of social support in sport (Rees & Hardy, 2000). This has lead to the development of recently validated measurement tools (e.g. PASS – Q; Freeman et al., 2011). The development of such measures that accurately assess specific support constructs will help to answer theoretically important questions, such as which types of support are beneficial and under what conditions (Cohen et al., 2000).

2.5.4 Practical Applications

Several practical implications for sport psychologists, advisors working with athletes and a range social support providers emerged from the present review. Coaches, parents and peers have been shown to positively influence a range of factors impacting the youth development in sport. However results from the two longitudinal studies (Davison & Jago, 2009; Le Bars et al., 2009) contained in the review indicate that the social support profile arising from key social support providers dynamically changed and had a negative influence on participation patterns in both elite sport and physical activity. Therefore to assist athletes in sustaining long terms adherence to sport participation at the sub elite and elite level, practitioners need to be cognizant of the type of support and the changing patterns of support emerging within an athlete's psychological network.

Researchers (Freeman et al., 2011; Rees, et al., 2012) have identified individuals who perceive their relationships as supportive have been shown to experience a range of favorable outcomes. In examining perceiver, target and relational components of perceived coach support, the review indicates that the relational component plays an important role in determining perception around coach supportiveness or unsupportiveness (Rees et al., 2012). Such a finding may inform researchers and applied practitioners as they consider the match between athletes and coaches in order to ensure that supportive relationships are formed. Furthermore this optimal matching approach can also allow practitioners to

carefully match specific types of social support to specific stressors (Cutrona & Russell, 1990). Such an approach can aid understanding of which specific types of social support help buffer people from the harmful effects of specific types of stressors (Cutrona & Russell, 1990).

This review has several limitations. Only English language studies were included in the review. During the search process two foreign studies [one Spanish (Carratala, Gutierriez, Guzman, and Pablos, 2011) and one Norwegian (Railo, 1980)] were excluded. The exclusion of these non-English studies might influence sample characteristics (e.g. location of study) and lead to the omission of potential correlates that may be culturally important. A further limitation of the review relates to the omission of some correlates due to limited space and the review guidelines adopted (Goodger et al., 2007; Park, et al., 2012; Sallis et al., 2000). These correlates include the following in the coach support provider category: interpersonal conflict (Jowett, 2008, 2009); athlete coping (Nicolas et al., 2011); athlete self concept (Jowett & Cramer, 2010); athlete self- esteem (Douglas Coatsworth & Conroy, 2006); fear of failure (Sagar et al., 2010); team cohesion (Tamminen & Holt, 2012); well being (Felton & Jowett, 2013); commitment (Weiss, Kimmel, & Smith, 2001); sport achievement (Nicolas et al., 2011); athlete performance anxiety (Smith et al., 1995). Correlates relating to parent support include child enthusiasm (Power & Woolger, 1994), youth sport friendship (Carr, 2009), fear of failure (Sagar et al., 2010); burnout (Gould et al., 1996), well being (Felton & Jowett, 2013), and athlete self-concept (Jowett & Cramer, 2010). The correlates relating to peer support included the following: burnout (Defreese & Smith, 2013; Smith et al. 2010); sport participation (Ullrich – French & Smith, 2006, 2009); and conflict resolution (Holt et al., 2008). As a result correlates with fewer than three supporting studies were either grouped into similar categories or not included in the summary table. Such omissions might preclude such a review from suggesting directions for examining similar correlates of interest.

2.6 Conclusion

Research into the area of support relationships in youth sport has developed considerably over the past decade. However, despite encouragement for athletes to use social support and recommendations for research (Jowett & Lavallee, 2007), the research area remained comparatively underdeveloped up to recently. A proliferation of research over the past 10 years has contributed a greater understanding of key interpersonal relationships in sport exercise and the exercise settings. New levels of understanding have emerged concerning the various types of support (informational, esteem, emotional, tangible) offered in an athlete's social network.

This literature review focused on the key support relationships in a youth sport context and reported the status of the research area whilst highlighting limitations in the research field. The review identified new levels of understanding concerning the various types of social support provided in a youth sport context. The presence of key social support providers has been shown to play an essential role in shaping youth sport experiences both from a positive (athlete motivation levels, elite sport participation) and negative (drop-out) perspective. For example coaches were identified as the most prevalent provider of support in a youth sport context through offering athletes unique forms of tangible, informational, emotional and esteem support. Moreover, the combined effect of coach, parent and peer support have been shown to play a key role in shaping youth sport experiences both from a positive (athlete motivation levels, elite sport participation) and negative perspective (drop out). The most considerable negative correlate identified related to youth sport drop out. It was the only negative correlate present across all of the three support providers (i.e. coaches, parents, team mates) identified. The results from two longitudinal studies (Davison & Jago, 2009; Le Bars et al., 2009) contained in the review indicated that social support dynamically changed over time and has a key influence on participation patterns in sport. These findings concur with recent research, which identified

that the correlates of youth sport attrition are largely social in nature and point to the role of key support providers in creating the conditions for continued participation in sport (Balish et al, 2014).

Theoretical frameworks have emerged from the literature review in order to assist researchers to determine which aspects of social support (perceived and received support) shape and undergird key outcomes in sport. Defreese and Smith (2013) identified the need for future research to address how specific aspects of social support (perceived and received support) and negative social interactions jointly shape psychological outcomes in sport. Research has also called for the need to examine the relationships between key motivational variables (e.g., perceived autonomy, perceived relatedness and perceived competency) that are involved in the process of dropping out and how these relationships may change over time (Le Bars et al., 2009). As previously outlined in this thesis other key advances in the literature identify the conditions under which social support influences key outcomes through the application of two principal models derived from the social psychology literature: the stress-buffering model and the main effect model (Cohen & Wills, 1985). The main effects model proposes that social support has a benefit regardless of whether a person is under stress while the stress-buffering model suggests that support is related to outcomes for those persons under stress (Jowett & Lavallee, 2007). Recently validated measurement tools (e.g. PASS-Q and ARSQ) now enable researchers to assess the functional aspects of social support (e.g. perceived and received support) in sport. This is especially salient given that perceived and received support may share as little as 12% common variance (Haber, Cohen, Lucas, & Baltes, 2007) and are widely considered two key but separate constructs (Dunkel-Schetter & Bennett, 1990; Helgeson, 1993; Wethington & Kessler, 1986). Moreover, Bianco and Eklund (2001) have argued that perceived support is primarily linked with the main effect model, while received support is primarily linked with stress buffering effect model. This suggests that perceived support is

directly related to the outcome irrespective of levels of stress while received support moderates the relationship between stress and a key outcome. Such a research direction can enable researchers to advance theory and the development of theory-led support interventions around major key outcomes within a youth sport perspective (e.g. youth sport drop out).

This literature review has highlighted the need to apply new research designs in order to explore and test the effectiveness of social support interventions. This review highlighted that only one study (Douglas Coatsworth & Conroy, 2006) out of the 73 studies identified has used an intervention-based approach to assess the effectiveness of a specific intervention or training programme for providing effective support to youth athletes. The case for assessing the effectiveness of social support interventions is further strengthened as numerous authors (e.g., Felton & Jowett, 2012a, 2012b; Le Bars et al., 2009) have discussed the need for intervention strategies to target the provision of certain social support behaviours (e.g. autonomy supportive, promotion of greater effort and persistence irrespective of ability, challenging task choice, non-conflict, non-controlling, positive and supportive) towards youth athletes in order to effect key outcomes (e.g., drop out). Moreover, Felton and Jowett (2012b) have suggested more longitudinal research would be useful in order to explore causal paths as well as possibly exploring the temporal nature of relationships across range of social environment factors (e.g. social identity). Such intervention-based research can assist practitioners in facilitating the development of more effective forms of social support in order to effectively tackle negative outcomes in youth sport (e.g. youth sport drop out).

The evidence contained in this literature review highlights a lack of intervention based studies in determining which aspects of social support work and why. Such a research direction requires making a judgment about the feasibility of interventions and determining whether such interventions are justified (Bowen, Kreuter, Spring, Cofta-

Woerpel, Linnan, Weiner, Bakken, Kaplan, Squiers, Fabrizio, Fernandez, 2010). Section 2.6.3 identifies the key feasibility considerations to be addressed in the thesis.

2.6.1 Research questions

As a result of key research directions contained within the literature review, the following three research questions have been identified to be addressed in this thesis:

1. Research Question 1: Do changes in perceived available social support predict intentions to drop out and, if so, are these effects mediated by changes in social identity and/or changes in needs satisfaction?
2. Research Question 2: Are received support and stress encountered associated with intentions to drop out and does received support buffer stress that participants encounter?
3. Research Question 3: What is the evidence of impact for social support on key stakeholders?

2.6.2 The Gaelic Athletic Association

In order to answer the research questions outlined in section 2.6.1, I designed and tested a feasibility study of a social support intervention for the Gaelic Athletic Association (GAA) as outlined in section 3.2. The GAA is a volunteer led, community-based organisation that promotes Gaelic games such as Hurling, Football, Rounders and Handball. The organisation is comprised of a range of bodies responsible for providing games experiences to both male and female participants. The Camoige Association and the Ladies Gaelic Football Association, for example, provide oversight for female participation while the GAA focus exclusively on male participation. Combined, all of these bodies have an extensive local community reach with over 2,000 clubs and 500,000 members (GAA, 2015). Since its establishment in November 1884, the GAA has made a profound impact on Irish social, cultural, political and economic life (ESRI, 2005).

In its early years, the GAA formed an important part of a Gaelic revival movement that fostered a sense of national identity during Ireland's struggle for independence early in the 20th century (de Búrca, 1999). The GAA adopted a key role in helping to construct the Irish nation through organizing native games in tandem with promoting the Irish language and key cultural activities including traditional dance and music (Delaney & Fahey, 2005). This nationalistic ethos has evolved in recent decades to focus on a more civic nationalism (Bairner, 1999, Hassan, 2005). This has lead to a greater local community emphasis whereby the GAA have invested significant resources in building a strong local community identity through a vibrant and expansive local club network (Delaney & Fahey, 2005).

More recently the GAA has experienced major challenges in safeguarding participation in their games. In September 2012, the GAA produced an internal report reviewing the effectiveness of the GAA's Games Development Strategy (GAA, 2012). The report highlighted a key barrier in providing meaningful and age appropriated games opportunities across a child, youth and adult participation continuum. This barrier relates to a 58% participation fall off rate involving 10,466 players between the ages of 10 – 22 years (GAA, 2012). The report identified 2 key contributory factors, which may have been creating the conditions for drop out in the GAA:

- Lack of a developmental ethos – a culture of keeping the best and ignoring the rest which is a product of valuing the outcome (winning), over the developmental process (achieving one's full potential);
- Inadequate competition frameworks – too much emphasis on rigidly structured competitions and the absence of a meaningful programme of regular and scheduled games.

These findings were line with a report published in September 2013 calling for the GAA to explore the factors relating to its high drop out rate in youth participation (Lunn, Kelly, Fitzpatrick, 2013). The Economic and Social Research Institute (ERSI) report recommended that the GAA further investigate youth sport drop out and identify key drop out reduction measures (Lunn et. al., 2013).

2.6.3 Key feasibility considerations

This literature review has identified the need for future research to address how specific aspects of social support (perceived and received support) jointly shape psychological outcomes in sport (Defreese & Smith, 2013). Numerous authors (e.g., Felton & Jowett, 2012) have also discussed the need for intervention strategies to target the provision of certain social support behaviors towards youth athletes. However, only one study identified in the literature review (Douglas Coatsworth & Conroy, 2006) has used an intervention-based approach to assess the effectiveness of a specific intervention or training programme for providing effective support to youth athletes. Such intervention-based research can assist practitioners in facilitating the development of more effective forms of social support in order to effectively address negative outcomes in youth sport.

Such a research direction requires making a judgment about the feasibility of interventions and determining whether such interventions are justified (Bowen et al., 2010). Research has highlighted that three different questions emerge in course of developing an intervention, Can it work? Does it work? Will it work? (Bowen et al., 2010). The initial phase of developing an intervention requires some evidence that the intervention might work. The evidence contained in this chapter informs the content of the GAA study, which contains a series of key social support behaviours (e.g. autonomy supportive, promotion of greater effort and persistence irrespective of ability, challenging task choice, non-conflict, non-controlling, positive and supportive) that have been proven to positively impact youth sport participation experience. The case for completing a

feasibility study that alters the social environment in a youth sport participation setting is further strengthened as previous research has highlighted that many of the important correlates of youth sport drop out are social in nature (Balish, et al., 2014).

Once there is evidence that an intervention might work, the next question to consider is whether it works. In order to address this question there is a need to determine the viability of the intervention. Chapter 3 provides the quantitative results relating to the effect of the intervention both from a longitudinal and cross sectional perspective. As a result the reliability and validity of key measures used to obtain data becomes an important feasibility consideration. The emergence of new social support measures as identified in this chapter (e.g., PASS-Q & ARSQ) present important feasibility considerations concerning their reliability and consistency in a youth sport setting. Key intervention fidelity measure (e.g., staff recruitment, training and supervision) present another important feasibility considerable in order to determine whether the intervention can be communicated in a disseminatable format that permits replication of the intervention effect. The views of key intervention stakeholders are also required to determine if the intervention can be implemented in a local practice setting. Chapter 4, the qualitative part of the GAA Study, will provide a range of views from key intervention stakeholders relating to the acceptability of the intervention.

Finally, once there is evidence that an intervention can work and does work, the final question relates to will it work? Chapter 5 will address a number of feasibility factors (i.e. acceptability, implementation, practicality, adaptation, integration, and expansion) in determining whether or not an intervention has the potential to be tested in a full-scale trial.

Chapter Three

Quantitative Part of GAA Study

3.1 Introduction

Research has highlighted the need to apply new research designs in order to explore and test the effectiveness of social support interventions. Numerous authors (e.g., Felton & Jowett, 2012a, 2012b; Le Bars et al., 2009) have discussed the need for intervention strategies to target the provision of certain social support behaviours (e.g. autonomy supportive, promotion of greater effort and persistence irrespective of ability, challenging task choice, non-conflict, non-controlling, positive and supportive) towards youth athletes in order to effect key outcomes (e.g., intentions to drop out).

The GAA is a National Sport Body in Ireland that encounters a high drop out rate (i.e. 58%) in their youth participation population. This fall off in participation is replicated in trends worldwide (Balish, et al., 2014). A further analysis of the correlates of youth sport drop out demonstrate that the social environment created by others (i.e. coaches) play a key role in sustaining engagement in sport and physical activity (Quested, et al., 2013). The evidence contained in Chapter 2 highlights a lack of intervention based studies in determining which aspects of social support work and why (Defreese & Smith, 2013). Researchers has highlighted the need for future research to address how specific aspects of social support (perceived and received support) and negative social interactions jointly shape psychological outcomes in sport (e.g youth sport drop out) (Felton & Jowett, 2012a, 2012b).

However, such a research direction requires making a judgment about the feasibility of interventions and determining whether such interventions are justified (Bowen et al., 2010). The case for adopting a feasibility approach concerning a social support intervention is further strengthened given the challenge in making judgments in advance of an intervention about different forms of social support at different points in the course of an intervention (Cohen, et al., 2000).

Therefore, the purpose of this research is to complete a feasibility study of a social support intervention specifically designed to reduce youth sport drop out in a GAA context. Data from both a longitudinal and cross sectional perspective will be used to determine whether the intervention is viable for further testing. Moreover, the research will also address two important research questions that have emerged from the literature review. These questions concern to the underlying effect pathway relating to perceived and received support and potentially unveil important locations for future interventions to decrease youth sport drop out.

3.2 Design

The research design involved a feasibility study delivered and evaluated for youth participants aged 12 to 16 years over a 24 week period. Experienced grassroots coaches were recruited and trained specifically to deliver the quantitative part of the study across 10 location sites in Ireland. These location sites were selected across a range of community support settings namely schools, universities and GAA clubs. The timing and duration of of the study was synchronized in line with two key school semester periods (i.e., September 2014 – December 2014 and January 2015 – April 2015). Over the 24-week period each site delivered a standard games format in accordance with the rules of the game as listed in Appendix A. Moreover, each site followed a game management protocol as listed in Appendix B in order to deliver a consistent games experience.

A central feature in the study design related to a series of modifications to the GAA games experience. Sites, to a lesser or a greater degree, introduced modifications to the standard rules as listed in Appendix A. The content for these modifications were derived from six evidence-based features of continued participation in sport derived from the literature review (referred to in the quantitative part of the GAA study as play to stay values). These values and modifications are listed in Appendix C. The use of modified rules is in line with previous research, which has called for the redesign of sport relevant

environment in line with the needs of young participants (Balish et al., 2014). Specifically this redesign of traditional sport participation experiences, involves a process of modifying traditional games environments by changing the sport structure, rules, facilities and equipment in order to make the participant the highest priority (Burton, 1984). Examples of such changes included reducing a pitch size (facility), using a smaller ball (equipment) and the rule that everybody must play (regulation).

3.2.1 Key theoretical considerations

In line with research findings generated from literature review, the quantitative part of the GAA study was designed in order to investigate the effect of perceived and received support upon intentions to drop out. Previous authors have highlighted the conceptual distinction between perceived and received support (Bianco & Eklund, 2001; Uchino 2009, Cohen, Underwood & Gottlieb, 2000). Perceived support is linked primarily to the 'main effect theory' of social support, which emphasises how social relationships contribute to overall functioning and buffer people throughout life against experiencing distress (Cohen, Underwood, Gottlieb, 2000; Sarason, Pierce, Sarason, 1990). Individuals who are high in perceived support know that they have the resources needed to confront difficult situations and as a result are less likely to view events as stressful compared to persons who are low in perceived support. Received support on the other hand is most commonly associated with the 'buffering hypothesis' of social support which holds that social support contributes to improved health by acting as a coping resource when people are distressed (Cohen & Wills, 1985). According to this hypothesis the social support that individuals receive when distressed will facilitate coping behaviours and thus help offset or buffer the negative effects of stress (Cohen & Willis, 1985). Arising from the conceptual distinction between perceived and received support two key implications arise from a feasibility design perspective. Firstly, both theories offer a different causal explanation for the effect of social support suggesting that perceived support exerts an effect via a preventative pathway while received support exerts its effect via a palliative pathway (Bianco &

Eklund, 2001). This implies that the antecedent conditions and mediators may differ substantially between both types of support. Secondly, research has identified that perceived support is typically stable over time (Uchino, 2009) and more consistently related to beneficial health outcomes in comparison to received support (Barrera, 2000; Uchino, 2004; Wills & Shinar, 2000). In contrast, received support has been identified as more of a situational factor that arises in response to stressful circumstances (Barrera, 2000; Carver, Scheier, & Weintraub, 1989; Thoits, 1986). This implies that appraisals of perceived support are best suited to a longitudinal focus given their stability over time while measures of receipt of support behaviour are more suited to reflect recent changes bought in an intervention (Cohen, Underwood and Gottlieb, 2000).

