Understanding Golf: Barriers and Facilitators to Youth Female Retention.

Submitted by

Natalie Williams (BSc. DipEd.)

A Thesis Submitted to the School of Sport Science, Exercise and Health at The University of Western Australia in Partial Fulfillment of the requirements for the degree of Masters in Science.

June 2012
Acknowledgements

“I can do all things through Christ who strengthens me.”

_Philippians 4:13_

The completion of this thesis could not have been achieved without the support and guidance of many people.

To my supervisors, I am sincerely grateful for the time and effort each person has invested in this research project. I would firstly like to thank Associate Professor Peter Whipp for accepting me as a student and guiding me in every aspect of this postgraduate research. His insight, experience, and continual words of encouragement have ensured this journey was enjoyable and successful. I am extremely appreciative for Dr Ben Jackson and his time and efforts to oversee this study. Ben is exceptionally hardworking and his passion for research is admirable. And for his vast knowledge and appreciation for research, I am very thankful for Associate Professor James Dimmock, a great teacher and very skilled researcher. These people are an inspiration to all those that work beside them.

I would also like to thank my husband, Dean Williams. Without his constant love and support I would not have been able to undertake postgraduate research and produce this thesis. I love you.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Preface</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cover Page</td>
<td>i</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>ii</td>
</tr>
<tr>
<td>Table of Contents</td>
<td>iii</td>
</tr>
<tr>
<td>List of Appendices</td>
<td>vii</td>
</tr>
<tr>
<td>List of Tables</td>
<td>viii</td>
</tr>
<tr>
<td>List of Figures</td>
<td>ix</td>
</tr>
</tbody>
</table>

## Chapter 1: Introduction

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Thesis Overview</td>
<td>1</td>
</tr>
<tr>
<td>1.2 Conceptual Framework</td>
<td>4</td>
</tr>
<tr>
<td>1.3 Research Objectives</td>
<td>5</td>
</tr>
<tr>
<td>1.4 Terminology</td>
<td>5</td>
</tr>
<tr>
<td>1.5 Thesis Structure</td>
<td>6</td>
</tr>
<tr>
<td>1.6 Anticipated Research Outcomes</td>
<td>7</td>
</tr>
</tbody>
</table>
## Chapter 2: Literature Review

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 Introduction</td>
<td>8</td>
</tr>
<tr>
<td>2.2 Women and Golf</td>
<td>8</td>
</tr>
<tr>
<td>2.3 Self-Determination Theory</td>
<td>9</td>
</tr>
<tr>
<td>2.4 SDT and Need Fulfillment</td>
<td>11</td>
</tr>
<tr>
<td>2.5 SDT in Sport and Exercise</td>
<td>11</td>
</tr>
<tr>
<td>2.6 Enjoyment and Motivation</td>
<td>12</td>
</tr>
<tr>
<td>2.7 Sport Dropout</td>
<td>13</td>
</tr>
<tr>
<td>2.8 Conclusion</td>
<td>14</td>
</tr>
</tbody>
</table>

## Chapter 3: The Paper

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Cover</td>
<td>15</td>
</tr>
<tr>
<td>3.2 Abstract</td>
<td>16</td>
</tr>
<tr>
<td>3.3 Introduction and Review of Literature</td>
<td>17</td>
</tr>
<tr>
<td>3.4 Method</td>
<td>22</td>
</tr>
<tr>
<td>3.4.1 Participants</td>
<td>22</td>
</tr>
<tr>
<td>3.4.2 Procedures</td>
<td>23</td>
</tr>
</tbody>
</table>
3.4.3 Interview guide 24

3.4.4 Data analysis 25

3.5 Results 26

3.6 Discussion 35

3.7 References 43

Chapter 4: Extended Sections

4.1 Extended Method 50

4.2 Extended Results 53

4.3 General Discussion 63

4.3.1 Perceived Competence and Enjoyment 63

4.3.2 Autonomy Support 66

4.3.3 Environmental Barriers 67

4.3.4 Results Diagram 69

4.4 Conclusion 70

References 71
## Appendices

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix A: Human Research Ethics Committee approval.</td>
<td>82</td>
</tr>
<tr>
<td>Appendix B: Thesis Declaration</td>
<td>84</td>
</tr>
<tr>
<td>Appendix C: Information sheet to parents and parent/child consent form.</td>
<td>86</td>
</tr>
<tr>
<td>Appendix D: Information sheet to participants and participant consent form.</td>
<td>91</td>
</tr>
<tr>
<td>Appendix E: Active golf participant interview questions.</td>
<td>97</td>
</tr>
<tr>
<td>Appendix F: Withdrawn golf participant interview questions.</td>
<td>100</td>
</tr>
<tr>
<td>Appendix G: Demographic Questionnaire.</td>
<td>104</td>
</tr>
<tr>
<td>Appendix H: UWA Golf Questionnaire.</td>
<td>106</td>
</tr>
</tbody>
</table>
List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>Categories, Themes, and Exemplar Meaning Units for Active and Inactive Participants.</td>
<td>42</td>
</tr>
<tr>
<td>Table 2</td>
<td>Descriptive Statistics for Intrinsic Motivation Inventory Scale Scores.</td>
<td>54</td>
</tr>
<tr>
<td>Table 3</td>
<td>Descriptive Statistics for Basic Psychological Needs Satisfaction Scale Scores.</td>
<td>55</td>
</tr>
<tr>
<td>List of Figures</td>
<td>Page</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>Figure 1: Conceptual Framework</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Figure 2: Results Diagram</td>
<td>69</td>
<td></td>
</tr>
</tbody>
</table>
1.1 Thesis Overview

Physical activity is important in maintaining optimal health and well-being (World Health Organization, 2011). In Australia, boys are more physically active than girls in all age categories (Australian Bureau of Statistics, 2009). This finding is also apparent in the UK and US, where girls display lower sport participation rates than boys (e.g., Aaron, Kriska, Anderson, Olsen, Cauley, & LaPorte, 1993; Cale, 1996; Van Tuyckom, Scheerder, & Brackie, 2010). Female attrition rates in exercise and sport have been extensively studied (Evans, 2008; Fraser-Thomas, Cote, & Deakin, 2008; Stephan, Boiche, & LeScanff, 2010; Theokas, 2009); however, research has provided limited information regarding strategies to maintain sport participation. Findings from past research have exposed reasons for female withdrawal from sport and include a lack of time, over-emphasis on competition, a lack of friends, dislike of coach, concerns regarding competence, and an absence of enjoyment (Gould, 1987; Butcher, Lindner, & Johns, 2002; Taggart & Sharp, 1996; Weiss & Petlichkoff, 1989). Preventing sport dropout is not only of interest to governing bodies and sports organizations, but is also a matter of public health. Acknowledging the key contributors to female retention to sport may play an important role in altering the trends of physical inactivity in women.