As a result of the stability of perceived support over time and its consistent correlation with key outcomes, I prioritized the exploration of perceived support within a longitudinal perspective. The decision to prioritize perceived support from a longitudinal perspective enabled the exploration of key mediating factors in explaining the link between changes in perceived support and intention to drop out at the end of the study. As a result changes in basic needs satisfaction and social identity over the duration of the study were used to explore the association between perceived support and intentions to drop out.

In contrast to perceived support, I then decided to explore the stress buffering effect of received support on intentions to drop out within a cross-sectional perspective. In line with previous research this enabled the assessment of recent change effects (i.e., received support, stress encountered and intentions to drop out) bought about as a result of the study (Cohen et al., 2001). This approach led to the splitting of the data between a longitudinal and cross-sectional approach, which allowed for all the research questions as outlined in Chapter 2 to be answered.

3.3 Participants

A sample of 296 subjects participated in the study. For the purposes of recruiting study participants, the following inclusion criteria were applied:

- Participants: males, aged 12 - 16 years of age between September 2014 and May 2015
- Skill: Basic proficiency in Gaelic Games
- Proximity: Participants who live less than 20 minutes by car from their local site
- Inclusivity: Open to all nationalities

The rationale for selecting males aged 12 – 16 years relates to previous research, that identified a rapid decline in participation) during the transition from primary to second level education (58% drop out rate) in male youth participation in Gaelic Games (GAA, 2012). This participation decline is in marked contrast to high levels of sports participation reported in during the primary school going years (ESRI, 2013).

Perceived activity competence plays a critical role in positively impacting adolescent physical activity levels (Sallis, Prochaska, & Taylor, 2000). As a result a decision was taken to ensure that all participants had an existing basic proficiency in Gaelic Games participation in order to ensure that participants had the requisite competence to effectively participate in the games.

The time required to reach a sports facility is a key factor in influencing recreational sports consumption behaviour (Pawlowski, Breuer, Wicker, Poupaux, 2007). In light of this a decision was taken to target young participants within a 20-minute drive time radius from their local site (hereafter referred to as the Super Game Centre or SGC). This approach using drive time regions is in line with previous research exploring the impact of a physical environment on youth sport participation (O'Reilly, Parent, Berger, Hernandez, Seguin, 2009).

As highlighted by Alfermann et al. (2013), research in youth sport has largely been carried out in Western countries. Few studies have addressed important variables for successful sports development in non-Western countries and whether athletes from diverse cultures differ in those variables. As a result of the need to cater for greater cultural diversity, a decision was made to include all nationalities in the study.

3.4 Procedures

Data were gathered using self-reported questionnaires (Appendix D) and group interviews (Appendix E).

3.4.1 Questionnaire-based data collection

3.4.1.1 Pilot data collection. A pilot data collection event was undertaken in two sites before the start of GAA study. The purpose of these pilots was to test the psychometric properties of the scales included in the player questionnaire. This provided an estimation of the time the participants took to finish filling in a questionnaire. Furthermore it identified the location of where participants experienced problems in understanding and responding to questions contained with the questionnaire. This pilot process led to the implementation of minor changes to the questionnaire (e.g., more age appropriate terminology) and a refinement of data collection protocols in preparation for the study.

3.4.1.2 Timing of data collections. Baseline questionnaire data were gathered in the first two weeks of the study as participants joined a Super Game Centre. Time 2 data collection took place after the first 12-weeks between September – December 2014. Time 3 data collection took place after the second 12 weeks between January – April 2015. This data collection timeline enabled data to be collected in order to fulfill both of the longitudinal and cross-sectional aspects contained within the research design. Data from participants (N = 103) who completed questionnaires at Time Point 1 (Baseline) and Time Point 3 (at the end of the quantitative part of the GAA study) were used for the

longitudinal aspect of the research. Data collected from participants (N = 217) who had completed questionnaires at either Time Point 2 (12 weeks) or Time Point 3 (at the end of the study) were used for the cross sectional aspect of the research.

3.4.1.3 Data collection protocol. I trained field assistants to assist with the collection of data. This was required due to the geographic scale of the 10 site network and the timing of data collection requirements during the quantitative part of the GAA study. Training for the field assistants addressed how to present the data collection instruments to participants and how to ensure that each child was enabled to fill in the questionnaire without feeling pressured.

Data collection typically took place in changing rooms or a meeting room in the Super Game Centre. Participants were asked to complete the questionnaire on their own without conferring with their peers. Participants were informed that they could leave out any questions that they did not feel comfortable responding to and were also reassured that their responses would remain confidential and that their names would not be associated with their responses.

The completion of the questionnaire typically took 20 minutes depending on the age and reading ability of the participant. When necessary participants were supported in a one-to-one setting if a player did not understand a question. If participants were absent the preferred option was to have the data completed in person at a follow up occasion. However as a last resort and for practical reasons, the questionnaire would be administered to participants during situations where it was logistically impossible for the data collection team to attend a site.

3.4.2 Ethical standards and procedures

The research in all its work operated in accordance with international guidelines for ethical principles of scientific research. No financial incentives were provided to participants for their participation. The parents and participants received information about

the project in which it was stated that participation in the project was voluntary and that all information gathered would be treated in confidence.

Children represent a vulnerable under age group not able to provide a legally valid consent to participation in the study. Therefore, the child's parent or legal guardian needed to be informed and asked to provide their legal consent. An information sheet and consent form was given to both parents and participants. Both parents and participants had to fill in and complete an informed consent form before the start of the research. In addition, participants in the group interview setting had to fill in and complete an informed consent form at the end of the study prior to participating in the group interviews.

In line with the rights of a child, participants were also given the opportunity to opt out of the study without penalty at any stage during the study. This choice was provided despite legal consent being afforded from parents or guardians. Adults participating in the study either as coaches or volunteers completed a mandatory police vetting process in line with the National Vetting Bureau (Children and Vulnerable Persons) Act 2012. This vetting procedure was carried out on all of the adults participating in the study. The research ethics committee in the University of Stirling reviewed the ethical procedures contained within the research. Ethical approval for the research was granted in March 2014.

3.5 Measures

Appendix D contains a copy of a self-report questionnaire that was used to measure eight constructs (i.e., basic needs satisfaction, social identity, perceived support, received support, stress encountered, intentions to drop out, social desirability, negative affectivity) relating to the identified research questions. The following measures were contained in the questionnaire:

3.5.1 Basic Needs Satisfaction

Participants were asked to respond to 17 statements in terms of how they relate to their feelings and experiences (cf. Standage et. al., 2005). The stem for each of the 17 items required participants to respond to a 7- point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).

Six statements assessed the participants' basic need for autonomy (e.g., "I have a say regarding what skills I want to practice" (Standage, Duda, & Ntoumanis, 2005). The validity and reliability of the autonomy need satisfaction items were originally tested in secondary school students (alpha = .81; Standage, Duda, & Ntoumanis, 2003). These items have since been supported in research with adolescent athletes (Reinboth & Duda, 2006; Quested, Ntoumanis, Viladrich, Haug, Ommundsen, Van Hoye, Mercé, Hall, Zourbanos, & Duda, 2013).

Perceived competence was assessed via 6 items (e.g., "I think I am pretty good at this activity") from the *Intrinsic Motivation Inventory* (IMI; McAuley, Duncan, & Tammen, 1989). The validity and reliability of this scale has been previously reported to be internally reliable (alpha =.84) (McAuley et al., 1989). The competence subscale of the IMI has demonstrated acceptable reliability with similar aged participants in previous sports based research involving British children (Ntoumanis, 2001; Standage et al., 2003).

Five items (e.g., "I felt listened to") from the acceptance subscale from the *Need for Relatedness Scale* (Richer & Vallerand, 1998) was used to assess relatedness need satisfaction. Previous work with similar-aged British children in physical education setting has supported the internal reliability of this scale (alpha = 0. 91; Standage et al., 2003). The psychometric properties of the three scales assessing basic need satisfaction have previously been demonstrated among French, Greek, Norwegian, Spanish and English youth sport participants (e.g. Adie et al., 2012; Balaguer et al., 2012; Ommundsen et al., 2010, Quested et al., 2013)

3.5.2 Social Identity

Participants were asked to respond to four items (e.g., "I identify with those playing at a GAA Super Game Centre") assessing the strength of connection and belonging to the GAA Super Game Centre. A Four-Item measure of Social Identification (FISI) was used for the purpose of measuring social identity. FISI is an adaptation of the scale reported by Doosje, Spears, and Ellemers (1995) and has good reliability both from a cross sectional (alpha = 0.83) and longitudinal study research design perspective (alpha = 0.75). The use of FISI is in line with a recent recommendation, which highlights the internal reliability of the scale (alpha = 0.77; Postmes, Haslam, & Jans, 2012).

3.5.3 Perceived Support

Participants indicated their perception of available support by completing a 16 item scale developed by Freeman, Coffee, and Rees (2011). The Perceived Available Support in Sport Questionnaire (PASS-Q) enables the accurate assessment of perceived support in order to investigate the longitudinal effect of perceived available support on intentions to drop out. Participants were asked to indicate to what extent certain types of support were available to them (e.g. "provide you with comfort and security"). Items were rated on a 5-point Likert-type scale, ranging from 0 (not at all) to 4 (extremely). Cronbach's alpha internal reliability coefficients for the four dimensions (Informational, Tangible, Esteem, Emotional) contained within the PASS-Q ranged from .68 to .87, composite reliabilities ranged from .69 to .87, and test–retest reliabilities ranged from .73 to .84. These results offer the flexibility to adopt either a multidimensional or aggregated approach to measuring perceived support (Freeman et. al., 2011).

3.5.4 Received Support

Participants were asked to respond to a series of 22 statements in terms of assessing received levels of emotional, esteem, informational and tangible support based on the work of Freeman, Coffee, Moll, Rees and Sammy (2014). The Athletes' Received Support Questionnaire (ARSQ) offers a valid measure of received support in order to determine if received support offsets the negative effects of stress encountered on intentions to drop

out. Participants were asked to indicate the frequency with which they received certain types of support (e.g. “help with transport to training and competition/matches”) during the last week. Items were rated on a 5-point Likert-type scale, ranging from 0 (not at all) to 4 (seven or more times). Cronbach’s alpha internal reliability coefficients for the four dimensions (Informational, Tangible, Esteem, Emotional) contained within the ARSQ ranged from ranged from .81 to .92. These findings offer the flexibility to adopt either a multidimensional or aggregated approach to measuring received support (Freeman et. al, 2014).

3.5.5 Stress Encountered

Based on the systematic review and other key research findings (e.g., Balish et al., 2014), ten stressors were chosen for their relevance to youth sport drop out. These stressors included the following:

- *Not getting a game*: The lack of opportunities to engage in sport has been identified as a fundamental resource in order to engage young people in sport (Balish et al., 2014).
- *Being shouted at during a game*: Research has found that the more coaches create a caring, mastery-oriented environment the more likely it is that positive youth developmental gains will emerge (Gould et al., 2012).
- *Not fitting in with the team*: Research has shown that many forms of social relations such as a relationship with a parent, coach or team are motivated by the need for relatedness (Balish, et al., 2014).
- *Pressure to win*: Coach and parent ‘pressure to win’ has been cited as key factors in leading to the withdrawal of participants from sport (Gould et al., 2006, 2008; Hellstedt, 1990).

- *Making friends*: Weiss and Smith (1999, 2002) have recognized that dimensions of friendship quality have important implications for motivation related outcome variables in the context of sport.
- *Expectations from others to perform:* As highlighted by Hellstedt (1990), parent pressure can play a key role in affecting a negative emotional response and lead to a withdrawal from sport.
- *Fitness concerns:* Salguero, Gonzalez-Boto, Tuero, and Marquez (2003) examined the reasons for drop-out among 62 swimming drop-outs. 'Not in good enough shape' was cited as a key reason for dropping out from youth sport.
- *Having no say when playing:* Research has highlighted that youth sport participants are most likely to experience positive developmental outcomes when interactions with coaches and parents are characterized by positive and informational feedback, appropriate role modelling and autonomy-supportive engagement styles (Weiss & Wiese-Bjornstal, 2009)
- *Not feeling respected by others:* Respect has been identified as a key affective element contained within the 3+1C conceptualization of the athlete coach relationship (Jowett, 2007).
- *Fitting sport in with other commitments:* Research has shown that fitting sport in with other commitments was cited as the most important reason impacting youth sport attrition (Salguero et al., 2003).

Participants were asked to respond to the stress encountered on a five-point Likert scale from 1 (not at all) to 5 (a lot). All 10 items were summed to form a composite score of stress encountered. This procedure was consistent with that employed by other researchers in the social support literature (Mitchell et al., 201; Rees et al., 2010).

3.5.6 Intention to Drop Out

Research in the attitude literature reveals that intentions represent a proximal predictor of behaviour (Ajzen, 1985, 1996; Ajzen & Fishbein, 1980; Eagly & Chaiken, 1993), particularly in the field of leisure (e.g. Ajzen & Driver, 1992) and exercise (e.g. Fortier & Grenier, 1999; Kimiecik, 1992). Therefore, based on the work of Ajzen and Driver, (1992), participants were asked to respond to four items designed to assess the degree to which they intended to drop out of the GAA Super Game Centre next season. The items were further developed and contextualised for this study from the items utilised by Sarrazin, Vallerand, Guillet, Pelletier, and Cury (2002) and further applied by Le Bars et al., (2009) and Quested et al., (2013). Two items measured intentions with regard to continue with, or drop out of the GAA Super Game Centre (e.g., "I intend to drop out of the GAA Super Game Centre at the end of this season") and two items tapped intentions to continue with, or drop out of the GAA Super Game Centre next season (e.g., "I am thinking of leaving the GAA Super Game Centre"). A calculation for intentions to drop out was obtained after reversing the two inversely worded items.

3.5.7 Social Desirability

Participant's ability to answer the all of the questions in a manner that is consistent was assessed using the 13-item *Marlowe-Crowne Social Desirability Scale* (Reynolds, 1982). This measure has been found to be reliable (alpha = 0.76). Participants responded to statements concerning their personal attitudes and traits through answering either true (coded 1) or false (coded 0). Negatively phrased items were reverse scored so that higher scores reflected greater socially desirability.

3.5.8 Negative Affectivity

Participants self-reported their negative affect using the 7 item through using the Type D Scale-14 (DS14) based on the work of Denollet (2005). Denollet demonstrated that the negative affectivity scale was internally consistent (alpha = 0.88/0.86), had good test–retest reliability (r = 0.72/0.82), and was not related to mood or health status. Participants

rated the seven statements on a five-point scale ranging from 0 (false) to 4 (true). The variable was calculated, with higher scores reflecting higher levels of negative affectivity.

3.6 Analysis

3.6.1 Descriptive Statistics

Basic descriptive statistics including means, standard deviations and bivariate correlations were calculated for all of key measures: basic needs satisfaction, social identity, social support (perceived and received), stress encountered and intentions to drop out. Table 3 contains a pre and post variable for each of the six measures used during the study.

3.6.2 Pre and Post Intervention Analyses

A paired sample *t*-test was used to compare the mean value of pre and post intervention variables. Table 4 reports the mean and standard deviation for each variable. In addition the degrees of freedom, t value and the Pearson correlation between each paired variable is presented. A Bonferroni adjustment was used to provide greater control of family wise type 1 error rate for each of the pairwise comparisons. The Bonferroni adjustment involves testing each pairwise comparison at a significance level where the desired overall alpha level (i.e., 0.05) is divided by the overall number of pairwise comparison (i.e., 6). This resulted in an adjusted significance level of 0.0083.

3.6.3 Longitudinal Mediation Analyses

As statistical techniques to test mediation (e.g., Baron & Kenny, 1986) suffer from problems including low statistical power, a lack of quantification of the intervening effect, and the inability to test multiple mediators simultaneously (Hayes, 2009), I employed non-parametric bootstrapping analysis developed by Hayes (2013). This analysis estimates direct and indirect effects in models with multiple proposed mediators and has been shown to perform better than other techniques (e.g., Baron & Kenny, 1986) in terms of statistical power and Type I error control (Hayes, 2009). Additionally, as it is not based on large-sample theory, it can be applied to smaller sample sizes (e.g., 143 participants; see

Gonzalez, Reynolds, & Skewes, 2011) with greater confidence (Preacher & Hayes, 2004). To test for mediation I used the PROCESS macro for SPSS (Hayes, 2013) with 20,000 bootstrap resamples and 95% bias corrected confidence intervals (CIs). There is evidence of mediation, or a specific indirect effect, when zero is not included within the lower and upper bound CIs. In order to reflect the longitudinal aspect of the data collected, I used the PROCESS macro to control for pre intervention scores in order to generate accurate estimates of post intervention values contained in the mediation model. The inclusion of key variables measured at previous times ensures that the paths in the mediation model are accurately estimated relative to their true values (Selig & Preacher, 2009).

3.6.4 Cross-Sectional Moderation Analyses

To examine the relationships between stressors, social support and intentions to drop out, moderated hierarchical regression was used (Jaccard & Wan, 1996). Prior to the formation of product terms, all variables were standardized (with a mean of 0 and standard deviation of 1) to enhance the interpretation of the interaction term (Finney, Mitchell, Cronkite, & Moos, 1984). Based on the recommendations of Biddle, Markland, Gilbourne, Chatzisarantes, and Sparkes (2001), each variable was entered into a hierarchical model that comprised of three blocks. The first independent variable (i.e., the stressor) was entered in the first block and the second independent variable (i.e., the social support), hypothesized as the moderating variable, was entered into the second block. The percentage of the total variability explained by each independent variable (R^2) indicated the main effects of the respective variables. The product term (i.e. received support and stressor) was entered in the third block and an interaction was reflected by a significant change in R^2. The form of the interaction was represented graphically by plotting the regression of the dependent variable (i.e., intention to drop out) on one of the independent variables (i.e., stressor) at different values of the moderator (i.e., received social support).

Four predicted values which were calculated for Y (i.e., intention to drop out) determined the nature of the interaction: first, when a low score on the stressor was

associated with a low score on the social support dimension (i.e., 1 standard deviation below its mean); second, when a high score on the stressor was associated with a high score on the social support dimension (i.e., 1 standard deviation above its mean); third, when a low score on the stressor was associated with a high score on the social support dimension; and finally, when a high score on the stressor was associated with a low score on the social support dimension (Biddle et al., 2001). As a result of these analyses, the slopes for the stressor in relation to intention to drop out when a social support dimension was low and high were plotted for interpretation purposes. In order to plot this interaction a standard procedure as advised by Aitken & West (1991) was applied. This process enabled a deeper exploration of the xz interaction between x (e.g. stressor) and z (e.g., received support). In order to probe this xz interaction, the region of significance pertaining to the relation between y and x as a function of z was required. The region of significance defines the specific values of z (e.g., received support) at which the regression of y (e.g., intention to drop out) on x (e.g., stressor) moves from non-significance to significance. This then enables the testing of simple intercepts and simple slopes at the boundaries of the region of significance for lower and upper values of x (e.g., stressor). This process has also been reported in the sport literature when examining main and stress-buffering effects of social support upon factors underlying performance and injury responses (e.g., Rees & Hardy, 2004; Mitchell, Evans, Rees, Hardy, 2014).

3.7 Feasibility Study Fidelity

The following elements were carried out in order to effectively promote fidelity during the quantitative part of the study: staff recruitment, training and supervision; and manual and written records.

3.7.1 Coach recruitment, training and supervision

3.7.1.1 Recruitment. Careful recruitment, thorough training and on-going supervision are essential elements to the promotion of fidelity (Yeaton & Sechrest, 1981). I

recruited 10 experienced local coaches with considerable knowledge and experience of working with the study population. All of the coaches indicated a willingness to go through a thorough training process and be supervised during the study.

3.7.1.2 Training. A training process was designed and executed by myself in close cooperation with the research supervisors. The training was designed to ensure that coaches: (1) had a clear understanding of what they would conduct. Over a 12-week period coaches completed four full training days, which focused on the study principles and their application from a social support perspective. As a result coaches had to understand the key functional components of social support (e.g., perceived and received support) underlying the coaching support they will be offering in the study. Coaches had to display the required technique to offer the right type of support to participants across a range of situations (e.g., promotion of the initiative, pre-session briefing and post-session debriefing). In their training coaches carried out two live test events whereby coaches had to deliver a pilot study with volunteers groups of children not participating in the research.

3.7.1.3 Supervision. I was responsible for regular and on-going staff supervision before and during the study. Across the 10 sites, I completed three supervision trips each week in order to provide feedback to the coach and their volunteer group. These supervisory visits were randomized and not communicated to the coach in advance. In addition all of the coaches met on a monthly basis to discuss the issues relative to delivering the quantitative part of the GAA study. Each week coaches submitted a weekly feedback report which enabled the research lead whenever appropriate to revise procedures in order to improve effectiveness and provide on-going training support. This reporting form included key information on the issues experienced in delivering the study and the key action tendencies arising from the issues presented.

3.7.2 Manual

A written manual was designed for the GAA study to enable the coach to follow a detailed set of instructions. The manual described both the content and process of the study

and included key support materials including a weekly reporting form and a player database register. In addition to these support resources, the manual contained detailed checklists that served as a reminder of the content and process (e.g., pre, during and post session) to be followed during each weekly games session. Together with the weekly reporting form, these checklists were used during weekly supervision activities in order to monitor the delivery of the study.

3.8 Results

3.8.1 Descriptive Statistics

The means, standard deviations, reliability alphas, and bivariate correlations for the study variables are presented in Table 3. Correlations among all of the variables suggest that subscale scores reflect distinct yet related constructs. In addition, correlations among perceived support, received support, social identity and basic needs satisfaction all displayed negative associations with intentions to drop out. Cronbach's alpha internal consistency reliability coefficients for all of the variables exceeded 0.70 demonstrating good internal consistency.

Table 3: Descriptive Statistics for Outcome and Process Variables

	Mean	SD	α	2	3	4	5	6	7	8	9	10	11	12
1. IDO Pre	2.20	1.46	.73	-.23*	-.41**	-.52**	-.17	.28**	.15	-.23*	-.41**	-.27**	-.25*	.03
2. PS Pre	3.60	.98	.85	-	.34**	.49**	.44**	-.18	-.08	.22**	.27**	.26**	.46**	-.12
3. SI Pre	5.17	1.54	.84	-	-	.45**	.27**	-.11	-.33**	.34**	.40**	.38**	.24*	.04
4. BNS Pre	5.26	.91	.85	-	-	-	.29**	-.13	-.16	.36**	.41**	.52**	.27**	.04
5. RS Pre	3.58	.93	.86	-	-	-	-	-15	-.18	.52**	.49**	.39**	.59**	-.02
6. Stressor Pre	2.55	.91	.77	-	-	-	-	-	-.03	-.13	.-09	-.06	-.07	.30**
7. IDO Post	2.00	1.39	.82	-	-	-	-	-	-	-.30**	-.43**	-.32**	-.19	.12
8. PS Post	3.92	.76	.93	-	-	-	-	-	-	-	.66**	.65**	.69**	-.12
9. SI Post	5.34	1.22	.76	-	-	-	-	-	-	-	-	.60**	.58**	.03
10. BNS Post	5.44	.87	.87	-	-	-	-	-	-	-	-	-	.50**	-.15
11. RS Post	3.59	.92	.95	-	-	-	-	-	-	-	-	-	-	.02
12. Stressor Post	2.29	.95	.83	-	-	-	-	-	-	-	-	-	-	-

Notes. *p < .05; **p < .01; IDO Pre = intentions to drop out pre; PS Pre = perceived available support pre; SI Pre = social identity pre; BNS Pre = basic needs satisfaction pre; RS Pre = received support pre; Stressor Pre = stress encountered pre; IDO Post = intentions to drop out post; PS Post = perceived available support post; SI Post = social identity post; BNS Post = basic needs satisfaction post; RS Post = received support post; Stressor Post = stress encountered post. Cronbach's alpha values appear on the matrix with the mean and standard deviation values; Correlations appear above the diagonal.

3.8.2 Pre and Post Intervention Analyses

The change in mean variables across pre and post values demonstrates that the intervention had a change effect on baseline values. Table 4 demonstrates the mean scores and standard deviations for all of the pre and post intervention variables. Results show pre- to post values are essentially equivalent in all instances except perceived support. Post intervention scores for perceived support were the significantly higher than pre intervention scores [$t(97) = -2.72$, $p = .008$].

Table 4: Pre and Post Intervention Analyses

	M	SD	t	df	*p*
IDO Pre	2.20	1.46	.731	100	.466
IDO Post	2.00	1.39			
PS Pre	3.60	.98	-2.72	99	.008*
PS Post	3.92	.76			
SI Pre	5.17	1.54	-1.16	97	.249
SI Post	5.34	1.22			
BNS Pre	5.26	.91	-1.91	100	.059
BNS Post	5.44	.87			
RS Pre	3.58	.93	-228	99	.820
RS Post	3.59	.92			
Stressor Pre	2.55	.91	.70	97	.484
Stressor Post	2.29	.95			

Notes. T test score values appear on the table with the mean, standard deviation, degrees of freedom and p values. *p <0.05, after Bonferroni correction (p < .0083). IDO Pre = intentions to drop out pre; IDO post = intentions to drop out post; PS Pre = perceived available support pre; PS Post = perceived available support post; SI Pre = social identity pre; SI Post = social identity post; BNS Pre = basic needs satisfaction pre; BNS Post = basic needs satisfaction post; RS Pre = received support pre; RS Post = received support post; Stressor Pre = stress encountered pre; Stressor Post = stress encountered post.

3.8.3 Research Question 1 and Associated Hypotheses

The following research question has been identified arising from the literature review of social support in youth sport as presented in Chapter 2: Do changes in perceived available social support predict intentions to drop out and, if so, are these effects mediated by changes in social identity and/or changes in basic needs satisfaction? One hypothesis is that changes in perceived available social support will predict intentions to drop out with higher levels of perceived available social support resulting in lower levels of intentions to drop out. Moreover, it is hypothesized that an increase in perceived available support will lead to higher levels of social identity and basic needs satisfaction which in turn lead to lower levels of intentions to drop out. Tests for the indirect effect of both mediators (social identity and basic needs satisfaction) prove that only social identity has a significant indirect effect on the relationship between perceived available support and intentions to drop out.

3.8.4 Main Effects Hypothesis

The association of changes in perceived available support with intentions to drop out post intervention were examined using hierarchical linear regression. Perceived support (pre intervention) were entered into the first step of the analysis, with perceived support (post intervention) entered into the second step of the analysis. This was done in order to assess the association of perceived available support (post intervention) on intentions to drop out (post) having controlled for perceived available support (pre). The results for the main effect of a change in perceived available support on intentions to drop out at the end of the study are found in Table 4. Higher perceived available support was significantly associated with lower levels of intention to drop out at the end of the study. This was reflected in the second step of analysis, which yielded a significant change in R^2 with perceived available support (post) negatively associated with intentions to drop out (post).

This negative association resulted in a medium effect size, which was highly significant at the $p < .01$ level.

3.8.5 Mediation Effects Hypothesis

The indirect effects of the proposed mediators (social identity and basic needs satisfaction) were examined within two independent bootstrap analyses. Two sets of analysis examined the associations between all of the following post values perceived available support, the mediators and intentions to drop out having controlled for pre values relating to social identity and basic needs satisfaction. Table 5 displays all of the relevant information from these analyses.

Social identity had a highly significant indirect effect on the relationship between perceived available support and intentions to drop out post. Figure 1 illustrates a full mediation effect via a c' path coefficient of .003 when the mediator (social identity) is included in the model. Bootstrap analysis further confirms this mediation effect as the bias corrected (BC) 95% confidence interval (CI) as reported in Table 5 does not contain zero. This is line with a key recommendation concerning the confirmation of an indirect effect using the bootstrapping technique (Preacher & Hayes, 2004, 2008).

Table 5: Hierarchical Multiple Regression Analyses Predicting Changes in Perceived Available Support on Intention to Drop Out Post

	PS	
	ΔR^2	β
Model Support Variable		
Step 1 – $F_{(1,94)}$ PS Pre	.005	-.073
Step 2 – $F_{(1,93)}$ PS Post	.099**	-.327**
Total R^2	.104**	

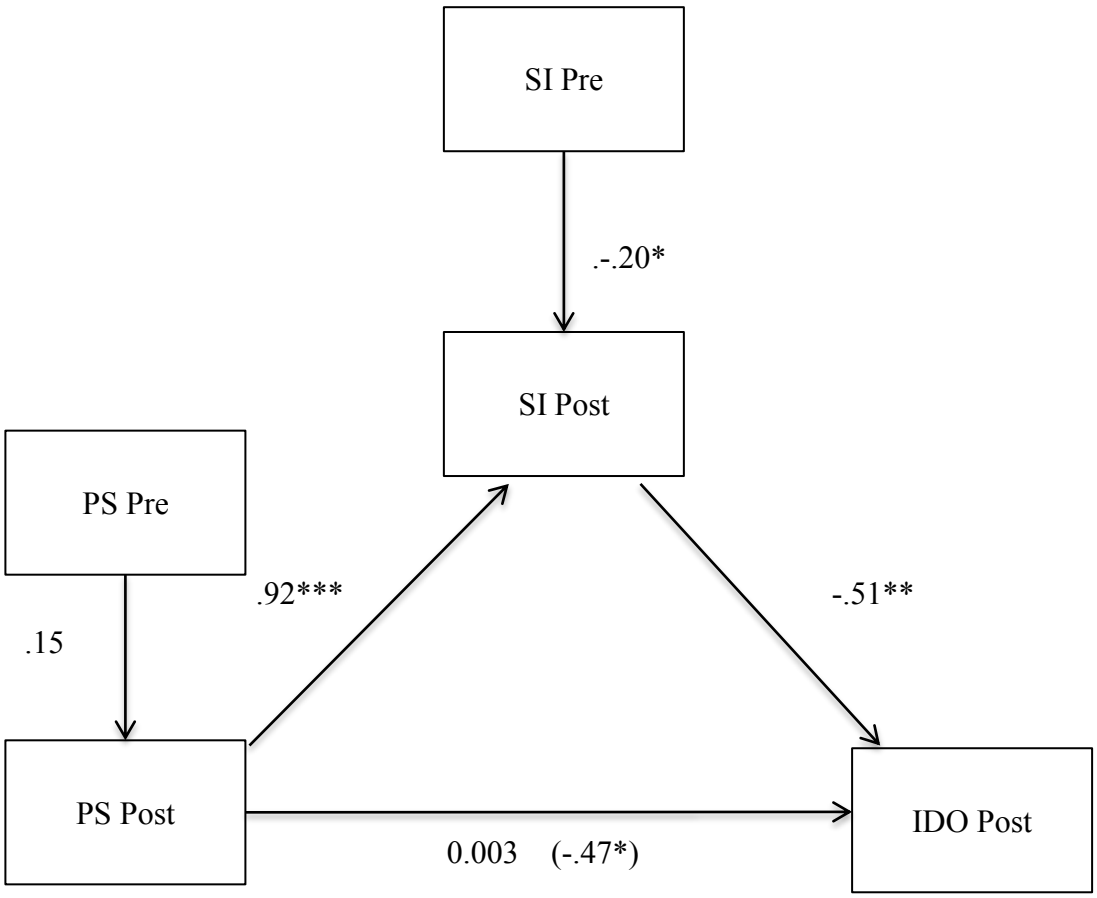
Notes. N = 97; *p < .05; **p < .01; PS Pre = perceived available support pre; PS Post = perceived available support post

Table 6: *Summary of Bootstrap Analysis showing the Indirect Effects of Social Identity and Basic Need Satisfaction on the Association between Perceived Available Support and Intention to Drop Out Post.*

Independent Variables	Mediator Variable	Dependent Variables	*a* path coefficient	*b* path coefficient	c' path coefficient	Mean indirect effect (ab)	*SE of mean*	BC 95% CI mean indirect (lower and upper)	
PS Post	SI Post	IDO Post	.92***	-.51**	<.01	-.47	.17	-.8528	-.1820
PS Post	BNS Post	IDO Post	.60***	-.38	-.35	-.23	.18	-.6767	.0776

Notes. *p < .05; **p < .01; ***p < .001; PS Post = perceived available support post; IDO Post = intentions to drop out post; BNS Post = basic needs satisfaction post; SI Post = social identity post.

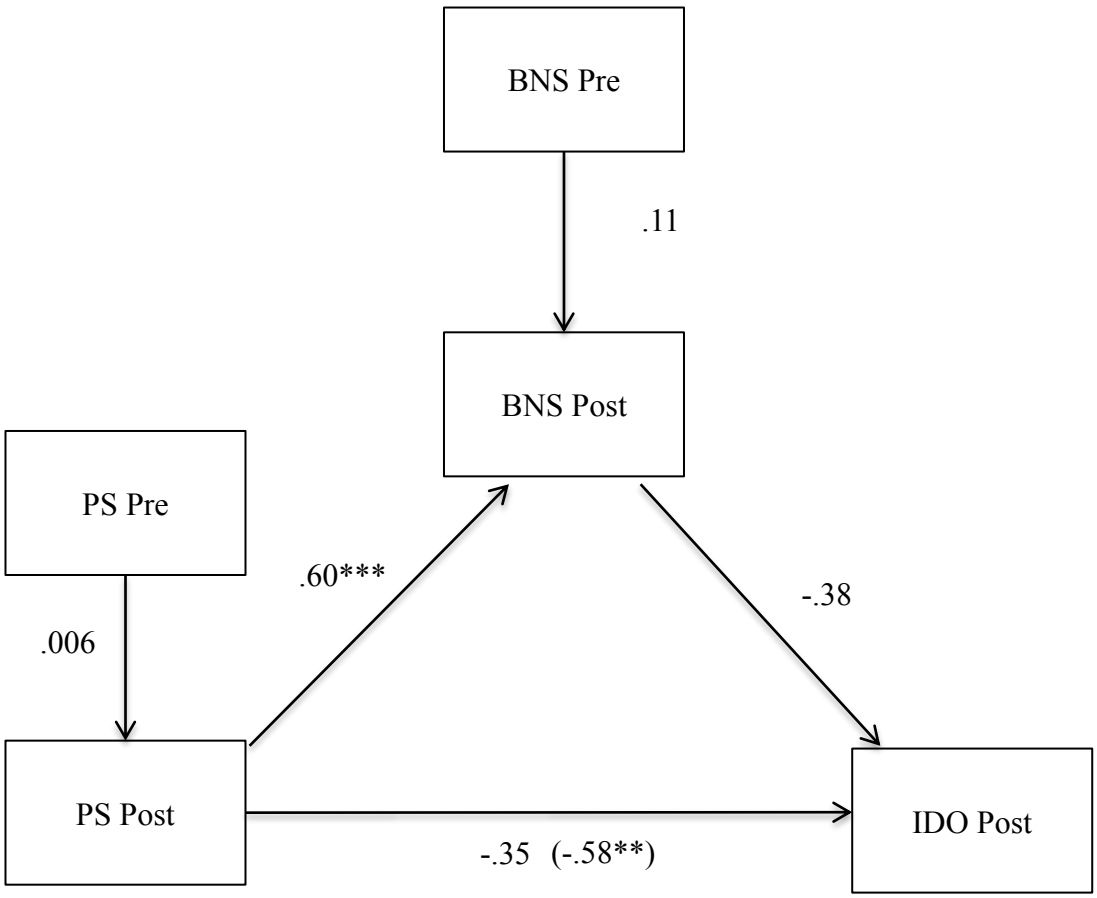
Figure 1: Mediation Model Explaining the Relationship between Perceived Available Support and Intention to Drop Out with Social Identity Posited as the Mediator



Notes. N = 94; *p < .05; **p < .01; ***p < .001; PS Pre = perceived available support pre; SI Pre = social identity pre; PS Post = perceived available support post; SI Post = social identity post; IDO Post = intentions to drop out post. The c path coefficient is reflected in the value in parenthesis.

In contrast basic needs satisfaction had an insignificant indirect effect on the association between perceived available support and intention to drop out post. Figure 2 illustrates a partial mediation effect via a $c^{'}$ path coefficient of -0.35 when the mediator (basic need satisfaction) is included in the model. Bootstrap analysis demonstrated the presence of zero in the bias corrected (BC) 95% confidence interval (CI) as indicated in Table 5. Although I found no full mediation effect for basic needs satisfaction, it is worth noting that this finding was not as a result of the statistical model being underpowered (.95 for the c' path; Kenny & Judd, 2014).

Figure 2: Mediation Model Explaining the Relationship Between Perceived Available Support and Intention to Drop Out with Basic Needs Satisfaction Posited as the Mediator



Notes. N = 98; *p < .05; **p < .01; ***p < .001; PS Pre = perceived available support pre; BNS Pre = basic needs satisfaction pre; PS Post = perceived available support post; BNS Post = basic needs satisfaction post; IDO Post = intentions to drop out post. The c path coefficient is reflected in the value in parenthesis.

3.10 Research Question 2 and Associated Hypotheses

The following research question has been identified arising from the literature review of social support in youth sport as presented in Chapter 2: Are received support and stress encountered associated with intentions to drop out and does received support buffer stress that participants encounter? It is hypothesized that there will be a main effect for stressors and received support on intentions to drop out. In other words received support will be associated with a decrease in intentions to drop out while stress encountered will be associated with an increase in intentions to drop out. Moreover, it is further hypothesized that there will be a significant stress buffering interaction between received support and stressors. Specifically, it is hypothesized that the detrimental relationship between stressors and intentions to drop out would be reduced (buffered) for those participants with high received support compared to those participants with low received support.