Golf is a sport that is globally male-dominated with the number of female participants considerably below that of males (Australian Golf Industry Council, 2009; National Golf Foundation, 2005; Sport England, 2011). In Australia, the lowest golf participation rates among females are observed for those aged 15-24 years (Australian Golf Industry Council, 2009). Female participants are most at risk of sport dropout during the period of adolescence, where conflicts with study and sport, time constraints, and an overemphasis on winning are experienced (Department of Sport & Recreation,
In light of the low participation rates for young women in golf, this study aimed to identify the barriers and facilitators to retain youth female participants and understand the motivational processes underlying golf adherence. The results of this study will be directly applicable to golf organizations in terms of identifying practical recommendations for sustaining female participation.

Self-determination theory (SDT, Deci & Ryan, 2000) was used as a theoretical framework to study female retention to golf during this investigation. SDT is an appropriate platform from which to study sport and exercise adherence, and has been widely utilized in understanding motivational outcomes (Calvo, Cervello, Jimenez, Iglesias, & Murcia, 2010; Otis, Grouzet, & Pelletier, 2005; Vallerand, Fortier, & Guay, 1997). In line with the central tenets of SDT, this study investigated the influence of basic psychological needs - autonomy, competence, and relatedness - on female golf adherence. Environmental conditions that support these basic psychological needs are expected to facilitate self-determined motivation (Ryan & Deci, 2007), and thus retention to sport. The need for autonomy refers to the participant possessing a freedom of choice and being the principal director of personal behaviors (Ryan & Deci, 2007). The need for competence reflects the desire of an individual to feel accomplished and skilled in a specific domain (Deci & Ryan, 2000). Finally, the need for relatedness relates to one’s desire for approval, support and encouragement in a social context (Conroy, Elliot, & Coatsworth, 2007). Individuals are more likely to adhere to a specific activity and retain active behavior in sport if self-determined motivational processes are present (Ryan & Deci, 2007; Ryan, Frederick-Recascino, Lepes, Rubio, & Sheldon, 1997; Standage, Gillison, Ntoumanis, & Treasure, 2012; Taylor, Ntoumanis, Standage, & Spray, 2010). It is therefore important to understand the factors that influence female participation in sport and foster self-determined motivation for adherence to certain physical activities.
Semi-structured interviews with 10 female participants ($M_{age} = 21.40$, $SD = 3.13$) were conducted to explore motivation, barriers, and basic psychological needs in the golf context. Verbal interviews were transcribed and coded into four high-order categories; autonomy; competence; relatedness; and environmental barriers. Quantitative data via questionnaires assessed items directly related to SDT and were analyzed using Statistical Package for Social Science (Coakes, Steed, & Ong, 2010). An examination of the qualitative data provided an in-depth understanding of the barriers and facilitators to female golf retention and enabled insight into the motivational processes that females may present in this context.

Female retention in golf is a persistent problem that is in need of investigation to understand the barriers and facilitators to adherence. This study examined the influence of basic psychological need satisfaction and self-determined motivation in a physical activity context. The results of this study will equip sporting organizations with the knowledge necessary to develop a golf context that encourages female retention. Female youth participants have been targeted to provide an insight into personal golf experiences and reveal the barriers and facilitators that affect player motivation and thus retention in this context.
1.2 Conceptual Framework

Figure 1. Conceptual framework for the purpose of examining female golf experience.
1.3 Research Objectives

The data obtained during this study have been collected to address the following research objectives:

1. Develop an in-depth understanding of the barriers and facilitators to female retention in golf.
2. Determine athletes’ perceptions about the relations between psychological needs (autonomy, competency, and relatedness) and golf participation.
3. Determine if golf retention in women is associated with self-determined motivation.

1.4 Terminology

A number of terms are repeatedly used throughout this thesis. Definitions for these terms are below, some of which are further clarified in the main text of this thesis.

**Self-Determined**: intentional behaviors that are initiated and regulated through choice as an expression of oneself (Deci & Ryan, 1987).

**Autonomy**: means ‘self-rule’ (LaGuardia & Patrick, 2008) and refers to self-initiation, volition, and willing endorsement of one’s behavior (deCharms, 1968).

**Competence**: the propensity to experience challenge and mastery in one’s activity (White, 1959).

**Relatedness**: is the experience of connecting with others in ways that conduce toward well-being and self-cohesion (Ryan & Powelson, 1991).

**Intrinsic Motivation**: refers to one’s engagement in activities because of the inherent pleasure and satisfaction that they provide (Deci, 1975). Intrinsic motivation is present when activities are considered enjoyable in their own right and require no external rewards or incentives to be performed (Markland & Ingledew, 2007; Ryan & Deci, 2000b).
Extrinsic Motivation: when individuals engage in a behavior to obtain contingencies that are separate from the activity itself (Hagger & Chatzisarantis, 2007).

Amotivation: when an individual has no motivation to engage in an activity due to feelings of incompetence, or because the activity does not lead to a desirable outcome (Ryan & Deci, 2007).

Active Golfers: female golf participants that are currently members of a golf club and compete regularly in tournaments with an official handicap.

Inactive Golfers: female golf participants that differ in membership status (current member or past member) and no longer possess an official handicap nor participate in competition.

1.5 Thesis Structure

A single study was conducted to address the research objectives. This study is reported in an individual paper inserted in chapter 3 of this thesis and includes its own introduction, literature review, and method, results, and discussion sections. The paper outlines some of the research objectives of this study and presents significant findings for female retention to sport in light of SDT and relatedness support. Alternative research findings and results pertinent to autonomy and competence needs satisfaction is covered in the additional material in the final chapters. In addition, a comprehensive review of the literature relevant to the remaining components of this study that has not been presented in the paper is further presented in chapter 2, with additional method, results, and discussion sections featured in chapter 4.
1.6 Anticipated Research Outcomes

It is anticipated that as a consequence of undertaking this research, stakeholders will be provided with:

- a framework to study barriers and facilitators to youth female participation in golf.
- novel information about the putative influence of psychological need satisfaction on youth female retention to golf.
- information that may be important in seeking to retain youth female participation.
Chapter 2       Literature Review

2.1 Introduction

The purpose of this chapter is to provide an overview of research in the area related to this study, and to establish the significance of this research. The value of sport and physical activity as a vehicle for enhancing social, emotional, physical, and mental health has been extensively investigated (Biddle, Fox, & Boutcher, 2000; Hardman & Stensel, 2009; Janssen & LeBlanc, 2010; World Health Organization, 2011). Sport has become an important part of peoples’ social and professional lives all over the world. However, the mass involvement in competitive and recreational sport often disguises the dropout rates that exist in specific sports. A key group at risk of dropout from organized sport is adolescent females (Australian Bureau of Statistics, 2009; Sarrazin, Boiche, & Pelletier, 2007). Research has identified barriers to female participation that include practical (i.e. time, money, and transport), personal (i.e. body image, lack of clothing choice, and lack of confidence), and social (i.e. male-dominated sport culture, attitudes about sexuality, and female invisibility) factors (McGinnis, McQuillan, & Chapple, 2005; Taggart & Sharp, 1996; Weiss, 1994). To further understand the reasons for female sport withdrawal, more research needs to be conducted on the psychological factors that act as barriers and facilitators to participation and retention in sport.

2.2 Women and Golf

The percentage of women participating in organized sport is less than men in all age categories (Australian Bureau of Statistics, 2009), and women also display poorer retention to sport in comparison to their male counterparts (Bailey, Wellard, & Dismore, 2010). One sport where females are considered as minority participants is golf.
Globally, a higher percentage of men than women participate in golf socially and competitively (Australian Golf Industry Council, 2009; National Golf Foundation, 2005; Sport England, 2011). In Australia, women occupy only 20% of the professional golf circuit (Australian Golf Industry Council, 2009) and are said to experience more barriers to golf participation than men (McGinnis et al., 2005; Berkley, 2003). Past investigations have attempted to examine the barriers and facilitators to female participation in golf (Department of Sport & Recreation, 2005; English Women’s Golf Association, 2007; McGinnis et al., 2005), although these reports are somewhat atheoretical and do not offer theory-driven implications. With a theoretical foundation, this study aimed to provide an in-depth understanding of the facilitators and barriers that women experience in the golf environment.

2.3 Self-Determination Theory

One theoretical perspective that is useful for understanding motivational processes in physical activity contexts is self-determination theory (SDT; Deci & Ryan, 2000). SDT, which evolved from early research that examined intrinsic motivational processes (Deci, 1975), provides a multi-dimensional approach that explains human growth tendencies and the effect of the social world on behavior regulation (Deci & Ryan, 2002; Wilson, Mack, & Grattan, 2008). Motivation represents the factors that move people to act, think, and develop (Deci & Ryan, 2008). SDT describes different types of motivation, namely intrinsic, extrinsic, and amotivation. Intrinsic motivation refers to the propensity to actively develop skills, engage in challenges, and take interest in activities for the inherent pleasure that they provide, in the absence of external rewards (Deci & Ryan, 2000). Extrinsic motivation includes all instrumental behavior that is energized by expected outcomes or contingencies not inherent to the activity itself (Ryan & Deci, 2007). SDT differentiates the types of motivation and the degree
to which behaviors are autonomous or self-determined. In the past, theorists thought that an individual may only experience either intrinsic or extrinsic motivation at one time, whereby intrinsic motivation has an internal perceived locus of causality and extrinsic motivation has an external perceived locus of causality (deCharms, 1968). In contrast, SDT contends that intrinsic and extrinsic motivational processes can manifest simultaneously, and together they determine the overall quality of motivation (Ryan & Deci, 2007).

SDT views extrinsic motivation in multiple forms, ranging from externally controlled to self-endorsed and volitional. The most extrinsic forms of motivation are external and introjected regulation. External regulation is considered to be most extrinsic in nature as it is highly controlled and involves the attainment of tangible rewards for an individual to engage in specific activities (e.g., participating in sport to receive prize money, trophies or medals). Introjected regulation involves the individual controlling themselves with internal contingencies of reward or punishment, rather than other people controlling one’s behavior (Ryan, 1982). Extrinsically motivated behaviors that are more autonomous in nature (or personally valued) are termed integrated and identified regulation. Integrated regulation is the most autonomous form of extrinsic motivation where an individual fully coordinates and assimilates an activity with other values so that it is not only volitional but also rooted in an individual’s personality (Ryan & Deci, 2007). Identified regulation involves a person engaging in an activity for the purpose of identification or belief that an act has value. It is also possible for an individual to possess no motivation to engage in specific activities. Termed amotivation, this may be exhibited when an individual feels incompetent or believes that an act has no value (Hagger & Chatzisarantis, 2007). According to SDT, environmental conditions that facilitate self-determined motivation will support individual well-being and adherence to specific activities.
2.4 SDT and Need Fulfillment

Central to SDT is the premise that individuals are active in their pursuit to satisfy three basic psychological needs for autonomy, competence, and relatedness (Ryan & Deci, 2007). The satisfaction of these needs is essential for psychological growth, integrity, and wellness (Deci & Ryan, 2008). The need for autonomy involves the desire for self-direction and being the perceived source of one’s own behavior (Deci & Ryan, 1985, 2002). The need for competence involves feeling effective in one’s pursuits and interactions with the social world (Deci, 1975; Deci & Ryan, 1985), and the need for relatedness concerns the tendency to achieve connectedness and a sense of belonging with others and one’s community (Baumeister & Leary, 1995; Deci & Ryan, 1985). To promote self-determined motivational processes, these basic needs must be supported in a social context. Furthermore, for intrinsic motivation to be catalyzed, additional environmental conditions must be present (e.g., the task must not be fundamentally mundane). Conversely, whenever an environment neglects or thwarts one of these needs, intrinsic motivation and self-determined processes will diminish (Ryan & Deci, 2007).