3.11 Results

3.11.1 Descriptive Statistics

The means, standard deviations, reliability alphas, and bivariate correlations for the study variables are presented in Table 6. The correlation between stressor and intentions to drop out indicates a positive relationship, which is line with previous studies that have explored the key correlates of youth sport drop out (Balish, at al., 2014; Sallis et al, 2002). This correlation was highly significant at a $p < .01$ level. In contrast the correlation between received support and the other two study variables (stressor and intentions to drop out) reflected a negative relationship; however, these correlations were not significant. Cronbach's alpha internal consistency reliability coefficients for all of the variables exceeded 0.70, demonstrating good internal consistency.

Table 7: Means, Standard Deviations, Coefficient Alphas, and Inter-Correlations for All Scales

	Mean	SD	α	2	3
1. RS	3.63	.89	.96	-.078	-.084
2. DOS	2.43	.87	.87	-	.233**
3. IDO	2.03	1.48	.86	-	-

Notes. N = 217; *$p < .05$; **$p < .01$; ***$p < .001$; RS = received support, DOS = stressor, IDO = intention to drop out.

3.11.2 Main Effects Hypothesis

Moderated hierarchical regression analyses (Jaccard et al., 1990) were used to examine the relationships between stressors, received support, their product and intentions to drop out. The independent variables were entered in a three-step process, corresponding with the testing of the buffering hypothesis (Baron & Kenny, 1986; Cohen & Wills, 1985). First, stressors were entered. Second, received support was entered. Third, the product of the stressors and received support was entered. In line with Jaccard et al.'s recommendations, the independent variables were standardised prior to entry. Assumptions for regression analyses were tested as follows. Values for the Durban-Watson statistic (1.944) were within the accepted range of above 1 and below 3, satisfying the assumption of independent errors. The assumption of no multicollinearity was satisfied, as inter-correlations between independent variables were not greater than .80. In addition, variance inflation factor (VIF) values were less than 10 while average VIF values were not substantially greater than 1 and tolerance values were above 0.2 (Stevens, 1996). In contrast the values of the residuals were not normally distributed thus failing to meet the assumption concerning normally distributed errors. The consequence of such a violation can invalid significance tests, confidence intervals and the overall generalization of the regression model (Field, 2013). However, the relevance of this violation can be discounted as the central limit theorem demonstrates that the parameter estimates of the sample will have a normal distribution if the sample size is greater than 30 (Field, 2013).

The results of the moderated hierarchical regression analysis are shown in Table 7. There was a significant main effect for stressors upon intentions to drop out (R^2 = .053 b = .337, $p < 0.01$). Over and above the variance accounted for by stressors, there was a non-significant main effect for received support on intentions to drop out (R^2 = .006, b = -.115, p = .243). These main effects were in the hypothesized direction however this association between received support and intentions to drop out was not significant.

3.11.3 Stress Buffering Effects Hypothesis

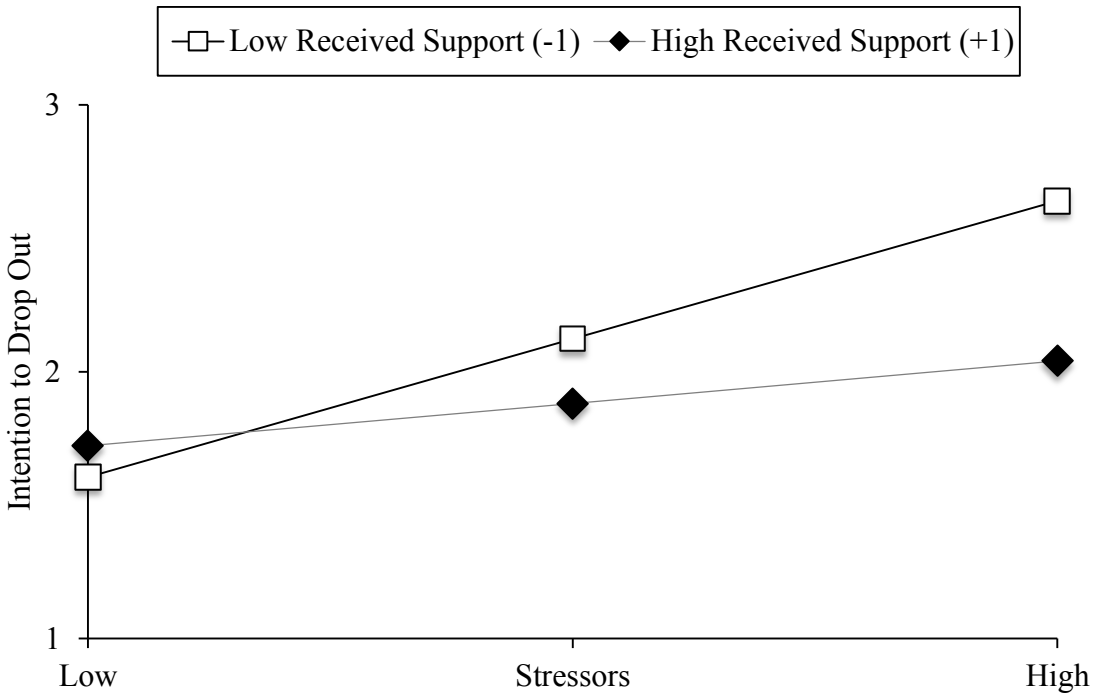
The results from the moderated hierarchical regression analysis in Table 7 show that over and above the variance accounted for stressors and received support, the interactive term (product of received support and stressor) was associated with a significant buffering effect (R^2 = .019 b = -.185 , $p < 0.05$) on intentions to drop out. Figure 3 demonstrates the significant interaction of received support and stressors on intentions to drop out. The graph is consistent with a buffering effect in that the detrimental relationship between stressors and intentions to drop out was reduced for those with high received social support compared to those with low received support. The figure also demonstrates that the level of received support was relatively unimportant at low levels of stressors.

Table 8: Hierarchical Regression Analyses Effects of Stressors, Received Support, and Products on Intention to Drop Out

Dependent Variable	Independent Variable	ΔR^{2a}	$P(F)^{b}$	b^{c}	$p(t)^{d}$
Intentions to Drop Out	Stressor	.053	.001	.337	.001
	Received support	.006	.243	-.115	.243
	Product Term	.019	.041	-.185	.041

Notes. N = 217; All variables standardized. [a]Stepwise change in R^2. [b]Probability of F for ΔR^2. [c]Unstandardized regression coefficient in final equation. [d]Probability of t for b.

Figure 3: The Significant Interaction of Stressors and Received Support in Relation to Intention to Drop Out.



Notes. The x-axis represents values of low (1 SD below the mean) and high (1 SD above the mean) levels of stressors. The lines represent values of low (1 SD below the mean) and high (1 SD above the mean) received support.

3.12 Discussion

The main aim of research question 1 was to investigate if changes in perceived available social support predict intentions to drop out at the end of the study and, if so, are these effects mediated by changes in social identity and/or changes in basic needs satisfaction. Participants reported low-to-moderate levels of intention to drop out at the end of the study. This mean score of 2.0 on a scoring range of 1 to 7 compares well with other studies using the same scale with mean scores of 2.87 (Quested et al., 2014), 2.70 (Le Bars, el al., 2009) and 2.91 (Sarrazin, et al., 2002) being reported previously. Overall, bivariate correlations among study variables were of expected magnitude and direction. The negative correlations among perceived support, social identity, received support and basic needs satisfaction were in line with previous studies involving basic needs satisfaction and intentions to drop out (Le Bars et al., 2009; Quested et al., 2013).

3.12.1 Theoretical Implications

As hypothesized changes in perceived available support had a significant main effect on intentions to drop out post, and this effect was shown to be mediated by a change in social identity over 24-weeks. These findings build on previous research, which has highlighted the importance of examining the interrelationship between key correlates impacting youth sport drop out (Balish et al., 2014). The emergence of perceived available support as a key predictor of intentions to drop out makes a key contribution to our understanding of the role social support in a youth sport drop out context. Perhaps most interesting is the decision to use perceived available support as a key measure during this feasibility study. Research has identified that perceived support is typically stable over time (Uchino, 2009) and more consistently related to beneficial health outcomes in comparison to received support (Barrera, 2000; Uchino, 2004; Wills & Shinar, 2000). These findings are supported by sport specific research which has demonstrated a consistent link between perceived available support and key positive outcomes namely

performance (Freeman & Rees, 2008, 2009; Gillet, Vallerand, Amoura, & Baldes, 2010), self-confidence (Rees & Freeman, 2007), and flow states (Bakker, Oerlemans, Demerouti, Slot, & Ali, 2011; Rees, Ingledew, & Hardy, 1999). The findings from this study indicate that one's ability to appraise the availability of support plays a key role in drop out intentions from sport. Such a finding is crucial in supporting continued research into our understanding of how support perceptions are formed and the consistency of an individuals' support perceptions across different support providers in a youth sports setting.

The emergence of social identity as a key mediator explaining the association between perceived support and intentions to drop out expands our understanding of key social environment factors in youth sport. This finding is in line with previous calls for longitudinal research to explore the causal paths underpinning the key fluctuations in social contexts (Felton & Jowett, 2012). Previous research has highlighted the importance of social identity in influencing the judgements of support (Haslam et al., 2004; Haslam et al., 2005) It therefore is perhaps to be expected that an increase in perceived support leads to an increase in social identity. This finding is supported in a recent study where Coussens, Rees and Freeman (2015) found that university athletes perceived specific coaches to be highly agreeable, competent and individuals with whom they share a common identity, while also perceiving these same coaches to be particularly supportive in comparison with other coaches.

The emergence of social identity as a significant mediating factor explaining the relationship between perceived support and intentions to drop also expands our understanding of how a set of common values in a group setting can have a positive effect on intentions to drop out from sport. The six play to stay values (effort, positive feedback, enjoyment, respect, belonging, empowerment) that were used in the study were specifically selected given their correlation with positive youth sport experiences. The use

of these values to create a common social group whereby participants perceived others within this group to understand and provide support aligned with their participation needs perhaps explains the mediated effect that these values had on both the perception of supportiveness and intentions to drop out. Such a finding highlights the importance of cultivating a common social identity between key support providers, which can enhance a player's perception of supportiveness, which in turns predicts intentions to drop out.

In contrast the purpose of research question 2 was to examine if received support and stress encountered are associated with intentions to drop out and if received support buffers stress that participants encounter. Moderated regression analyses revealed the following key findings: a) there were a non-significant main effect for received support on intentions to drop out; and b) there were significant stress buffering effects for received support in relation to intentions to drop out. That is, the detrimental relationships between stressors and intentions to drop out were reduced for those with high received support compared to those with low received support, but level of received support was relatively unimportant at low levels of stressors.

In line with the stress-buffering hypothesis, the results revealed a stress buffering effect for received support on the relationship between stressors and intentions to drop out. Such a finding is line with previous research, which has supported the position that received support might reduce the impact of stress appraisal by decreasing the perceived importance of the problem, by leading to improved coping, or by providing a distraction from, or a solution to, the problem (Cohen et al., 2000). The findings from this research provide support for the role of received support within a youth sport drop out context. This finding is supported by previous research in a youth sport setting, which found that stress buffering effects were primarily attributable to the influence of received support on self-confidence (Rees & Freeman, 2007). The findings from this study highlight the importance of educating support providers on appropriate support measures, particularly the quantity

and appropriateness of the support that they make available to young participants susceptible to stress.

3.12.2 Feasibility Recommendations

The evidence contained in the quantitative part of the GAA study suggests that a social support intervention is a feasible intervention for preventing youth sport drop out. Results show that pre- to post values are equivalent in all instances except perceived support where an increase was observed as indicated by inferential analyses. Moreover, the main effect results relating to a change in perceived support demonstrated that an increase in perceived support over the duration of the intervention was significantly associated with lowered intentions to drop out at the end of the intervention. This negative association resulted in a medium effect size, which was highly significant at the $p < .01$ level. Further analysis of the longitudinal data demonstrated that social identity had a significant indirect effect on the relationship between perceived available support and intentions to drop out post. Although these findings were observed among participants who were all exposed to the intervention (i.e. single arm intervention design), the associations observed are encouraging and indicate that further testing of the intervention in a controlled setting is warranted. For example, a key recommendation arising from this finding may involve running a controlled trial involving two player groups. Such a study a design would enable a more rigorous test of social identity and its mediating role in explaining the relationship between social support and intentions to drop out.

Cross sectional results involving received support are encouraging and indicate that a specific type of social support intervention warrants future testing in a controlled setting. Findings demonstrate that received support had a significant, yet small effect on the detrimental relationship between stress encountered and intentions to drop out. Although causal inference cannot be determined from this cross sectional finding, the results are promising and merit further testing in a controlled setting. For example, a key recommendation arising from this finding may involve running a controlled trial involving

two player groups. Such a research design will enable more a rigorous testing of the intervention and the stress-buffering hypothesis.

Both the longitudinal and cross sectional results highlight another key feasibility consideration concerning the reliability and consistency of the measures used in the study. Cronbach's alpha internal reliability coefficients for all of the measure exceeded the required 0.70 level and therefore demonstrated adequate reliability of these measures. This is an important feasibility consideration in demonstrating that the measures have reliability and validity should they be used in a future controlled trial.

Finally, the results from the feasibility study highlight that the intervention can be disseminated across a 10-site intervention structure involving 10 site leaders. The staff recruitment, training and supervision processes demonstrate that future controlled trials could execute a high level of fidelity in ensuring that staff are fully trained to deliver the required intervention protocols. This is an important feasibility consideration should future research consider delivering a similar protocol across geographic or cultural boundaries where there is a high reliance on staff to adhere to intervention protocols.

Chapter Four

Qualitative Part of GAA Study

The purpose of this chapter is to report and discuss the results of the qualitative part of the GAA study. Specifically the chapter aims to further test the feasibility of the intervention by ascertaining subjective perspectives (e.g., perceptions, insights and experiences) from key stakeholders (i.e., players, coaches and parents) at the end of the quantitative part of the GAA.

A total of 15 group interviews were completed, involving 29 players, 22 parents and 7 coaches. A deductive content analysis approach was used in order to analyse group interview data (Krueger & Casey, 2014). This approach was also employed in order to identify evidence from passages of text relating to key theoretical implications at the end of the feasibility study (Green & Krueger, 2005). Social support theory involving the key functional components of perceived and received support provided the overarching theoretical consideration as a result of the key research questions identified in Chapter 2.

4.1 Method

4.1.1 Group interview data collection

Appendix B lists a copy of the operating protocols used during the group interview process.

4.1.1.1 Participant selection criteria. For the purposes of recruiting participants for the group interviews, the following three groups were identified: (a) participants who attended their local Super Game Centre; (b) parents with a child who attended a local Super Game Centre; and (c) coaches who provided coaching support in their local Super Game Centre. The rationale for selecting a sample of players, parents and coaches is reflected in the literature review which identified the role that all three social support providers play.

4.1.1.2 Timing of data collections. Group interviews took place with participants within two weeks of the study completion date in April 2015. Group interviews occurred

across a sample of five sites (Kildare, Laois, Dublin, Waterford and Limerick). In total 22 parents, 29 players and 14 coaches participated in 15 group interview sessions.

4.1.1.3 Data collection protocol. As listed in Appendix (E) I conducted all group interviews and began each with an introduction explaining the purpose and rationale behind the research, assurances of confidentiality, and an explanation of the interview process. Each interview lasted between 35 and 90 minutes and was tape-recorded to provide an accurate recording. Participants were informed that there were no right or wrong answers, they were asked to take their time responding to questions, and to tell the interviewer if they could not remember or did not understand the question. .

4.1.2 Deductive Content Analysis

A deductive content analysis approach was used in order to analyse group interview data (Krueger & Casey, 2014). This approach involves the controlled assignment of prior formulated research questions and underlying theoretical derived categories to the passage of text. This leads to creation of coding agenda outlining category definitions, prototypical text passages, and rules for distinguishing different categories with respect to theory are completed step by step, and are revised with the process of analysis (Krueger & Casey, 2014). I initially analysed the data, and the data was subsequently checked by my research supervisory team who at the time were unfamiliar with the data and therefore able to give an unbiased opinion regarding the validity of the analysis (e.g., Green & Krueger, 2005). In instances where there was a disagreement regarding an analytic decision, we discussed the interpretations until agreement was reached. Further checks were completed on the validity of the analysis by re-reading the transcripts in order to ensure that all of the identified categories in the data provided a true representation of participant perceptions. Finally, we met again to ensure that 100% agreement was reached as to the representation of the results that were made.

4.1.3. Procedure

Prospective participants were contacted via their local GAA Super Game Centre who forwarded a study information letter and consent form to each participant. Participants in the qualitative interviewing were compromised of GAA Super Game Centre participants, parents and coaches Semi-structured interviewing was used to provide a rich and meaningful insight into a subject's support experience during the feasibility study. All group interviews were transcribed verbatim.

4.1.4 Interview Guide

A semi structure interview guide was developed after a review of relevant qualitative literature (Krueger & Casey, 2014). The interview guide was developed in order to allow the interviewer to explore a set of pre-defined research questions which drew on two principal social support theories (i.e., stress buffering hypothesis, Cohen & Wills, 1985; and main effects model, Cohen & Wills, 1985). Other contributing theories included self-determination theory (Deci & Ryan, 1985, 2000), social identity theory (Tajfel & Turner, 1979; Livingstone & Haslam. 2008) and the theory of planned behaviour (Ajzen & Driver, 1992).

The interview questions related to: (i) the nature of the stress encountered from a drop out perspective; (ii) the perception of available social support; (iii) the actuality of social support received; (iv) social belonging; and (v) future participation intention.

4.2 Results

4.2.1 Perceived Support

The results from the analysis contained in Table 8 point to two key factors relating to perceived support: (1) access to games; and (2) games format.

Table 9: Evidence of Theoretical Implications: Perceived Support.