2.5 SDT in Sport and Exercise

SDT has been comprehensively researched in sport and exercise settings (see Hagger & Chatzisarantis, 2007). Much of this research has focused on the environmental conditions that support or neglect need satisfaction, as well as on the subsequent effects of need satisfaction on intrinsic motivation (Alvarez, Balaguer, Castillo, & Duda, 2009; Ommundsen & Kvalo, 2007; Smith, Ntoumanis, & Duda, 2007). For instance, Gagne, Ryan, and Bargmann’s (2003) study of gymnasts’ experiences of motivation and well-being found those athletes that possess autonomous forms of motivation reported more positive experiences and higher well-being in sport.
Moreover, data from this study revealed athletes who experienced support for relatedness, autonomy, and competence showed higher levels of well-being in gymnastics. In addition, a study by Wang and Lui (2007) found perceived competence in female secondary school students to have a strong positive impact on enjoyment in physical education. There is strong scholarly support for the notion that need satisfaction is important for healthy functioning and retention to specific activities (Deci & Vansteenkiste, 2004). However, despite findings (Markland & Ingledew, 2007; Reis, Sheldon, Gable, Roscoe, & Ryan, 2000) regarding the influence of autonomy and competence on intrinsic motivational processes, there has been no research, to the author's knowledge, conducted on SDT’s applicability to the golf context and more specifically on female golf withdrawal and retention.

2.6 Enjoyment and Motivation

One of the main reasons why people undertake sport is for the enjoyment that they feel (Ryan et al., 1997). Enjoyment has been defined as a “positive affective response to sport experience that reflects generalized feelings such as pleasure, liking, and fun” (Scanlan & Simons, 1992, pg. 202-203). Enjoyment has been labeled a key factor for motivated behavior, particularly in youth sport (Murcia, de San Roman, Galindo, Alonso, & Gonzalez-Cutre, 2008; Weis, Kimmel, & Smith, 2001). In a study of youth sport enjoyment by McCarthy, Jones, and Clark-Carter (2008), enjoyment or fun was found to be a key factor for initiating and maintaining involvement in sport. In addition, research conducted in the physical education setting linked students with higher levels of enjoyment to possess more autonomous forms of motivation, as well as higher levels of enjoyment in individuals that were exposed to need supportive versus controlling environments (Mouratidis, Vansteenkiste, Lens, & Sideridis, 2011). The proposition that enjoyment is positively associated with self-determined motivation
(Ntoumanis, 2002) is important to understanding and predicting sport retention. Need satisfaction and feelings of enjoyment for exercise and sport define the most self-determined forms of motivation and predictors of sport dropout.

### 2.7 Sport Dropout

Dropout in sport is considered to be a negative behavioral consequence that is derived from non-self-determined forms of motivation, whereas more self-determined forms of motivation (i.e., intrinsic motivation and identified regulation) lead to increased persistence in sport (Sarrazin et al., 2007). Pelletier, Fortier, Vallerand, Tuson, and Briere (2001), for example, studied dropout in competitive swimmers, and found athletes that reported more self-determined motivation exhibited greater sport persistence. Similarly, a study that examined dropout in female handballers (Sarrazin, Vallerand, Guillet, Pelletier, & Cury, 2002) found that athletes who dropped out were significantly less intrinsically motivated, had lower levels of identified regulation, and were more amotivated than athletes who exhibited persistence. To study self-determination in sport, researchers often examine need satisfaction (autonomy, competence, and relatedness) as motivational determinants for persistence in sport and exercise settings (Chatzisarantis, Hagger, Biddle, Smith, & Wang, 2003). The satisfaction of the three psychological needs lead to more self-determined motivation in an individual and consequently predict adherence to specific activities (Murcia et al., 2008). Despite the existing research conducted on female athlete dropout in sport, emphasis has typically been placed on the type of motivation expressed by participants. Further research into how female golfers satisfy their basic psychological needs, and the sources through which they derive need satisfaction, would be beneficial to understand the reasons for female sport withdrawal.
2.8 Conclusion

The statistics for female participation in sport and physical activity have been well documented; however, strategies to combat the declining figures have not been as extensively examined. This study provides a basis for further research on psychological need satisfaction for women in golf and is supported by a theoretical foundation. By identifying the mechanisms through which females derive feelings of competence, autonomy, and relatedness (or not), this research has the potential to inform golf stakeholders and thereby improve the environment surrounding female participation in golf, and lead to positive experiences that facilitate motivation to retain active participation in sport.
Chapter 3

The Paper

Relatedness Support and the Retention of Young Female Golfers

3.1 In Review: Journal of Applied Sport Psychology

Submitted: 17th October, 2011

Revision submitted: 30th April, 2012
3.2 Abstract

In this study, self-determination theory was used as a guiding framework to understand the role of relatedness support for young women’s retention in golf. Data were collected using semi-structured interviews with 10 female participants ($M_{age} = 21.40, SD = 3.13$). Content analyses revealed five distinct sources that contributed to feelings of relatedness, namely Parents, Peers, Coaches, Golf Club, and Gender Comparisons. Findings highlight that retention of female golfers may be facilitated by promoting valued relationships with parents, peers, coaches, and golf clubs. Policies that decrease the perceived marginalization of female participants may also promote relatedness support and retention within this cohort. This study underscores the importance of relatedness support for young women and identifies strategies that may help to improve female retention in sport.