Category	**Definitions**	**Coding rules**	**Participant responses**
Perceived support in relation to intentions to drop out.	Perceived available support refers to a support recipient's subjective judgment that friends, family, teammates, and coaches would provide assistance if needed. (Freeman et al, 2011) Intentions to drop out refer to the degree to which a player intends to drop out from sport participation. (Sarrazin et al., 2002)	Identify examples of theoretical implications for perceived support in relation to intentions to drop out	*Perceived support - regular games provision* 'Knowing like everyone's going to get a game or be in a team because you know it encourages people to turn up because they know they're going to play football and they know they're going to get a game. And when you see the enjoyment of the people when they are playing like instead of standing on the line looking at it, you know like everyone wants to get a game, and everyone turns up to get a game.' SGC Coach 'I thought I needed to get a bit more skills and all that. So I decided to come down here. And I was excited to come here because, well in a way I thought we were gonna be doing like skills and all the usual at the club. But when I came down here the first week it was just games, games, games.' SGC Player *Perceived support - enjoyment emphasis*

			‘So a lot of times you’re on a team it’s you know you’re trying to win or you’re in training and it’s very structured. Down there what I’ve seen with the two lads, Friday, ‘we’re going, we’re going, can I’ etc. etc.. They’ve dragged in a few more lads it’s clearly the enjoyment thing, they’ve really got it back again and they love coming down because there’s literally no, you know it’s not winning or losing it’s just having a bit of fun with the lads, really enjoying it. And what you find is that sometimes we sometimes miss that from say matches and trainings and that and they’re really just, it’s sort of like recharging the batteries, it really is.’ SGC Parent ‘Just the numbers and how much everyone kind of enjoyed it like, that’s a big success because it’s definitely going to, it already has there’s a few players there that’s gone back to play with the clubs already. I know that’s obviously successful like.’ SGC Coach *Perceived support - positional freedom* ‘So I can go play maybe midfield and you get a lot of

			touches. And then you feel like you just wanna stay here for the rest a' the day and just keep playing hurling but you're only here for an hour.' SGC Player
Perceived support in relation to social identity.	Perceived available support refers to a support recipient's subjective judgment that friends, family, teammates, and coaches would provide assistance if needed. (Freeman et al., 2011) Social identity refers to a player's sense that they are part of a group or team. (Rees et al., 2015)	Identify examples of theoretical implications for perceived support in relation to social identity.	*Perceived support – team selection ethos* 'Everyone's equal like at the Super game Centre. Like no one's different from each other. That's why, like it's everyone, everyone's divided up equally among each other like to make sure that everyone has the best game as possible. Everyone has fun.' SGC Player *Perceived support – friendship development* 'My lads like to play each other in clubs. And they won't talk to each other. But now if they went to play a club match then, 'oh there's Jamie or there's John or whatever'. They, they know each other now by names and they're friends.' SGC parent *Perceived support – enjoyment emphasis* 'When you come to the Super Game Centre like it's not as serious as a proper football match or anything like that for your club. It's just, it's just there for the craic to have with

			the lads like.' SGC Player *Perceived support – Getting game time* 'Yeah I'd say coming every week and everyone acts the same level as you. And the majority of us didn't get a game. Didn't get any game time or anything like that. So we're all trying to just play and have a bit a' fun.' SGC Player *Perceived support - Respect* 'That was one thing I was looking from the sidelines and from the smallest guy on the pitch to the tallest guy they looked out for each other. You know there was size differential, there was height differential, there was weight differential they all did the tackles and all the thing and it was all a bit of fun.' SGC Parent *Perceived support - Team development* 'At first when people came down you could see the difference with the GAA players and the soccer players. At first the GAA players are a bit, like, being hard on the

			soccer players getting used to the sport. But as the weeks went on, like, as they made their mistakes we said hard luck, you'll do it next time, like, keep going, don't give up. And you seen that over the weeks they got better and better. And you can see them all starting to gel together, they weren't in two rooms any more. They decided to join to one, like.' SGC Coach
Perceived support in relation to basic needs satisfaction.	Perceived available support refers to a support recipient's subjective judgment that friends, family, teammates, and coaches would provide assistance if needed. (Freeman et al., 2011) Autonomy, competence and relatedness play a role in ensuring 'on going psychological	Identify examples of theoretical implications for perceived support in relation to basic needs satisfaction.	*Perceived support – friendship development* 'Making friends, yeah, because like there's no point playing the sport that you don't know anyone. Like your team is like, you have to make friends with them before like you can really get to know them. Cause like there's no point calling for a ball if it's somebody you don't know, like.' SGC Player 'Cause they're so close out there, you know, compared to what they were the first week, like, they just, even they'd come down together instead of arriving on their own.' SGC Coach *Perceived support – increased player autonomy*

	growth, integrity and well being' (Deci & Ryan, 2000) Autonomy refers to a need to feel volitional in once actions and to be the originator of these actions. (deCharms, 1968) Competence refers to a need for effective interaction with the environment in order to produce desired outcomes (White, 1959) Relatedness refers to feeling connected to and		'Like I coached a few times but you're learning, as a coach you're learning as well. This was a big learning experience for me. It opened my eyes big time how to coach kids properly so that you're not enforcing them to do stuff. You're kind of, as you said, you're not, not knowingly changing the games for them. But let them express themselves. See what they develop and see these things themselves without enforcing them.' SGC Coach 'Players out there are out there because they want to be out there. They're not out there, they're not made to be there, say some people who are like made to do sports. It's all their own choice.' SGC Player *Perceived support – increased player competency* 'I started off last year saying I would a' called myself one a' the worst footballers in the County I'd say. But since I came in and the coach has been there every week, you know, trying to edge me on to play I got a bit better and I play a bit, a full forward now. A small bit and try to, I got a bit better football. So I've got more confidence football

	understood by others or fulfilling a sense of belongingness with other people (Baumeister & Leary, 1995)		now. I'd nearly say football's one a' my main sports now instead a' hurling.' SGC Player

4.2.1.1 Access to games. The respondents in the group interview setting reported that an open access to games experiences played a key role in enhancing the perception of available support and reducing intentions to drop out at the end of the quantitative part of the study. This finding was supported from both player and coach perspectives. Evidence from player perspective highlighted the importance of getting games time as opposed to normal skill development experiences in their club setting: *I was excited to come here because, well in a way I thought we were gonna be doing like skills and all the usual at the club. But when I came down here the first week it was just games, games, games.* Meanwhile evidence from a coach perspective highlighted the importance of players knowing that they are guaranteed a game in order to positively impact their desire to continue participation: *Knowing like everyone's going to get a game or be in a team because you know it encourages people to turn up because they know they're going to play football and they know they're going to get a game. And when you see the enjoyment of the people when they are playing like instead of standing on the line looking at it, you know like everyone wants to get a game, and everyone turns up to get a game.*

4.2.1.2 Games Format. The games format was reported to be an important factor in increasing perceived available support. The results from the analysis in Table 8 point to six emergent factors relating to the games format: (1) enjoyment emphasis; (2) increased player autonomy; (3) team selection ethos; (4) respect; (5) increased player competency; and (6) friendship development.

4.2.1.2.1 Enjoyment emphasis. An emphasis on enjoyment was cited as a key feature of the experience from a player, coach and parent perspective. An example of evidence from a parent perspective highlighted a non focus on winning as critical in enabling players to enjoy the games experience and promote the initiative to their peers: *They've dragged in a few more lads it's clearly the enjoyment thing, they've really got it back again and they love coming down because there's literally no, you know it's not*

winning or losing it's just having a bit of fun with the lads, really enjoying it. This evidence is further supported from a player perspective: *when you come to the Super Game Centre like it's not as serious as a proper football match or anything like that for your club. It's just there for the craic to have with the lads like.* Evidence from a coach perspective demonstrated the impact that an enjoyable games experience had on a players intention to re engage participation with their local club: *Just the numbers and how much everyone kind of enjoyed it like…. there's a few players there that's gone back to play with the clubs already.*

4.2.1.2.2 Increased player autonomy. Evidence from a coach perspective highlighted the importance of enabling participants to become autonomous during their games experience: *It opened my eyes big time how to coach kids properly so that you're not enforcing them to do stuff…. see what they develop and see these things themselves without enforcing them*. An example of this autonomous based approach is further support by evidence from a player perspective which highlighted the significance of positional freedom in impacting his intention to continue participation: *so I can go play maybe midfield and you get a lot of touches. And then you feel like you just wanna stay here for the rest a' the day and just keep playing hurling but you're only here for an hour*. This autonomy promoting approach was further supported in this player's response: *players out there are out there because they want to be out there. They're not out there, they're not made to be there, say some people who are like made to do sports. It's all their own choice*.

4.2.1.2.3 Team selection ethos. Evidence from a player perspective highlighted the significance of team selection procedures in creating a sense of equality and enjoyment in the games experience. *Everyone's equal like at the Super game Centre. Like no one's different from each other. That's why, like it's everyone, everyone's divided up equally among each other like to make sure that everyone has the best game as possible. Everyone*

has fun. This coach led selection procedure increased social identity of the group while enhancing the perception of enjoyment in the experience.

4.2.1.2.4 Respect. Evidence from a parent perspective highlighted the role of respect in ensuring that participants managed diverse biological sizing thus ensuring enjoyment across the participant group: *'That was one thing I was looking from the sidelines and from the smallest guy on the pitch to the tallest guy they looked out for each other. You know there was size differential, there was height differential, there was weight differential they all did the tackles and all the thing and it was all a bit of fun.*

4.2.1.2.5 Increased player competence. The role of perceived coaching support in impacting a participants perceived competence and confidence is highlighted in this response provided by a player: *'I started off last year saying I would a' called myself one a' the worst footballers in the County I'd say. But since I came in and the coach has been there every week, you know, trying to edge me on to play I got a bit better and I play a bit, a full forward now. A small bit and try to, I got a bit better football. So I've got more confidence football now. I'd nearly say football's one a' my main sports now instead a' hurling.*

4.2.1.2.6 Friendship development. Players, parents and coaches all highlighted the significance of friendship development during the experience. Evidence from a player perspective highlighted the importance of getting to know their peer's names in order to play the game effectively: *making friends, yeah, because like there's no point playing the sport if you don't know anyone. Like your team is like, you have to make friends with them before like you can really get to know them. Cause like there's no point calling for a ball if it's somebody you don't know, like.* Meanwhile evidence from a parent perspective provided a key insight into the significance of a non-competitive social setting whereby participants can form friendships in absence of seeing their peers as competitors: *my lads like to play each other in clubs. And they won't talk to each other. But now if they went to*

play a club match then, 'oh there's Jamie or there's John or whatever'. They, they know each other now by names and they're friends. Evidence from a coach perspective highlighted how relationships between participants had become closer over the course of the study and led to participants arriving in groups to the Super Game Centre: *they're so close out there, you know, compared to what they were the first week, like, they just, even they'd come down together instead of arriving on their own.*

4.2.2 Received Support

The results from the analysis contained in Table 9 points to four key factors related to received support: (1) peer to peer support; (2) increased confidence to participate; (3) stress encountered; and (4) stress removed.

4.2.2.1 Peer to peer support. Evidence from a coach perspective highlighted the role peer to peer in generating participation uptake within a local community context: *And it did because they were talking to their friends about it and you could see every week there was one or two more starting to come in from the local school area.* Evidence from one player also highlighted the significance of peer support in shaping a decision to continue participation in response to adverse weather conditions: *even when it started hailstones there, one of us said 'how about we go in the hall and play, just spend time passing. Rather than just saying 'oh we'll just leave' we stayed.*

Table 10: Evidence of Theoretical Implications: Received Support.

Category	**Definitions**	**Coding rules**	**Participant responses**
Received support in relation to intentions to drop out.	Received support refers to the specific helping actions provided by friends, family, teammates, and coaches (Freeman et al., 2011). Intentions to drop out refer to the degree to which a player intends to drop out from sport participation. (Sarrazin et al., 2002)	Identify examples of theoretical implications for received support in relation to intentions to drop out.	*Received support – peer to peer promotion* 'And it did because they were talking to their friends about it and you could see every week there was one or two more starting to come in from the local school area.' SGC Coach *Received support – peer to peer support* 'Even when it started hailstones there, one of us said 'how about we go in the hall and play, just spend time passing. Rather than just saying 'oh we'll just leave' we stayed.' SGC Player *Received support – increased player confidence* 'I was speaking to another parent after, and he came over to me and he said your centre is working. And I said what do you mean. He said them two lads have come back to training for the last two weeks, with the club they'd gone away from last year. So I says oh, right, so it obviously had the effect of confidence on the players as well, that yes,

			they'd got an enjoyment factor back for football and they'd gone back playing.' SGC Coach
Received support in relation to stress encountered and intentions to drop out	Refers to the effect that received support has on the relationship between stress encountered and intentions to drop out. Received support may reduce or alter the behavioural response to the stress and lead to improved coping or provide a distraction from or a solution to the problem (Cohen et al., 2000; Cohen & Wills, 1985)	Identify examples of theoretical implications for received support in relation to stress encountered and intentions to drop out.	*Received support - Reduced fear of failure* 'It's, I'm trying to think, it's just the environment that's there that they know that they're not gonna be given out to if this happens. They're coming in relaxed. They're coming in knowing what, what's gonna happen. It's not, they're not, they're coming in without fear basically.' SGC Coach *Received support – Getting a game* 'In the club setting it's more, if you play; you have to be the best. And you have to be the fittest. And you have to have all this. In club it's all about whoever's best and here fitness isn't an issue cause you play a lot a' football. And eventually you will get fit. So last year I was very unfit and I didn't play a match at all I don't think now for sure. So I finally got sick of it anyway. I was going to leave. But I came to here now anyway. I got a bit more fitness and a bit more football and eventually now I got to play.' SGC player

			Received support – Avoid underage alcohol consumption 'Like just keep doing it, just keep like it's actually it's good for everyone, 'cause we'll be down here having fun and like our parents will know where we are instead of being out on the streets. And like you won't be doing any bad things, just playing sports and keeping healthy 'cause like we're having fun here as well. And like it's keeping us safe as well. It's like Friday night it's like one of the dangerous nights 'cause people are probably out drinking and that but 'cause we're here it's like keeping us away from that and keeping us healthy at the same time.' SGC Player *Received support – Not getting shouted at* 'Not being shouted at I tried again and again till I got it right.' SGC Player' 'Well I, again it comes down to pressure I think. And he knows that no-one's gonna shout at him. Nothing's gonna happen to him. You make a mistake, no-one's gonna shout

			at you. No pressure. He knows he's not gonna get took off. He knows he's gonna start, play a game.' SGC Parent *Received support – enjoyable atmosphere* 'You know, they're slagging each other, they're having a bit of a laugh and it's a bit less, it's not as serious as say training, training or matches you know, cause some of us here are involved in teams and, you know, you try and keep the, in training you try and keep it fairly serious you know. Sometimes too serious, they're supposed to enjoy it but you know we talk about training with intensity and playing with intensity but when they're here in the Super Games it's not that intense, it's really more about fun. And they enjoy it a lot of the time I think, they keep coming back.' SGC Parent

4.2.2.3 Increased confidence to participate. Evidence from a coach perspective relating to a key piece of parent feedback highlighted the impact of the study in reversing a previous decision to drop out from local club participation: *I was speaking to another parent after, and he came over to me and he said your centre is working. And I said what do you mean. He said them two lads have come back to training for the last two weeks, with the club they'd gone away from last year. So I says oh, right, so it obviously had the effect of confidence on the players as well, they'd got an enjoyment factor back for football and they'd gone back playing.*

4.2.2.4 Stress encountered

Two key stressors emerged within the group interview setting which relate to shaping a player's intention to drop out of their sport.

4.2.2.4.1 Not getting selected. Evidence from a player perspective highlighted the impact of not getting selected to play on fitness levels which eventually led to this participant dropping out of their sport: *so last year I was very unfit and I didn't play a match at all I don't think now for sure. So I finally got sick of it anyway. I was going to leave.* The impact of such an experience on the emotional state of a parent is highlighted in the following parent response: *the last time he just demonstrated up for a game they only had two subs and the manager of the club brought on one and didn't bring him on and he just came home and said, I'm never going back. And I couldn't blame him I was livid.*

4.2.2.4.1 High pressure to perform. Evidence from a player perspective highlighted the significance of pressure to perform in determining access to game time: *miss one score then you don't know where you're gonna be. You could be on the bench then. Someone else is in and you can't play a game.* This player response highlighted the lacks of autonomy provided to the participants in terms of choosing their position on the field of play and how this reduces the desire to participate in the game: *before I left I would be made go in goals and I really hate goals, I hated it. So if you made an own goal it adds*

pressure on to you… It just makes you dread, dread every match we do. Antisocial behaviour derived from coaches during the game was highlighted by this player as a key stress during their participation experience: *because sometimes the coaches are shouting at you and when they shout at you, you feel really stressed.*

4.2.2.5 Stress removed

Four key factors emerged as playing a critical role in the removal of typical stressors which are associated with an increase in intentions to drop out from sports participation.

4.2.2.5.1 Relaxed environment. The lack of an emphasis on winning is cited as a key element in the games environment which creates a more relaxed and enjoyment orientated experience for participants. This parent response highlights the impact of such an ethos on a player's intentions to continue participation in their sport: *'You know, they're slagging each other, they're having a bit of a laugh and it's a bit less, it's not as serious as say training, training or matches you know, cause some of us here are involved in teams and, you know, you try and keep the, in training you try and keep it fairly serious you know. Sometimes too serious, they're supposed to enjoy it but you know we talk about training with intensity and playing with intensity but when they're here in the Super Games it's not that intense, it's really more about fun. And they enjoy it a lot of the time I think, they keep coming back.*

4.2.2.5.2 Getting fit while getting a game. The relationship between getting fit as a result of a getting game time is reflected in the following participant response. The participant's experience of the study is in marked contrast to their typical experience in their local club where the best players with the greatest fitness level get selected to play. The experience provided enabled the development of greater fitness as a result of getting game time which in turn reduced intentions to drop out of participation in their sport: *in the club setting it's more, if you play; you have to be the best. And you have to be the fittest. And you have to have all this. In club it's all about whoever's best and here fitness isn't*

an issue cause you play a lot a' football. And eventually you will get fit. So last year I was very unfit and I didn't play a match at all I don't think now for sure. So I finally got sick of it anyway. I was going to leave. But I came to here now anyway. I got a bit more fitness and a bit more football and eventually now I got to play.'

4.2.2.5.3 Safe environment. The safety of the games environment and its ability to have a positive impact on participants was highlighted as important for this player who stated: *like just keep doing it, just keep like it's actually it's good for everyone, 'cause we'll be down here having fun and like our parents will know where we are instead of being out on the streets. And like you won't be doing any bad things, just playing sports and keeping healthy 'cause like we're having fun here as well. And like it's keeping us safe as well. It's like Friday night it's like one of the dangerous nights 'cause people are probably out drinking and that but 'cause we're here it's like keeping us away from that and keeping us healthy at the same time.*

4.2.2.5.4 Positive feedback. Evidence from a coach, parent and participant perspective highlighted the significance of positive feedback provided by the coach. Participants highlighted the significance of positive feedback in supporting a retain high sense of effort as they develop their skills: *not being shouted at I tried again and again till I got it right*. This view is supported by evidence from a coach perspective which highlights the significance of creating a feedback climate where participants are relaxed and fearing failure: *it's, I'm trying to think, it's just the environment that's there that they know that they're not gonna be given out to if this happens. They're coming in relaxed. They're coming in knowing what, what's gonna happen. It's not, they're not, they're coming in without fear basically.* This response if further supported by evidence from a parent perspective which highlighted the impact of a non-pressurized games climate on the games experience: *well I, again it comes down to pressure I think. And he knows that no-one's gonna shout at him. Nothing's gonna happen to him. You make a mistake, no-one's*

gonna shout at you. No pressure. He knows he's not gonna get took off. He knows he's gonna start, play a game.

4.3 Discussion

The purpose of research question 3 was to identify evidence of impact for social support on key stakeholders (i.e., players, coaches and parents) in order to further test the feasibility of the intervention. In total six key factors emerged from the text passages identified as a result of the key categories (e.g., perceived support and received support) derived from the research questions contained in Chapter 2.