Key words: self-determination theory, sport participation, close relationships, golf
3.3 Introduction and Review of Literature

Relatedness Support and the Retention of Young Female Golfers

Participation in sport and physical activity is critical in maintaining personal health and psycho-social well-being (World Health Organization, 2011), and research has indicated that individuals who participate in sport and physical activity from a young age are more likely to maintain high levels of activity throughout their lives (e.g., Pate et al., 2005). In Australia, boys are more physically active than girls between the ages of 5 and 14 years, and this trend continues through adolescence (Australian Bureau of Statistics, 2009). Lower activity rates for girls (in every age group) are also apparent in the UK and US (e.g., Aaron et al., 1993; Cale, 1996; Van Tuyckom, Scheerder & Brackie, 2010). Moreover, not only do females participate in less sport than males, they also display lower retention rates in comparison to their male counterparts (Bailey, Wellard, & Dismore, 2010). For this reason, it is important to understand why lower participation rates and higher rates of dropout are apparent for females.

Golf is one sport that is characterized by a marked gender discrepancy, with marked differences in the Australian national ratio of male (80%) to female (20%) participation (Australian Golf Industry Council, 2009). The challenges associated with gaining and retaining female golfers is not restricted to Australia. For example, the English Golf Union and English Women’s Golf Association Golf Club Membership Questionnaire (2006) stated that 83% of golf clubs in England have vacancies for female members, and 78% of clubs are actively seeking female adult and junior members. Similarly, women represent just 24% of the golfing population in the US (National Golf Foundation, 2005). Guided by these statistics, the overarching purpose of this study was to examine the role of relatedness support in promoting female players’ retention in golf.
One conceptual model with particular relevance for our understanding of motivation and retention in sport is self-determination theory (SDT). SDT, which is a broad framework for the understanding of human behavior, addresses both personal and situational factors that elicit different types of motivational responses (Deci & Ryan, 1985). Intrinsic motivation refers to one’s engagement in activities because of the inherent pleasure and satisfaction that they provide (Deci, 1975). This form of motivation is present when activities are considered enjoyable in their own right and require no external rewards or incentives in order to be performed (Markland & Ingledew, 2007; Ryan & Deci, 2000). Ryan and Deci (2000) asserted that enjoyment, interest and inherent satisfaction (i.e., markers of intrinsic motivation) are the clearest reflections of true self-determination. Extrinsic motivation, on the other hand, occurs when individuals engage in a behavior to obtain contingencies that are separate from the activity itself, and can be expressed in four forms; integrated regulation, identified regulation, introjected regulation, and external regulation (Hagger & Chatzisarantis, 2007). Although these regulations all reflect extrinsic forms of motivation, two of them are characterized by pressures, imposed either internally (introjected regulation) or externally (external regulation), and the remaining two are characterized by a sense of volition and self-endorsement. Thus, forms of extrinsic motivation vary along a self-determination (or autonomy) continuum. In some instances, an individual may engage in an activity without any motivation. Termed amotivation, this may be exhibited when an individual feels incompetent or believes that an act has no value (Hagger & Chatzisarantis, 2007). For example, exercisers who join a gym but rarely work out because they believe it would be too difficult for them to get into shape (Conroy, Elliot, & Coatsworth, 2007). From an SDT perspective, the extent to which individuals display more autonomous forms of motivation serves to promote adherence to sport.
In addition to documenting the various forms that motivation may take, self-determination theorists also contend that autonomous motivation is supported by the fulfillment of psychological needs, namely competence, autonomy, and relatedness (Ryan & Deci, 2007; Spray, Wang, Biddle, & Chatzisarantis, 2006). The need for competence reflects the desire to feel accomplished and skilled in a specific domain, and can be evaluated with task (e.g., “did I complete the task perfectly?”), self (e.g., “did I perform this task well as or better than I did previously?”), or normatively-referenced standards (e.g., “did I perform the task better than others?”) (Conroy, Elliot, & Coatsworth, 2007). Autonomy refers to possessing freedom of choice and being the principal director of personal behaviors (Ryan & Deci, 2007). Finally, relatedness encompasses a sense of connectedness and one’s need for approval, support, and encouragement in social endeavors (Ryan & Powelson, 1991). Social support, in its varied forms (see Holt & Hoar, 2006), is likely to be a key contributor to feelings of relatedness (Ryan & Solky, 1996). Overall, social-contextual conditions that foster satisfaction of the three needs lead to enhanced health, well-being, and performance outcomes (Ryan & Deci, 2000). Consequently, this theoretical foundation provides an appropriate framework for understanding the factors that may support (or hinder) female retention in golf contexts.

Self-determination processes have been extensively investigated in exercise (e.g., Banting, Dimmock, & Grove, 2011; Podlog & Dionigi, 2009; Tessier, Sarrazin, & Ntoumanis, 2010) and sport (e.g., Ryan, Williams, Patrick, & Deci, 2009; Silva et al., 2010). However, psychological need research has often focused on the provision of autonomy supportive environments to foster self-determined motivation (Black & Deci, 2000; Vallerand, Fortier, & Guay, 1997). In recent years, scholars have recognized that such an approach may overlook important social factors that could contribute to the satisfaction of relatedness (as well as competence) needs (Adie, Duda, & Ntoumanis,
2008; Standage, Gillison, & Treasure, 2007). For instance, Weiss (2000) suggested that social acceptance/comfort is one of three major motives for sport participation, whilst Patrick et al. (1999) also highlighted the importance of peer relationships for adolescents’ continued involvement in sport and physical activity. Although the examination of relatedness support is somewhat underdeveloped in comparison to research on the other basic needs, a number of quantitative studies have begun to address this issue in recent years (e.g., Gray & Wilson, 2008; Kowal & Fortier, 1999; Reinboth & Duda, 2006). Nevertheless, a further understanding of relatedness processes in sport might be gleaned from research in which qualitative methodologies are employed, in which participants are provided with greater opportunity to describe in detail the processes through which this psychological need is satisfied.