4.3.1 Theoretical Implications

The findings contained in Chapter 3 provide an important context to the results demonstrated in this chapter. The quantitative part of the GAA Study demonstrated a set of results which advance theory (e.g., social support, social identity) and the development of theory-led interventions in youth sport contexts. The results demonstrate that an increase in perceived available support had a significant main effect on intentions to drop out at the end of the intervention; this effect was shown to be mediated by an increase in social identity over the duration of the intervention. The results also show that there were significant stress buffering effects for received support in relation to intentions to drop out.

The findings in this chapter relating to perceived support highlighted the significance of two key factors (open access to games, games format) in increasing the perception available support. In total six key factors emerged relating to the games format, which reflect the rules, standards and operating procedures of the study. As part of the design, a standardized games format took into account these six evidence-based features of continued participation in sport derived from the literature review. These best practice features were coined as the 'GAA Play to Stay Values'. These values were translated into a series of standardized rules, which enabled the provision of a standardized games experience for each participant. The findings contained in this chapter highlighted the

significance the games format (e.g. team selection procedure, enjoyment, respect, autonomy) in shaping intergroup relationships (e.g. friendship development, peer to peer promotion) between players, teammates and their coach. These insights advance theory and support the notion that a shared social identity between support providers and receivers underpins the giving, receiving, and interpretation of support (Haslam et al., 2004; Haslam et al., 2005). Such a finding advances previous research highlighted in the literature review (e.g., Felton & Jowett, 2012a, 2012b, Le Bars et al., 2009) which called for strategies to target certain social support behaviours (e.g., autonomy supportive, promotion of greater effort and persistence irrespective of ability, challenging task choice, non-conflict, non-controlling, positive and supportive) towards youth athletes in order to effect positive outcomes (e.g. sport continuation). The findings presented in this chapter can assist practitioners in facilitating the development of more effective forms of social support in order to impact positively on youth sport outcomes.

Furthermore, the findings in this chapter provide insight into the type of stressors (e.g., not getting selected, high pressure to perform) and the significance of these stressors in impacting intention to drop out of sport. Specifically, the findings highlight the significance of received support from coaches (e.g., positive feedback) in creating a positive and enjoyment-orientated environment. This finding is supported by evidence presented in Chapter 2 which demonstrates that youth sport participants are most likely to experience positive developmental outcomes when interactions with coaches and parents are characterized by positive and informational feedback, appropriate role modelling and autonomy-supportive engagement styles (Weiss & Wiese-Bjornstal, 2009). Getting game time, which then enabled the development of physical fitness, was also highlighted as a key support resource provided to participants. This finding is supported by research which has found that opportunities to participate and in engage in sport has been identified as a fundamental resource in order to engage young people in sport (Balish et al., 2014).

The evaluation comments relating to received support derived from the group interview setting highlight in particular the significance of social support in altering the relationship between stress encountered (e.g. not getting game time, getting shouted at) and intentions to drop out of sport. This finding is in line with the literature review, which demonstrated the significance of key coaching behaviours in safeguarding continued youth sport participation (Le Bars et al., 2009). The overall findings relating to received support and the stress buffering hypothesis are in line with previous research, which has supported the position that received support might reduce the impact of stress appraisal by decreasing the perceived importance of the problem, by leading to improved coping, or by providing a distraction from, or a solution to, the problem (Cohen et al., 2000). The findings contained in this chapter provide support for the role of social support within a youth sport context. This highlights the importance of educating coaches and parents on appropriate support measures, particularly the type and access to the support that they make available to young participants susceptible to stress.

4.3.2 Feasibility Recommendations

The results from Chapter 4 provide strong evidence concerning the acceptability of the intervention in a youth sport context. The views of stakeholders form an essential understanding of how an intervention can be integrated into practice (Bohen et al., 2009). Chapter 2 (section 2.6.3) highlighted 2 key drop out factors specific to the GAA context. The presence of inadequate competition frameworks (i.e. absence of a meaningful programme of regular and scheduled games) coupled with a lack of a developmental ethos (i.e. culture of keeping the best and ignoring the rest) informed the pre intervention context of this feasibility study. The stakeholder views contained in Chapter 4 point to a series of specific intervention features (i.e., open access to games, enjoyment emphasis, equal team selection ethos, relaxed and safe environment, positive feedback) in relation to reducing drop out in a GAA context.

Furthermore, the views of stakeholders contained in Chapter 4 suggest key ways in which the SGC can be refined in order to make it more acceptable to participants in a GAA context. For example Table 8 highlights the importance of key themes (i.e. access to regular games, enjoyment emphasis and positional freedom) in enhancing the overall perceived support of the intervention. In order to make the intervention more acceptable, future research should take into account the requirement to include key promotional messages designed to positively impact the perception of support. The inclusion of a promotional strategy with key messages designed to positively shape perceived support may enhance overall acceptability of the intervention during pre intervention.

In contrast to perceived support, the views contained in section 4.3.2.5 highlight the key features of received support (i.e. relaxed environment, getting fit while playing a game, safe environment, positive feedback) arising from the intervention, which led to the removal of typical drop out stressors. This evidence highlights the key role of coaches in creating a games environment that prevents drop out. The implication from this finding suggests that intervention training for coaches should take into account specific support provider skill development (i.e., positive feedback, self awareness) in order to enhance the acceptability of the intervention.

Chapter 4 provides key stakeholder views on the impact of social support in a youth sport setting. Although this evidence remains limited to a specific team sport within an Irish context, the evidence contained in Chapter 4 suggests that the intervention could be applied into other youth team sport contexts. For example the stakeholder views contained in Chapter 4 highlight the specific role of social support in reducing intentions to drop out of sport. Specifically, the emergence of increased player autonomy and enjoyment is supported by previous research, which has explored autonomy support and intentions to drop out of sport across five European countries (Quested et al., 2013). Furthermore, stakeholders provided key views supporting an open access to games and a more inclusive

team selection ethos irrespective of ability. Previous research has highlighted the importance of social support providers promoting a task involving motivational climate in preventing youth sport drop out (Le Bars et al, 2009). Such an approach involves key support providers challenging task choices, promotion of greater effort and persistence regardless of perceived ability.

Chapter Five

Discussion

5.1 Introduction

Research into the area of social support in youth sport has developed greatly over the past decade. The literature review in this thesis indicated that future research needs to focus on studies identifying the predictors and mediators of social support within a youth sport drop out context and examining changes in social support over time by employing longitudinal designs. The quantitative and qualitative parts of the GAA Study in the thesis were based on addressing these existing limitations in the literature, with a specific focus on the role of functional aspects of social support (i.e. perceived and received support).

The quantitative part of the GAA study involved a two-part feasibility study. In order to assess the potential viability of the intervention to be tested in a full-scale trial, this study initially investigated the effect of a change in perceived support on intentions to drop out at the end of a social support intervention. The findings indicated a significant main effect demonstrating that an increase in perceived support was negatively associated with intentions to drop out at the end of the study. Furthermore, social identity emerged a significant mediating factor in explaining the association between perceived support and intentions to drop out.

The quantitative part of the GAA Study examined the stress buffering effect of received support. Findings demonstrated that stress encountered had a significant negative main effect on intentions to drop out. Moreover, received support was shown to exert a significant buffering effect on the detrimental relationship between stress encountered on intentions to drop out.

The qualitative part of the GAA study focused on whether the intervention needed to be refined or adapted to make it more acceptable to users or more relevant or useful to the specific context in which it is delivered. The findings revealed a range of key factors relating to perceived support (i.e., access to games, games format) and received support (i.e., peer to peer support, increased confidence to participate, stress encountered and stress

removed), which reflected the views across a wider stakeholder group involving coaches, parents and youth participants.

The results presented in this thesis have a number of theoretical and applied implications, and indicate a number of research directions, which can further expand an understanding of the role of social support in youth sport contexts.

5.2 Theoretical Implications

The literature review demonstrated that a proliferation of research over the past decade has led to a greater understanding of the role of social support in a youth sport context. Although studies have highlighted the importance of social support as a determinant of physical activity in adolescents (Balish et. al., 2014; Sallis et. al., 2000), no studies to date have examined the functional aspects of social support (i.e. perceived and received support) relative to youth sport drop out. In this thesis, I reported the effect that both perceived and received support has upon intentions to drop out. The results of the thesis provide support for the following theoretical implications: (a) The importance of developing a greater perceived availability of social support and increasing social belonging in predicting intentions to drop out; and (b) the use of received support in buffering adolescent participants from the stressors typically associated with youth sport drop out.

The findings from the quantitative part of the GAA Study demonstrate that an increase in perceived support was negatively associated with intentions to drop out. The adds to previous findings demonstrating that perceived support is associated with beneficial effects on a range of key youth sport outcomes including self-confidence (Rees & Freeman, 2007; Freeman, et. al., 2011), burnout (Freeman, et. al., 2011; Defreese & Smith, 2013) and performance (Freeman & Rees, 2010).

The qualitative part of the GAA Study provides a useful insight into some of the key factors relating to the main effect of perceived support upon intentions to drop out. The

factors include a perception that players have access to games on a regular basis and the perception that the games format engenders enjoyment, respect, autonomy, competence, belonging and friendship. The literature review highlighted the significance of these factors in positively impacting the climate and experience of youth sport participation. Weiss and Smith (2001) identified enjoyment as a key mediating variable in explaining the relationship between commitment and participation in sport. Meanwhile, Defreese and Smith (2013) examined the association between teammate social support, burnout and self-determined motivation. Results showed that perceived teammate support to be inversely associated with burnout and positively associated with self-determined motivation.

In explaining the main effect of perceived support upon intentions to drop out, it is important to consider the role of social identity in the context of the GAA study. The literature review identified the need for studies to examine the effect of changes in social support over time on key outcomes such as youth sport drop out. Previous research highlighted that changing the structure of sport (e.g., rules, procedures and competition structures) may lead to more meaningful decreases in sport attrition (Balish et al., 2014). The findings from the study demonstrated that an increase in perceived support was associated with an increase in social identity, which in turn predicted intentions to drop out. These findings suggest that the modified games experience increased a sense of belonging within the social setting connected to the games experience. Main effect theorists have argued that people's identities are tied to the social roles that they occupy (Thoit, 1983). It is suggested that these social roles create a set of behavioural expectations, which instil a sense of predictability in providing information on how people should interact. Cohen (1988) argues that the ability to meet these expectations may result in cognitive benefits including enhanced feeling of self-worth and greater control over one's environment, which positively influence health (Cohen, et. al., 2000).

The findings from the qualitative part of the GAA Study provided further insight into a range of key factors, which helped to explain the effect that the intervention had upon coaches, parents and players. Each of the factors (i.e., team selection ethos, friendship development, enjoyment emphasis, respect and team development) reflected the operating expectations as set down in accordance with the six Play to Stay values listed in Chapter 4. For example, parents cited *('my lads like to play each other in clubs. And they won't talk to each other. But now if they went to play a club match then, 'oh there's Jamie or there's John or whatever'. They, they know each other now by names and they're friends'*) the importance of their children getting to make new friends in a games setting not typically set up to enable the development of such friendships due to local competitiveness within a local club competition context. Players cited ('*everyone's equal like at the Super game Centre. Like no one's different from each other. That's why, like it's everyone, everyone's divided up equally among each other like to make sure that everyone has the best game as possible. Everyone has fun'*) that each player was treated equally and that teams were selected in a balanced and equitable way. Coaches cited (*'and you seen that over the weeks they got better and better. And you can see them all starting to gel together, they weren't in two rooms any more. They decided to join to one, like'*) the development of belongingness over the duration of the intervention. This evidence highlighted the role that an increase in social identity can play in enhancing the perception of available support within a social setting. This finding is line with contemporary research in a youth sport setting which has found that a common social identity is significantly associated with perceived support (Coussens, et. al., 2015). These findings are supported in the wider social support literature which has shown that a shared sense of social identity between perceiver and provider underpins the giving, receiving, and interpretation of support (Haslam et al., 2004; Haslam et al., 2005).

The findings contained in the quantitative part of the GAA Study combined with the supporting evidence in the qualitative part demonstrate that cultivating a common social identity in a group setting can enhance player perception of available support, which in turn influences intentions to drop out. The identification of such an important mediating factor expands the existing literature which has recently called for the identification of key mediating factors underpinning youth sport drop out (Balish et at., 2014).

In contrast to perceived support, a stress coping perspective was applied to received support given its situational nature in response to stressful situations (Uchino, 2009). Previous research in a sports setting has found a stress buffering effect for received support upon key outcomes including performance (Rees et al., 2010), negative affect (Freeman, et. al., 2014) and burnout (Lu, Lee, Chang, Chou, Hsu, 2016). The findings from the quantitative and qualitative part of the GAA Study highlight that received support buffered the detrimental relationship between stress encountered and intentions to drop out.

The quantitative part of the GAA Study identified that a high levels of stress encountered was associated with high level in intentions to drop out. The qualitative part of the study identified two key stressors (i.e., not getting selected; high pressure to perform), which are associated with intentions to drop out. Accessing participation opportunities has been identified as a fundamental resource in engaging participants in youth sport (Balish et al., 2014). The study operated a policy that ensured every player played a game at each session. The qualitative part of the GAA Study identified high pressure to win as significant stressor for participants. The literature review demonstrated that coach and parent 'pressure to win' has been cited as key factors in leading to the withdrawal of participants from sport (Gould et al., 2006, 2008; Hellstedt, 1990). In order to effectively address these stressors, research has highlighted that the stressor context plays a focal role in the effectiveness of coping options in response to stress encountered

(Uchino, 2009). These coping options include received support as well as other emotional and problem focused coping behaviours.

The findings from quantitative part of the GAA Study demonstrate the stress buffering effect of received support upon the detrimental relationship between stress encountered and intentions to drop out. Evidence from the study highlighted that a relaxed and positive environment impacted intentions to drop out. The literature review demonstrated that youth sport participants are most likely to experience positive developmental outcomes when interactions with coaches and parents are characterized by positive feedback (Weiss & Wiese-Bjornstal, 2009). Meanwhile, Le Bars et al. (2009) completed two longitudinal studies stressing the importance of coaches, peers and parents in creating a motivational climate that safeguards athlete persistence in sport. Findings indicate that a task-involving climate involving all social support agents predicted athlete persistence in sport. Such a support climate corresponds with key support behaviours, including challenging task choice and the promotion of greater effort and persistence regardless of perceived ability. These findings highlight the significance of key support behaviors in effectively counteracting the main effect of stress upon intentions to drop out.

In addressing the stress coping perspective, the literature review highlighted the key role that parents, peers and coaches play in influencing coping response to youth sport stressors (Holt, et. al., 2008; Tamminen & Holt, 2012). Tamminen and Holt (2012) showed that parents and coaches used specific strategies to help athletes to learn about coping, including questioning and reminding, providing perspective, sharing experiences, dosing stress experiences, initiating conversations, creating learning opportunities and direct instruction. Parents and coaches were identified to play a significant 'buffering' role in limiting the extent to which athletes are exposed to stressors. In contrast, the paradoxical nature of social support in a youth sport setting has also been identified in the stress coping literature (Tamminen & Holt, 2010). Social support has been identified to influence

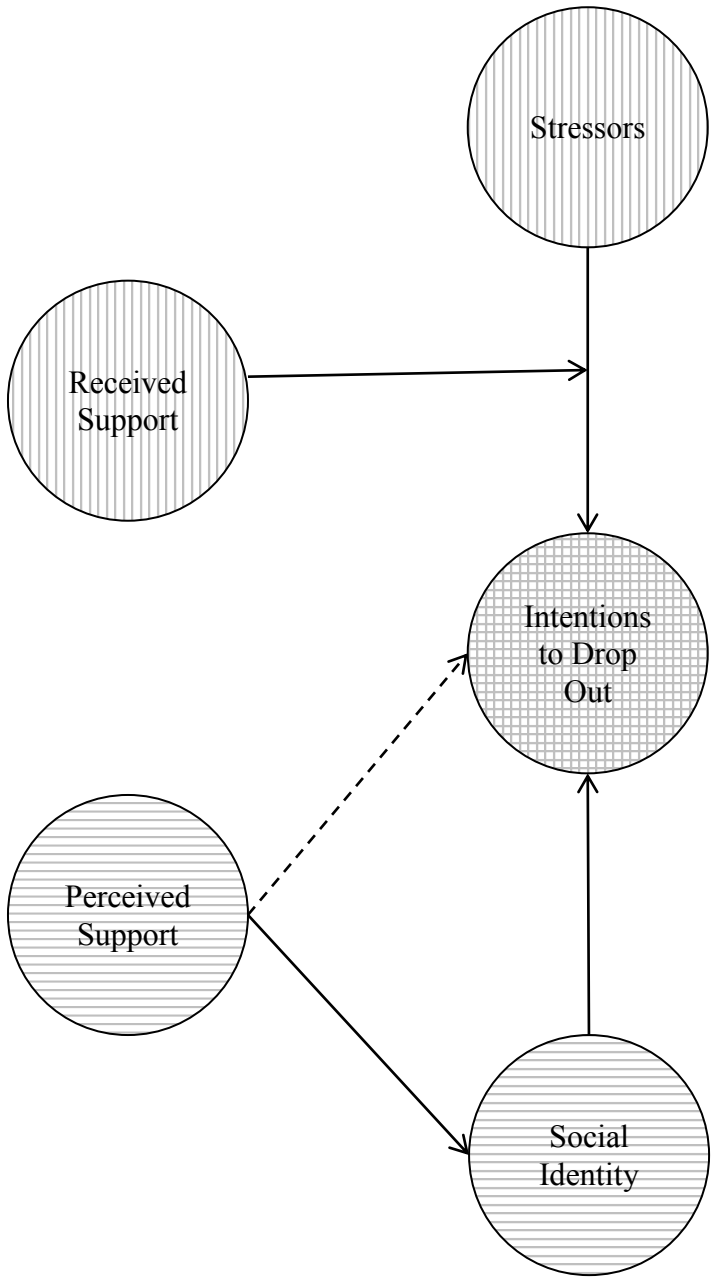
adolescent coping through positive or negative social interactions and social evaluation expressed through communication between athletes and key members in their social network. The literature review has showed that social support can be both an asset and a liability for athletes. This highlights the importance of targeting coach, parent and peer/teammate interactions in order to improve athlete coping responses to key stressors (Tamminen & Holt, 2010).

Evidence across both parts of the study highlight the role received support can play in buffering players from the effects of stress typically related to drop out. The qualitative findings also highlight the importance of taking the stressor context in account in planning a social support intervention. The quantitative part of the study highlights the importance targeting players who are experiencing high levels of stress in preventing youth sport drop out.

The above findings relating to perceived and received support present a new level of conceptual understanding concerning the role of social support in a youth sport context. Section 3.2 highlighted the conceptual distinction between perceived and received support and hypothesized two different causal explanations for the effect of social support. Figure 4 illustrates a conceptual model for social support process on intentions to drop out. Perceived support is shown to predict intentions to drop out thus linking perceived support to the main effect theory of social support. This prediction can be explained by social identity, which is shown to mediate the association between perceived support and intentions to drop out. Alternatively, stressors predicated intentions to drop out while received support is shown to moderate the effect of stressors upon intentions to drop out. In summary the conceptual model identifies three key predictors (perceived support, social identity, stressor), one mediator (social identity) and one moderator (received support) in explaining the effect of social support on intentions to drop out. Such a multi level

statistical model unveils important locations for interventions to decrease youth sport drop out (Balish et al., 2014)

Figure 4: A Model of Social Support Processes on Intentions to Drop Out



Note. Vertical line format within each variable indicates the moderation model; horizontal line format within each variable indicates the mediation model.