Research has shown that a lack of relatedness is a predictor of burnout in elite rugby players (Hodge, Lonsdale, & Ng, 2008), and is an important factor in female physical activity and sport participation (Slater & Tiggermann, 2010). Specifically, Slater and Tiggerman (2010) concluded that fulfilling youth females’ desire for relatedness may be key in reducing dropout and maintaining ongoing active behavior. Furthermore, Podlog and colleagues’ (Podlog, Kleinert, Dimmock, Miller, & Shipherd, in press) recent study with injured athletes found relatedness to be most salient during adolescence, and that a lack of meaningful sport interactions adversely influenced adolescents’ sense of social identity and self-concept. Ryan and Deci (2000) also suggested that “because extrinsically motivated behaviors are not typically interesting, the primary reason people initially perform such actions is because the behaviors are prompted, modeled, or valued by significant others to whom they feel (or want to feel) attached or related” (p. 73). With relevance to relatedness support, their assertion indicates that the need to belong or feel connected in an environment is central to the internalization process and self-determined motivation. Importantly, satisfaction of the
need for relatedness is considered by some to be particularly important for females (e.g., Smith, 1998), and a key mechanism that underpins female motivation (Kowal & Fortier, 2000).

Females participating in stereotypically male-dominant sports (e.g., golf) have been found to experience more conflict between their roles as women and as athletes than do females participating in less male-dominant sports (Anthrop & Allison, 1983; Guillet, Sarrazin, & Fontayne, 2000; Sage & Loudermilk, 1979). Moreover, the onset of adolescence has been associated with a loss of ‘voice’ in girls, as social pressures encourage them to suppress aspects of their personality in order to conform to cultural stereotypes of feminine behavior (Gilligan, 1982). As a result, female withdrawal from golf during adolescence could be potentially linked to social norms and expectations that masculinity is an undesirable trait for women, particularly in a male-dominant environment. Women are often considered more emotionally expressive than men and rely on social support to a greater extent (Ryan, La Guardia, Solky-Butzel, Chirkov, & Kim, 2005; Taylor et al, 2000). It is therefore necessary for women to feel belongingness, encouragement, and support in the golf context in order to consolidate feelings of comfort and acceptance in what is stereotypically a masculine and male-dominated sport. Among other factors, female attrition in sport has been linked to feelings of poor social support, male dominance, and unclear guidance (Allender, Cowburn, & Foster, 2006; Slater & Tiggermann, 2010). It therefore appears imperative that adolescent women in particular receive relatedness support in golf, to encourage motivational processes that promote retention in the face of potentially challenging gender stereotypes and expectations.

The statistics for female participation in sport and physical activity have been well documented; however, strategies to combat the declining figures have not been as extensively examined. Work is needed to determine the key sources of relatedness
support for women in sport, and the present study focuses on this issue in the context of golf. Given that female golfers may derive their own unique perspectives regarding relatedness support via their interactions with various social agents, this investigation was grounded in the social constructivist perspective (Schwandt, 2000) in order to understand participants’ experiences in their own words (Creswell, 2003). Social constructivism exists within an epistemological framework in which individuals form subjective meanings through their exchanges with others (see Gergen & Gergen, 2003; Ponterotto, 2005), and focuses upon identifying the characteristics and values that they ascribe to those interactions. As a result, investigations grounded in social constructivist approaches encourage participants to document their own subjective perceptions through the use of qualitative methodologies. This approach enabled us to not only allow golfers to describe the extent to which they felt relatedness support in their golf activities, but also allowed for participants to detail the unique ways through which they personally derived feelings of relatedness support.

The primary purpose of this study was to examine factors associated with relatedness support that contribute to youth female participation in golf. This purpose was achieved by comparing the perspectives of active and inactive golfers on the associations between relatedness and golf retention. By identifying the mechanisms through which females derive feelings of relatedness (or not), this research has the potential to improve the environment surrounding female participation in golf, and lead to positive experiences that facilitate motivation to retain active participation in sport.

3.4 Method

3.4.1 Participants

Participants (N = 10) were adolescent and adult females aged 16 to 26 (\(M_{age} = 21.40; SD = 3.13\)), who were selected to cover a range of participation levels, from competitively active to completely inactive golf players. Each participant had
either (a) withdrawn from competitive golf during adolescence, (b) remained active in competitive golf (and were adolescent), or (c) been actively competitive in golf during adolescence (but had now reached adulthood). However, consistent across the sample was the fact that all players had, at some point in their life, achieved an official handicap and played competitively at club and regional tournaments. Players were categorized as ‘Active’ or ‘Inactive’ based on (a) participant-defined perceptions of golf involvement guided by the primary researcher (i.e., ‘Would you say that you are an active or inactive golfer, based on your current participation rates in social and/or competitive golf?’), and (b) their current involvement in competitive golf. ‘Active’ participants ($n = 5$) were all currently members of a golf club and competed regularly in tournaments with an official handicap ($M = 5.3; SD = 8.02$). To protect their anonymity, Active participants were identified as A1 to A5, and Inactive golfers were labeled from I1 to I5. All of the women interviewed were currently, or had been, moderate to highly competent golfers. To support this statement, the average handicap for Active participants ($n = 5$) was 7 ($A1 = 24, A2 = 1, A3 = 9, A4 = 0, and A5 = 1$). ‘Inactive’ participants ($n = 5$), on the other hand, differed in their membership status and no longer possessed an official handicap due to their extended absence from the golf environment. These Inactive participants had once achieved an average handicap of 5.2 ($I1 = 2, I2 = 16, I3 = 3, I4 = 2$, and $I5 = 3$) when they were actively involved in golf. We felt that the similarity between these handicap scores for Active and Inactive participants strengthened comparisons regarding relatedness support perceptions between the two groups.

### 3.4.2 Procedure

After obtaining permission to conduct the study from the Human Research Ethics Committee Research Services (Appendix A) at the authors’ institution, flyers were distributed to Australian Golf Clubs and Women’s Golf Western Australia. Potential participants were informed that (a) participation was voluntary, (b) they could
withdraw from the study at any time, and (c) anonymity was ensured. Informed consent was provided by all participants prior to conducting interviews. The time and location of all interviews was arranged according to participant preference, and all interviews were audio-recorded to allow for subsequent transcription. At the completion of each interview, participants were thanked, asked to provide feedback if they wished, and given the opportunity to ask questions about the study.