5.3 Implications for Social Support Intervention Methodology

The quality of the social environment that is created by parents, coaches and peers has been identified as a critical determinant of whether engagement in sport is long term and leads to enhanced physical and mental health (Quested, et. al., 2013). The literature review identified that youths are at risk of dropping out of sport during adolescent years and that this trend is replicated worldwide (Balish et. al., 2014). The results from both studies contained in this thesis provide a key contribution to the social support literature in understanding how social support can address youth sport drop out.

The literature review identified that a task-involving climate involving key social support agents (parents, coaches and teammates) predicted athlete persistence in youth sport. Such a support climate corresponds with key support behaviours, including challenging task choice and the promotion of greater effort and persistence regardless of perceived ability (Le Bars, et. al., 2009). The GAA Study responded to a key research direction from the literature review and investigated the effect of a social support intervention through a longitudinal study design. The findings demonstrated that an increase in perceived support was negatively associated with intentions to drop out at the end of the study. An increase in social identity emerged as a significant mediating factor in explaining the main effect of perceived support on intentions to drop out.

These findings concerning perceived support and social identity in the context of predicting intentions to drop out present key implications for social support intervention design. Firstly, the emergence of social identity as a mediating factor explaining the association between perceived support and intentions to drop out merits further attention. The findings suggest that a shared sense of social identity within a social group positively influences judgments of support through creating a sense of belonging and purpose. This is line with previous research that has showed that a shared sense of social identity between perceiver and provider has been shown to underpin the giving, receiving, and interpretation

of support (Haslam et al., 2004; Haslam et al., 2005). Given the significance of a shared identity in shaping the judgments of support, future social support interventions should consider the selection and cultivation of shared values in order to positively effect support perceptions which can then influence outcomes.

However as Cohen, Underwood and Gottlieb (2000) advise, selecting appropriate support strategies from an intervention perspective are not without its challenges. The authors advise that researchers complete a baseline support network assessment on the key relationships underpinning the goal of a social support intervention. The literature review highlighted the importance of completing such assessments in ensuring that interventions are focused on the appropriate antecedents of perceived support. In examining perceiver, target and relational determinants of perceived coach support, Rees et al. (2012) found that the relational component explained 35–44% of variance in perceived coach support. This finding was consistent with judgments of support in other contexts (e.g., Lakey, McCabe, Fisicaro, Drew, 1996; Lakey, Drew, Sirl, 1999; Lakey, Cohen, Neely, 2008). Moreover, Coussens, et al., (2015) demonstrated that when athletes perceive specific coaches to be highly agreeable, competent, and individuals with whom they share a common identity, they also perceive these same coaches to be particularly supportive in comparison with other coaches. These findings have important implications for social support interventions. A baseline network assessment will enable support providers to screen for similarity in attitudes, values and experiences in order to ensure that perceived support is maximized in an intervention setting.

5.4 Practical Implications

Several practical implications emerged based on the findings from the current thesis. These implications are consistent with the data obtained and the analysis conducted in the investigation. The practical implications include the development of social skills to enhance support perception and the use of stressors to determine support need.

Evidence relating to perceived support across both parts of the GAA Study highlights the importance of increasing perceived support in youth sport contexts. Uchino (2009) has highlighted that the development of social skills in children and adolescents can lead to the formation of a supportive social network, which can enhance perceived support. Such interventions have been linked to improvements in peer acceptance and support (Bierman, 1986; Bierman & Furman, 1984; Drentea, Clay, Roth, & Mittleman, 2006) and academic outcomes (Dirks, Treat, &Weersing, 2007).

The quantitative part of the GAA Study highlighted the importance of practitioners completing baseline support network assessments in designing and executing effective social support interventions (Cohen, et. al., 2000). Practitioners can screen for important considerations including the nature of the relationship between the support provider and support recipient and the demands and duration of the stressor impacting the support recipient. Such assessments are critical in ensuring that practitioners selected an appropriate support strategy, which reflects the social context and the under lying intervention goal.

5.5 Feasibility Recommendations

The evidence contained in Chapters three and four indicate that the intervention has the potential to be run again in a controlled trial for a more rigorous test of the hypotheses stated in Chapter three. Pre and post results contained in Section 3.8.2 demonstrated that pre- to post values are essentially equivalent in all instances except perceived support where an increase was observed as indicated by inferential analyses. Chapter 4 presented a range of stakeholder views concerning the acceptability of the SGC intervention in a GAA context. The emergence of evidence based intervention features (i.e. increased player autonomy, positive feedback, enjoyment emphasis) within stakeholder views suggest that the intervention could be extrapolated beyond a GAA youth population and implemented more broadly in a diverse youth sport setting. As a result, it is recommended to run a

controlled trial designed to enable a more rigorous test of the intervention while addressing key relevant theoretical considerations involving both the main effect and stress-buffering hypothesis. It is also recommended that key promotional messages (i.e., everyone gets a game, enjoyment emphasis, relaxed and safe environment) are used to positively impact the perception of support prior to and during future intervention trials. Such an approach will enhance the acceptability of the intervention given the significant association between perceived support and intentions to drop out.

5.6 Strengths and Limitations

There are two main strengths that are evident in the contribution of this thesis. Firstly, the literature review identified the need to explore the effect of a change in support over time on key outcomes within a youth sport setting (Le Bars et al., 2009; Defreese & Smith, 2013). Such a research direction has been identified as critical with social support researchers suggesting that the impact of support on health and well-being is best investigated over time (Hobfoll, 2009). The findings contained in the GAA Study reflect a significant contribution demonstrating that changes in social support over time were associated with lower intentions to drop out at the end of an intervention. Secondly, the evidence contained in the literature review identified that there was a lack of intervention-based studies examining the role of social support in a youth sport context. Previous studies have highlighted the need to manipulate the relational context within youth sport in order to explore key relationship underpinning sport participation (Coatsworth & Conroy, 2006). Moreover, previous research has highlighted the need to redesign youth sport environments in order to effectively tackle youth sport drop out (Balish et. al., 2014). The evidence contained across both parts of the study highlight the potential in using a common set of values to guide the modification of a youth sport environment. Although these findings do not determine causation underpinning the effect mechanism contained

with the intervention, a number of key research directions have emerged as a result of these findings.

The GAA Study contained a delimitation associated with purposeful sampling. Specifically, participants in all three studies were male participants aged 12 to 16 years from a GAA sport background. As Patton (2002) highlighted, purposeful sampling does not necessarily aim to be representative but to establish participant groups who can provide in-depth responses for the research questions, so the results from the study cannot be generalized to other adolescent populations who are a different age, or come from other sports, or different cultural backgrounds.

The study design represents another limitation from a methodology perspective. As there was no control group present in the intervention, causality cannot be inferred with regard to the intervention due to the level of support variability presented across the intervention sites. Future intervention-based research should consider the inclusion of randomized controlled groups in order to assess the effectiveness of social support intervention strategies. Moreover, research has highlighted the need for controlled interventions to include measures of mediating variables in order to determine if an interventions success can be attributed to changes in the presumed mediators (Cohen, et. al, 2000).

A further limitation concerns the use of aggregate measures in the GAA Study. Previous research has advocated the use of aggregate measures of stressors, stress, and support to best show how social support works (Rees & Freeman, 2007). However, as highlighted by Uchino (2009), multidimensional assessments of social support have conceptual advantages over aggregate measures of support (Cutrona & Russell, 1990). Multi-dimensional measures enable the investigation of key differential relationships that support dimensions may have with key outcomes. Future research should consider the use of the multi-dimensional social support measurement inventories (e.g., PASS-Q; ARSQ)

that now enable the measurement of the effect of different support types on key outcomes in a sports setting.

The use of intentions to drop out as a measure to predict actual drop out presents another limitation in this thesis. Although previous studies have used intentions to drop out as a proximal predictor of actual drop out behaviour (Sarrazin et al, 2002; Le Bars et al., 2009; Quested et al., 2013), future research should explore the intentions-behaviour link in order to better predict dropout behaviour (Sarazin et al., 2002). This should involve measuring actual drop out behaviour in order to fully determine sport specific drop out related patterns in a youth sport context.

5.7 Recommendations for Future Research Directions

The findings from this thesis point to a number of research directions, which will expand and deepen the contributions contained with this thesis. Firstly, the findings from the quantitative part of the GAA Study point to a key research direction concerning the role of social identity in enhancing team group support. The study adds the existing evidence which shows that the likelihood of receiving effective support from others generally depends upon those others being (and being perceived to be) representative of a shared social identity (Rees, Haslam, Coffee, Lavallee (2015). Future research should consider a deeper investigation of the relationship between the multi-dimensional components of perceived support (informational, esteem, emotional, tangible), the three dimensions of social identity (in-group ties, cognitive centraility, in-group affect) and group cohesion in a youth team sport settings. Such a research direction can determine which aspects of perceived support predict social identity and also whether any effects of perceived support on social identity are mediated by cohesion.

The exploration of gender differences with respect to functional aspects of social support represents another key research direction. Chapter 2 identified key gender-related differences across a range of key variables including self-esteem (Coatsworth & Conroy,

2006), physical activity (Keresztes et al., 2008), parental modelling (Power & Woolger, 1994), athlete motivation (Ullrich-French & Smith, 2006) and stress (Ullrich-French & Smith, 2006). There is considerable evidence that females are less active than males of all ages (Nadar, Bradley, Houts, & O'Brien, 2008; Troiano, Berrigan, Dodd, Masse, Tilert, & McDowell, 2008).

The examination of which key types of social support are beneficial for athletes coping in certain stress related conditions represents another key research direction. Although several researchers have examined adolescent coping strategies in response to key stressors (Gould et al., 1996 ; Nicolas, Gaudreau, & Franche, 2011 ; Raedeke & Smith, 2004 ; Sagar et al., 2010; Tamminen & Holt, 2012), the literature review demonstrated that social influences on athlete coping is relatively unstudied (Tamminen & Holt, 2012). Future research should aim to examine how social support influences the coping process as previous studies have tended not to include assessments of coping as a process (Tamminen & Holt, 2012).

The investigation of perceived and received support together represents another key research direction. Research has highlighted that both support types are conceptually related under some conditions and may interact in potentially important ways (Uchino, 2009), and influence each other in some contexts (e.g., Haber, Cohen, Lucas, & Baltes, 2007). Chapter 2 highlighted the growing evidence from the studies linking perceived and received support with performance (e.g., Freeman & Rees, 2008; Rees & Freeman, 2009; Rees et al., 2007). Future studies should elucidate whether the impact of received support via an intervention would be different for those individuals who are high or low in perceived support.

5.8 Conclusion

This PhD thesis has contributed to the social support literature in three important ways: (1) it has demonstrated that social support derived from coaches, parents and peers

predicts a range of positive and negative youth sport outcomes, (2) it has demonstrated the effect mechanism underlying the functional aspects of social support in a youth sport context; and (3) it has broadened existing understanding of social support theory through demonstrating the mediating role of social identity in effecting key outcomes (e.g., youth sport drop out). My impact vision for this research was to examine the role of social support in order to address youth sport drop out. The findings contained in this PhD support the case for the continued redesign of youth sport environments in order to create sustained and prolonged engagement in sport participation. The feasibility recommendations serve to inform a more rigorous test of an intervention based approach in preventing youth sport drop out. This empirical research now enables sports organisations to assess their sport environment and proactively address youth drop out through educating and up-skilling support providers in order to realize the support potential within sports communities.

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Appendix A: Rules of the Game

Key Aims

To enable players to perform the underlying technical skills of football in an open and fun environment.

Game Set Up

- 6 teams of 10 players
- Teams are mixed and selected based upon categorizing the players into 2 groups – Under 14 and Under 16.
- 10 v 10 team set up
- Playing Area 80m x 40-50m (3 Playing Areas fit on 1 standard pitch)
- 1 goalkeeper, 3 defenders, 3 midfielders and 3 attackers
- No zones – free movement permitted
- Players rotate positions between goalkeeper, defence, midfield and attack at half time. Teams change sides at half time.
- Well secured portable goal posts (15’ x 7’ or 4.5m x 2.2m) /Training poles or flags may be used

Playing Rules

- Play commences with a throw-in between two players from each team in the middle of the field.
- The goalkeeper may advance 20m for a kick out.
- The side-to-side (shoulder) charge is permitted between 2 players.
- The ball may be caught in the hands and played away by kicking it or striking it with the fist.
- The ball may be carried for four steps before bouncing or toe tapping it – players are restricted to one bounce and one toe tap per possession.
- The ball may be lifted off the ground with the hands, provided the player involved is on his/her feet. Free kicks may be taken from the hand or from the ground.
- The player who is fouled takes the free and when an opponent fouls the ball e.g. over carries it, the player nearest to the ball takes the free.
- When a free is awarded the ball must be given, on the full, to the player taking the free kick. If this does not happen the ball is advanced 5m.
- The opponent nearest to where the ball crosses the sideline takes the sideline kick from the hands.

- When a defender plays the ball over his/her own end line, the other team is awarded a free kick from the center of the field opposite where the ball crossed the end line.
- Opposing players to be at least 5m from the player taking a free kick, sideline kick or kick out. Free kicks should be no closer than 13m from the opposing end line.

Scoring System

- 1 point when the ball is played over the crossbar
- 3 points when the ball is played under the crossbar

Timings

- 2 Halves Per Game – 7½ Minutes per half
- 3 games provided for each team in one 60 minute session period

Appendix B: Games Management Protocol

Pre Game Action Steps

Your Participants

1. Revisit SGC volunteer feedback sheets from the previous SGC session
2. Confirm player attendance levels for the next session by checking the SGC email

Your Facility

3. Confirm facility booking

Your Staff

4. Organize 4 volunteers to attend the next SGC session

Your Equipment

5. Recheck **your** equipment list
6. Count & Pump balls
7. Count Sliotars - 3 per pitch - 9 in total

Or

8. Count Cones - 8 per ptich - 24 in total
9. Check the safety of the goalposts x6

In Session Action Steps

Pre Session: Brief & Set Up (30 Mins)

10. The coach briefs the SGC volunteers on the session plan
11. SGC volunteers set up both the playing and workshop spaces
12. The coach signs off on the SGC space set up

Arrival Greeting (10 Mins)

15 Mins Before Session Start

13. SGC staff located at SGC site facility entrance
14. Welcome parents and players as they arrive into the SGC site
15. Direct players to the dressing room areas to get changed

Organize (5 Mins)

Location: Main Pitch

16. Session is started
17. Players are called into a circle pitchside
18. SGC staff take their place in the centre of the circle and introduce themselves
19. Team**s** are picked by the coach

GAA Games (60 Mins)

Location: Main Pitch

20. 3 games zones are set up and managed by 3 SGC volunteers

21. The coach manages the games clock
22. 3 15 minute games are played on each of the 3 pitches

    Post Game Action Steps (15 Mins)

    Debrief (15 Mins)

    Location: Main Pitch
23. The coach brings games based activities to an end
24. The coach leads the post game reflection during the warm down activities
25. The coach thanks the participants for attending and highlights the next session date

Appendix C: Potential Games Modifications

6 Play to Stay Values	**12 Games Modifications**
1. Positive Feedback *'All communication is positive and promotes growth'*	1. Teams are given an extra point when players give positive feedback ("unlucky – head up"; "better luck next time"; "great effort") during a mistake situation or a breakdown in possession involving 2 or more players. 2. At the end of the session each team is to identify the player from the opposite team who provided the most encouragement/support during the session
2. Empowerment *'Players shape and own the games experience'*	3. The coach randomly nominates the team captain who then pick their team and set out their team formation before the commencement of the game. This leadership role is alternated at the start of each subsequent game with a new leader who gets to reset a formation and give instructions to his teammates. 4. The coach removes the referee from the games and asks players to referee their game amongst themselves by asking players to declare a foul if they have fouled an opponent.
3. Belonging *'Every player feels connected to the GAA'*	5. Players are tasked with getting to know their team mate's names and are awarded points for when players pass ball to a team mate and state the name of the ball receiver before the pass is completed. 3 successful naming completions leads to one point. 6. At the start of the session each player to identify how he proposes to contribute to the team.
4. Effort *'Greater effort and physical fitness is promoted'*	7. Teams are awarded double points for when a team scores and the outfield team (not including the goal keeper) crosses the half way line upon the score being completed. Thus greater effort gets rewarded. 8. An extra point is offered for a hook, block down or forcing an error
5. Respect	9. If a player is fouled the offending player offers to

'Everyone has due regard for each other's feelings and rights'	helps the other up and check if they are all right. The situation ends with a handshake. 10. Only team captain/leader - wears a designated arm band – is allowed to communicate with the match referee
6. Enjoyment *'Players have fun'*	11. Each game to conclude with the most scores in a minute, most scores out of 10 kicks/shots from 20/45m line. 12. Each game starts with the most scores in a minute, most scores out of 10 kicks/shots from 20/45m line.

Appendix D: Questionnaire

Introduction

This questionnaire focuses on assessing your GAA participation experience. You will be asked to complete a set of questions today. The information you provide will be used only for the purpose of this research and you will not be identified individually. As such, your confidentiality is assured.

Please answer all the questions in this booklet. If you are unsure about something, put what you think is as reasonable an answer as you can, given the question. There are no right or wrong answers. We are interested in all responses. Please indicate your answer by marking your response with a '✓' in the boxes provided. Please check you have answered every question and have ticked just one response for each question. If even one question has not been answered in this way we cannot use your information.

Firstly, please fill out the information below.

Date of Birth:_____

Number of years playing Gaelic Games:_____

Are you a member of a GAA club? Yes: ☐ **No:** ☐

If so, please indicate the name of your GAA club: _____

WHEN YOU HAVE FINISHED PLEASE CHECK YOU HAVE COMPLETED ALL THE QUESTIONS

THANK YOU

For each of the following statements, please indicate how true it is for you, using the following scale from **1 (not at all true) to 7 (very true)**:

Not at all true			Somewhat true			Very true
1	2	3	4	5	6	7
☐	☐	☐	☐	☐	☐	☐

When I participate in the GAA Super Game Centre….