3.4.3 Interview Guide

Interviews are ‘special forms of conversation’ (Holstein & Gubrium, 2004) that are used to gain direct access to the perceptions and experiences of focal individuals (Silverman, 2000). A semi-structured interview guide was initially piloted with a retired professional female golfer (aged 26 years). Pilot testing was also undertaken with three academic staff members who were experienced in conducting semi-structured interviews and were familiar with the SDT and relatedness support literature. The pilot process assisted in developing the breadth and depth of the interview guide, ensuring the appropriateness of questions, and enabling the identification of problematic phrases or wording. The final semi-structured interview guide (Appendix E and F) comprised of questions specific to SDT relatedness support (e.g., ‘Who were the most important people in your golf experience and why?’), as well as generic questions that served to investigate the reasons for golfers’ withdrawal or continued participation in the competitive arena (e.g., ‘Why do you think other girls quit golf and you continued to play?’ or ‘Why do you think other girls continued with golf and you stopped?’). The standardized interview guide for Active and Inactive participants focused on specific, pre-determined issues, but it permitted flexibility and additional probing from the researcher (Whittemore, Chase, & Mandle, 2001). The average time duration of the interviews was ninety-two minutes (a full copy of the interview guide is available from the first author upon request). All interviews were conducted by the first author, and the
interview allowed for full exploration of subject matter and ensured that participant responses were not subject to pressure or restriction (Amis, 2005).

### 3.4.4 Data Analysis

All interviews were audio recorded, with additional written supplementary notes documented concurrently to assist with further questioning. The first author became familiar with the data by repeatedly reading the transcripts and listening to the audiotapes. The audiotapes were subsequently transcribed verbatim and processed through open, axial, and selective coding (Burns, 1997). Open coding was used to select, identify, and label categories from data analysis. Axial coding techniques were employed to explain and understand the relationship between the categories and their influence on female participation and retention in golf. Subsequently, selective coding validated the initial conclusions and further refined the themes. Transcripts were analyzed deductively for themes pertaining to relatedness, and each theme comprised meaning units that reflected factors that athletes described as sources of relatedness (i.e. parent support, peer support etc.). Meaning units represent a phrase, sentence, or paragraph containing conceptually relevant (i.e., relatedness support-focused) information (Tesch, 1990). However, where retention-focused meaning units did not “fit” with the concept of relatedness support, they were ignored for the purpose of this investigation. Meaning units were isolated where female participants described a specific barrier or facilitator associated with relatedness support in golf. Categories were then used to combine the themes directly relevant to relatedness and to exclude those that were unrelated to this concept. Three researchers with experience in the research and teaching of SDT tenets cross-validated the lead author’s analyses by reading and independently coding a sample of meaning units. Specifically, the first author presented themes and meaning units to the other authors for comparisons to be made with the original researcher’s coding. Initially, an average consensus of 81% was
found across the three researchers, and any areas of disagreement were resolved using a four-step process. This involved debate regarding the definitions of lower-order themes, inter-theme distinctiveness, intra-theme similarity, and higher-order category definitions. This process ensured that all meaning units were grouped under appropriate themes, and allowed for consensus between researchers regarding the meaning of participants’ responses. Data collection was terminated at the point of data saturation, representing the time at which no novel or additional themes emerged from the data (Miles & Huberman, 1990). The number of Active and Inactive participants remained equal throughout the interview process. It became apparent at the fifth interview for each participant group that all emergent meaning units were consistent with existing themes, and no novel themes were formed during the examination of these transcripts.

3.5 Results

The 10 interviews produced 270 pages of 12-point, single-spaced text. Five distinct themes emerged under the higher-order category of relatedness. These themes were labeled Parents, Peers, Coaches, Golf Club, and Gender Comparisons. These themes, as well as the key issues discussed by participants that were associated with them, are summarized in Table 1.

Parents

To initially become involved in golf, participants reported that familial influence played an important role in their participation. Parents provided financial assistance, as well as transport to and from golf venues, and were often viewed as a key source of support. As one Active golfer (A3) stated, “I was motivated to play because I wanted to bond with my Dad”, and “family play a big part in winning competitions… they encourage me and motivate me to keep going”. These supportive familial relationships were an influential factor in the retention of female golf participants. Four of the Active golfers (80%) commented that their parents offered positive support for their
participation in golf, and support from fathers was commonly mentioned by these participants. For instance, one Active golfer indicated that “My Dad sends me like four or five emails a week. He asks me about my game and tries to give me advice, that constant support is nice” (A3). Another noted that “He encourages me and he makes me and that definitely makes me feel good and enjoyment is important” (A2). Active participants also commented that it was easier to keep playing knowing that their parents were always there for them and constantly provided emotional support, regardless of their performance at tournaments and competitions.

Inactive participants, on the other hand, expressed a difference in the nature of their parental relationships. Four of the inactive golfers (80%) indicated that they received very little support from their parents, or that the support was perceived as inappropriate or unwelcome. One Inactive golfer (I4) felt that her father was overbearing in his golf-focused support, which left her upset because she was unable to spend quality time with her mother, suffering strain in their relationship.

“Mum didn’t mind that I was playing, but it really did drive a gap between us because I was spending most weekends with Dad and I wasn’t seeing my Mum much” (I4).

A distinction was apparent between the positive and negative effects that parents had on their child’s participation in golf. When the participants made the decision to participate in golf, they seemed to appreciate the support from family in the form of positive encouragement and administrative assistance (e.g., membership fees and equipment purchase). On the other hand, for Inactive participants, familial influences were characterized by feelings of detachment and distance in parental relationships, particularly with their mothers. A statement by an Inactive participant (I5) reflected the disconnection experienced in the mother-daughter relationship as golf became a priority, “Mum wasn’t a
big role in golf, but I used to dance before I took up golf at 11 [years of age] and she did all the dancing stuff with me... Dad’s more of an influence [in golf]."