		Not at all true			**Somewhat true**			**Very true**
1.	I think I am pretty good at this activity.	☐	☐	☐	☐	☐	☐	☐
2.	I think I did pretty well at this activity, compared to other players.	☐	☐	☐	☐	☐	☐	☐
3.	After working at this activity for a while, I felt pretty competent.	☐	☐	☐	☐	☐	☐	☐
4.	I am satisfied with my performance at this task.	☐	☐	☐	☐	☐	☐	☐
5.	I was pretty skilled at this activity.	☐	☐	☐	☐	☐	☐	☐
6.	This was an activity that I couldn't do very well.	☐	☐	☐	☐	☐	☐	☐
7.	I have a say regarding what skills I want to practice	☐	☐	☐	☐	☐	☐	☐
8.	I can decide which activities I want to practice	☐	☐	☐	☐	☐	☐	☐
9.	I feel that I participate in Gaelic Games because I want to.	☐	☐	☐	☐	☐	☐	☐
10.	I have to force myself to do the activities.	☐	☐	☐	☐	☐	☐	☐
11.	I feel a certain freedom of action.	☐	☐	☐	☐	☐	☐	☐
12.	I have some choice in what I want to do.	☐	☐	☐	☐	☐	☐	☐

Here is a list of statements about what you may feel towards players at the GAA Super Game Centre. Please indicate to what extent you agree with each of the following items on a scale of **1 (Do not agree at all) to 7 (very strongly agree)**:

Do not agree at all	Very slightly agree	Slightly agree	Agree	Moderately agree	Strongly agree	Very strongly agree
1	2	3	4	5	6	7
☐	☐	☐	☐	☐	☐	☐

In my relationships with players at the GAA Super Game Centre, I feel...

	Do not agree al all	**Very slightly agree**	**Slightly agree**	**Moderately agree**	**Agree**	**Strongly agree**	**Very strongly agree**
13. ….understood	☐	☐	☐	☐	☐	☐	☐
14. …supported	☐	☐	☐	☐	☐	☐	☐
15. ….listened to	☐	☐	☐	☐	☐	☐	☐
16. …valued	☐	☐	☐	☐	☐	☐	☐
17. ….safe	☐	☐	☐	☐	☐	☐	☐

Please rate your level of agreement with each statement.

Disagree completely	Disagree	Somewhat disagree	Neural	Somewhat agree	Agree	Agree completely
☐	☐	☐	☐	☐	☐	☐

At the GAA Super Game Centre…

	Disagree completely	**Disagree**	**Somewhat disagree**	**Neutral**	**Somewhat agree**	**Agree**	**Agree completely**
18. I identify with those playing at a GAA Super Game Centre	☐	☐	☐	☐	☐	☐	☐

Please rate your level of agreement with each statement from **1 (strongly disagree)** to **7 (strongly agree).** There are no right or wrong answers: Your impression is the only thing that matters.

Strongly Disagree						Strongly Agree
1	2	3	4	5	6	7
☐	☐	☐	☐	☐	☐	☐

During my participation in the GAA Super Game Centre:

	Strongly disagree						**Strongly agree**
19. I feel committed to those who play at the GAA Super Game Centre.	☐	☐	☐	☐	☐	☐	☐
20. I am glad to be attempting to play at the GAA Super Game Centre.	☐	☐	☐	☐	☐	☐	☐
21. Being one of those playing at the GAA Super Game Centre is an important part of how I see myself.	☐	☐	☐	☐	☐	☐	☐

Below is a list of items referring to the types of help and support you may have available to you as a sportsperson. **Please indicate to what extent you have these types of support available to you.**

Not at all ☐ Slightly ☐ Moderately ☐ Considerably ☐ Extremely ☐

If needed, to what extent would someone . . .

	Not at all	**Slightly**	**Moderately**	**Considerably**	**Extremely**
22. provide you with comfort and security	☐	☐	☐	☐	☐
23. reinforce the positives	☐	☐	☐	☐	☐
24. help with travel to training and matches	☐	☐	☐	☐	☐
25. enhance your self-esteem	☐	☐	☐	☐	☐
26. give you constructive criticism	☐	☐	☐	☐	☐
27. help with tasks to leave you free to concentrate	☐	☐	☐	☐	☐
28. give you tactical advice	☐	☐	☐	☐	☐
29. always be there for you	☐	☐	☐	☐	☐
30. instil you with the confidence to deal with pressure	☐	☐	☐	☐	☐
31. do things for you at competitions/matches	☐	☐	☐	☐	☐
32. care for you	☐	☐	☐	☐	☐
33. boost your sense of competence	☐	☐	☐	☐	☐
34. give you advice about performing in competitive situations	☐	☐	☐	☐	☐
35. show concern for you	☐	☐	☐	☐	☐
36. give you advice when you're performing poorly	☐	☐	☐	☐	☐
37. help you organise and plan your competitions/matches	☐	☐	☐	☐	☐

Below is a list of items referring to the types of help and support you may receive as a sportsperson. **Please indicate the frequency with which you received each type of support during the last week by ticking one of the following response options per question.**

Not at all	Once or twice	Three or four times	Five or six times	Seven or more times
☐	☐	☐	☐	☐

In the last week, how often did someone…

		Not at all	Once or twice	3 or 4 times	5 or 6 times	7 or more times
38.	encourage you	☐	☐	☐	☐	☐
39.	give you advice about performing in a competitive situation	☐	☐	☐	☐	☐
40.	help plan your training	☐	☐	☐	☐	☐
41.	give you tactical advice	☐	☐	☐	☐	☐
42.	help with transport to training and competition/matches	☐	☐	☐	☐	☐
43.	offer you ideas and suggest actions	☐	☐	☐	☐	☐
44.	do things for you at training and competition/matches	☐	☐	☐	☐	☐
45.	help you put things in perspective	☐	☐	☐	☐	☐
46.	help set sessions in training	☐	☐	☐	☐	☐
47.	help you decide what to do	☐	☐	☐	☐	☐
48.	help you with tasks	☐	☐	☐	☐	☐
49.	give you advice about what to do	☐	☐	☐	☐	☐
50.	cheer you up	☐	☐	☐	☐	☐
51.	emphasise your abilities	☐	☐	☐	☐	☐
52.	listen to you	☐	☐	☐	☐	☐
53.	help manage your training sessions	☐	☐	☐	☐	☐
54.	tell you, you can do it	☐	☐	☐	☐	☐
55.	show concern for you	☐	☐	☐	☐	☐
56.	reinforce the positives	☐	☐	☐	☐	☐
57.	make you feel that they would always be there for you	☐	☐	☐	☐	☐
58.	comfort you	☐	☐	☐	☐	☐
59.	boost your confidence	☐	☐	☐	☐	☐

Below is a list of situations you may encounter as a sportsperson. On the left hand column please indicate, **by ticking one of the following response options, to what extent you encountered these situations over the last week**. On the right hand column please indicate **how stressed you felt because of these situations.**

Not at all	Slightly	Moderately	Considerably	Extremely
☐	☐	☐	☐	☐

In the last week, please indicate:

a) the extent to which you encountered the situation

b) the stress you experienced because of the situation

Note – *please tick one box on the left (section a) and one box on the right (section b)*

a) Extent Encountered						b) Stress Experienced				
not at all	**slightly**	**moderately**	**considerably**	**extremely**	**Situation**	**not at all**	**slightly**	**moderately**	**considerably**	**extremely**
☐	☐	☐	☐	☐	60. Not getting a game	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	61. Being shouted at during a game	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	62. Not fitting in with the team	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	63. Pressure to win	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	64. Making friends	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	65. Expectations from others to perform	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	66. Fitness Concerns	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	67. Having no say when playing	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	68. Not feeling respected by others	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	69. Fitting sport in with other commitments	☐	☐	☐	☐	☐

For each of the following statements, please indicate how true it is for you, using the following scale from **1 (not at all true) to 7 (very true)**. There are no right or wrong answers: Your impression is the only thing that matters.

Not at all true			Somewhat true			Very true
1	2	3	4	5	6	7
☐	☐	☐	☐	☐	☐	☐

	Not all all true			**Somewhat true**			**Very true**
70. I intend to drop out of the GAA Super Game Centre at the end of the season	☐	☐	☐	☐	☐	☐	☐
71. I intend to continue to play at the GAA Super Game Centre next season	☐	☐	☐	☐	☐	☐	☐
72. I am thinking of leaving the GAA Super Game Centre	☐	☐	☐	☐	☐	☐	☐
73. I am thinking of staying with the GAA Super Game Centre next season	☐	☐	☐	☐	☐	☐	☐

Listed below are a number of statements concerning personal attitudes and traits. **Read each item and decide whether the statement is true or false as it pertains to you personally.** It's best to go with your first judgment and not spend too long on any one question.

	True	False
74. It is sometimes hard for me to go on with my work if I am not encouraged.	☐	☐
75. I sometimes feel resentful when I don't get my way.	☐	☐
76. On a few occasions, I have given up doing something because I thought too little of my ability.	☐	☐
77. There have been times when I felt like rebelling against people in authority even though I knew they were right.	☐	☐
78. No matter who I'm talking to, I'm always a good listener.	☐	☐
79. There have been occasions when I took advantage of someone.	☐	☐
80. I'm always willing to admit it when I make a mistake.	☐	☐
81. I sometimes try to get even rather than forgive and forget.	☐	☐
82. I am always courteous, even to people who are disagreeable.	☐	☐
83. I have never been irked when people expressed ideas very different from my own.	☐	☐
84. There have been times when I was quite jealous of the good fortune of others.	☐	☐
85. I am sometimes irritated by people who ask favours of me.	☐	☐
86. I have never deliberately said something that hurt someone's feelings.	☐	☐

Below are a number of statements that people often use to describe themselves. Please read each statement **from 1 (false) to 5 (true)** tick the appropriate box to indicate your answer. There are no right or wrong answers: Your impression is the only thing that matters.

False	Rather false	Somewhat true	Rather true	True
1	2	3	4	5
☐	☐	☐	☐	☐

	False	**Rather false**	**Somewhat True**	**Rather true**	**True**
87. I often worry about unimportant things	☐	☐	☐	☐	☐
88. I often feel unhappy	☐	☐	☐	☐	☐
89. I am easily irritated	☐	☐	☐	☐	☐
90. I take a gloomy view of things	☐	☐	☐	☐	☐
91. I am often in a bad mood	☐	☐	☐	☐	☐
92. I often find myself worrying about something	☐	☐	☐	☐	☐
93. I am often down in the dumps	☐	☐	☐	☐	☐

Thank you for completing the questionnaire

Appendix E: GAA Interview Guide

List of Abbreviations

GAA	Gaelic Athletic Association
UOS	University of Stirling
P2S	Play to Stay
SGC	Super Game Centre

1. Focus Group Session Objectives (What?)

Key Objectives

1. Conduct a process evaluation of the intervention with participants, parents and coaches connected with the project;
2. Identify evidence of theoretical implications of the intervention

2. Focus Group Session Groups (Who?)

1. Parents – Parents who have sons who are attending a SGC.
2. Participants – SGC participants aged 12 – 16 years who are attending a SGC.
3. Coaches – Senior local leaders charged with running a SGC.

3. Focus Group Methodology Overview (How?)

Key Design Factor	Description
Guiding Theories	**Principal Theory – Social Support Theory** • Stress Buffering Hypothesis (Cohen & Wills, 1985). • Main Effects Model (Cohen & Wills, 1985). **Contributing Theories** • Self Determination Theory (Deci & Ryan, 1985, 2000) • Social Identity Theory (Tajfel & Turner, 1979; Livingstone & Haslam (2008) • Theory of Planned Behaviour (Ajzen & Driver, 1992)
Interview Type	Semi Structured
Question Type	Open ended questions
Session Duration	75 mins
Researcher	Daragh Sheridan
Equipment Requirement	Voice recorder, flip chart poster x2, notepads, name badges and pens

4. Focus Group Session Delivery Plans (What? & Why?)

Parents

Focus Group Session Category	Parents	
Session Part & Time	Process Indicators	Rationale
Introduction – 5 Mins	• DS Introduces himself and the SGC research project; • DS outlines focus group session aims and objectives; • DS pauses to assess if there any questions; • DS seeks data consent approval • Voice recorder is then switched on	Contextualize the SGC project aims and objectives Introduce the aim of the focus group session Secure permission to proceed with the focus group
Part 1 – 20 Minutes X2 Questions	SGC Impact 1. So as a parent what has been your experience of the SGC? 2. How has the SGC experience impacted on your son?	Probe the impact of the SGC engagement on player and parent behaviour
Part 2 – 10 Minutes X3 Questions	Stress Encountered 3. Hands up if drop out from GAA sport is prevalent in your home? 4. What for you are the key factors that would impact your son's decision to drop out from GAA sport? Please provide examples. 5. Of the 10 stressors	Stress Buffering Hypothesis To explore the stress buffering hypothesis we need to probe and validate the 10 stressors that are contained in the SGC questionnaire

	indicated on the flipchart which for you is the most significant for your son and why? Please provide examples.	
Part 3 – 20 Mins X7 Questions	SGC Perceived Supports 6. How did you hear about the SGC intervention? 7. Before starting the SGC – what was your perception of the SGC? 8. What was your son's perception of the SGC? SGC Received Supports 9. So, what has your son gained as a result of attending the center? Probe new friends/more skills/greater confidence/more initiative. Probe the different type of potential social supports received(informational, esteem, emotional, tangible) 10. How is the SGC offering different from the traditional club games offering? SGC Social Identity 11. In terms of the 6 P2S stay values, what do these values mean to you? 12. Which of the values do you feel is the most important	Functional Social Supports To explore the difference between the perceived and received supports derived from the SGC – align well with the PASS-Q and ARSQ quantitative measures. Self Determination Theory Probe if perceived autonomy, competency and relatedness have been impacted. Social Identity Theory Probe how the x6 P2S values have shaped the SGC experience

	to you as a parent and why? 13. Over the duration of the games programme, how have the P2S values impacted your son's experience of the center?	
Part 3– 10 Mins X2 Questions	SGC Future Participation Intention 14. Has your intention to support your son and his involvement in the GAA being impacted by the SGC experience to date? Please expand 15. Do you feel your son's intention to stay involved in the GAA has been impacted as a result of his SGC experience? Please expand.	Theory of Planned Behaviour Probe if there is a change of GAA participation intentions as a result of SGC participation.
Conclusion – 5 Minutes	• DS signals the end of the focus group session • DS requests if there are any questions or additional comments that participants would like to make • DS then provides some information on the Aug 24th showcase event and draws the session to a close	

Participants

Focus Group Session Category	Participants	
Session Part & Time	Process Indicators	Rationale
Introduction – 5 Minutes	• DS Introduces himself and the SGC research project; • DS outlines focus group session aims and objectives; • DS pauses to assess if there any questions; • DS then checks if all of focus group attendees have signed and submitted their consent forms. • Voice recorder is then switched on	Contextualize the SGC project aims and objectives Introduce the aim of the focus group session Secure permission to proceed with the focus group
Part 1 – 20 Minutes X2 Questions	SGC Impact 1. So, what has been your experience of the SGC? 2. What were the significant moments in your SGC experience when things changed for you? Please provide an example.	Probe the impact of the SGC engagement on player behaviour
Part 1 – 10 Minutes X3 Questions	Stress Encountered 3. Hands up if dropping out from GAA sport has crossed your mind before? 4. What for you are the key factors that would impact your decision to drop out from GAA sport? 5. Of the 10 stressor indicated	Stress Buffering Hypothesis To explore the stress buffering hypothesis we need to probe and validate the 10 stressors that are contained in the SGC questionnaire

	on the flipchart which for you is the most significant to you and why? Please provide an example.	
Part 2 – 20 Minutes X6 Questions	SGC Perceived Supports 6. Before starting the SGC – what was your perception of the SGC? 7. What was your parent's perception of the SGC? SGC Received Supports 8. So, what have you gained as a result of attending the center? Probe new friends/more skills/greater confidence/greater sense of initiative. Probe the different type of social supports (informational, esteem, emotional, tangible). Please provide an example of a support. 9. How is the SGC offering different from the games offering that you experience in your club? Please provide an example. SGC Social Identity 10. In terms of the 6 P2S stay values, what do these values mean to you? 11. Of the 6 P2S stay values which do you feel is the most important to you as a player and why?	Functional Social Supports To explore the difference between the perceived and received support derived from the SGC – align well with the PASS-Q and ARSQ quantitative measures. Self Determination Theory Probe if perceived autonomy, competency and relatedness have been impacted. Social Identity Theory Probe how the six P2S values have shaped the SGC experience

	12. How have the 6 P2S values impacted your SGC experience? Please provide an example.	
Part 3– 10 Minutes X1 Question	SGC Future Participation Intention 13. Do you feel your intention to stay involved in the GAA has been impacted as a result of his SGC experience? Please expand.	Theory of Planned Behaviour Probe if there is a change of GAA participation intentions as a result of SGC participation.
Conclusion – 5 Mins	• DS signals the end of the focus group session • DS requests if there are any questions or additional comments that participants would like to make • DS then provides some information on the Aug 24th showcase event and draws the session to a close	

Coaches

Focus Group Session Category	Coaches	
Session Part & Time	Process Indicators	Rationale
Introduction – 5 Minutes	• DS outlines focus group session aims and objectives; • DS pauses to assess if there any questions; • DS seeks data consent approval • Voice recorder is then	Introduce the aim of the focus group session Secure permission to proceed with the focus group

	switched on	
Part 1 – 20 Minutes X2 Questions	SGC Impact 1. So, what has been your experience of the SGC? 2. What were the significant moments in your SGC experience when things changed for you? Please provide an example.	Probe the impact of the SGC engagement on player behaviour
Part 2 – 10 Minutes X2 Questions	Stress Encountered 3. Based upon your experience as a coach in your community, what for you are the key factors that would impact a player's decision to drop out from GAA sport? Please provide examples. 4. Of the 10 stressors indicated on the flipchart which for you is the most significant for young participants and why?	Stress Buffering Hypothesis To explore the stress buffering hypothesis we need to probe and validate the 10 stressors that we have went with in the SGC questionnaire
Part 3 – 20 Minutes X5 Questions	SGC Perceived Supports 5. Before starting your leadership role within your SGC – what was your perception of the SGC concept? SGC Received Supports 6. So, what do you feel participants have gained as a result of attending the center? Probe new friends/more skills/greater	Functional Social Supports To explore the difference between the perceived and received support derived from the SGC – align well with the PASS-Q and ARSQ quantitative measures. Self Determination Theory Probe if perceived autonomy, competency and

	confidence/more initiative. Probe the different type of social supports (informational, esteem, emotional, tangible). Please provide examples. 7. How is the SGC offering different from the traditional club games offering? Please provide examples. SGC Social Identity 8. In terms of the 6 P2S stay values, what do these values mean to you? 9. Of the 6 P2S stay values, which do you feel is the most important for participants? Please expand. 10. How have the P2S values impacted the player experience in your center? (SGC02 centers only)	relatedness have been impacted. Social Identity Theory Probe how the six P2S values have shaped the SGC experience
Part 4– 10 Minutes X2 Questions	SGC Future Participation Intention 11. Has your intention to remain involved with the GAA as a coach being impacted by the SGC experience to date? Please expand. 12. Do you feel a player's intention to stay involved in the GAA has been	Theory of Planned Behaviour Probe if there is a change of GAA participation intentions (both parent and son) as a result of SGC participation.

	impacted as a result of his SGC experience? Please expand.	
Conclusion – 5 Mins	• DS signals the end of the focus group session • DS requests if there are any questions or additional comments that the coaches would like to make	