Inactive golfers felt that they were not receiving the emotional and physical support that they desired, particularly from their mothers. Instead, their initial participation about the sport was often driven by family expectations, which “made my motivation decrease and decrease and it eventually got to the stage where I had no motivation” (I3).

Peers

Relatedness support from peers was discussed by both Active and Inactive golfers. It was evident that Active participants had strong support networks from other females in the golf setting.

“I still get enjoyment out of golf even when I am not playing well because I love some of the people that I get to hang around with, even just playing social golf with a few friends, I find that enjoyable.” (A5).

One Active golfer commented on the influence that other female golfers had on her retention, “to find other people with the same interests gives you the motivation to keep going back to make new friends and you want to see them” (A5). The ability to satisfy social connectedness in golf was a key contributor to enjoyment, and for that reason the desire to continue participating in golf was sustained.

“I’d say I was at my happiest when there were groups of girls, like we’d all join in and we’d play with all the girls that you got along with. Some weeks you’d rock up and there’d just be a few boys and I’d be like, ‘what am I doing here?’

So my highlight was playing with other girls, I loved it” (A1).

Overall, four of the five Active golfers in the sample spoke about positive experiences with, and support from, peers. All of the Inactive golfers, on the other hand, struggled to develop meaningful peer relationships in golf, which ultimately contributed
to their abandonment of the game, as expressed by Inactive golfer (I1), “Towards the end of high school, I dropped golf because I just wanted to play sports with my mates again... There seems to be more junior girls now and it’s good to see them hang out and play together. That was something I didn’t really have”.

Inactive participants expressed a sense of isolation in relation to their golf peers, “I was never particularly close with the girls I played golf with. They were a lot more bitchy (I5)”, and, “I never really hung out on a social level with those girls, I never really established that connection (I4)”. All participants appeared to view social support from their golfing peers as a vital component to maintaining their golf involvement.

“I think especially for kids it’s the group environment that makes the difference, because no kid wants to be hanging around by themselves all the time. So it’s when they start feeling that isolation and loneliness that they drop out” (A5).

Young golfers appeared to need to experience friendship and connectedness with other women in this context in order to facilitate adherence. However, when discussing the distinction between ‘golf’ friends and ‘mainstream’ (i.e., non-golf) friends, a commonality existed between Active and Inactive golfers. Both groups expressed receiving little support from their mainstream friends, perhaps due to a lack of golf knowledge among those not involved in the sport.

‘My friends out of golf didn’t really understand it [golf], like the fact that it took up so much time and all the dedication I had to put into it. I missed out on doing a lot of things [with friends] ‘cause I was golfing and I don’t think they had much of an idea or realized how seriously I took it’ (I2).
Active and Inactive golfers felt a clear distinction between the types of relationships experienced with peers in and out of the golf context. An Active golfer commented, “golfers I know tend to be more self-motivated but my other friends were more interested in going out on Friday and Saturday nights and they always wanted me to go out but I couldn’t” (A3). The lack of relatedness support from mainstream peers consequently drew Active participants into the club atmosphere and encouraged them to develop stronger social bonds with other golfers, something that Inactive golfers were unable to achieve.

Coaches

Due to the individual nature of golf, participants appreciated one-on-one coaching sessions, whereby specific feedback could be provided to golfers in a private environment. Once golfers entered the state level of competition, coaches were provided for the team as a whole. Four of the Inactive participants did not experience the closeness that they had once felt from past coaches.

“I was in the development squad and there were certain girls that were a lot better and the coach would spend a lot of time with them… so even if you were there for an hour session the coach never actually came up and spoke to you or interacted with you at all” (I5).

Some coaching styles were also viewed as undesirable, as expressed by an Inactive golfer, “At the end I started feeling not too happy with the way I was being treated… he wanted me to do well and would go through the papers and be like. ‘I saw you perform well in this or didn’t shoot well in that’” (I4). This coach-player relationship was somewhat over-bearing and the participant elaborated by stating, “He was always very conscious of what I was doing on the course and away from him as well, and that made me feel a bit uncomfortable” (I4). Conversely, four of the Active participants appeared to be content with their coaching arrangements and discussed
close support in that, “My coach definitely influences my interest to come back and keep going, and definitely encourages me to achieve my goals” (A2), and “I get along with my coach like a house on fire, we bond really well” (A1). An Active participant exemplified this sentiment with, “a coach needs to have a good bond with their students, and they need to have that understanding of what you’re going through and friendship... that’s why I’m still playing today” (A4). One Inactive participant summarized the need for connectedness with a coaching figure when she stated:

“To be a good golfer you need a good support network around you, having like a mentor or coach who not only helps you with your golf but inspires you to be better” (I5).

Participants who withdrew from golf were able to express the qualities that they wanted in a coach but were unable to experience these encouraging, supportive, and likeable characteristics. Inactive golfers found it difficult to leave and hire new coaches, particularly when they had been with a long-term coach from a young age. Regardless of whether coaches were satisfying Inactive golfers’ relatedness needs, they often remained with them for long periods. Comments such as, “I was with my coach for four or five years and it took me a long time to leave... it’s like breaking up with a boyfriend” (I1), and “you get that feeling that you don’t want to let them down” (I5), demonstrated participants’ need to please their coaches despite the detrimental influence this appeared to have their intentions to continue participating in the sport.

Interestingly, this concept of closeness in the coach-player relationship largely reflects relatedness support. However, the difference between Active and Inactive golfers lay in the positive attributes that coaches possessed and the way in which they satisfied the relatedness needs with positive encouragement, support, and understanding. Active golfers expressed feelings consistent with
relatedness support from their respective coaches, whilst Inactive golfers’ were unable to establish true connectedness with coaches.

**Golf Club**

An affiliation with a golf club (i.e., of which they were a member) appeared to have a number of advantages, such as providing high-standard facilities and playing conditions (e.g., change rooms and restaurants, handicap tracking systems, access to training and competitive play). Active participants referred to their golf clubs as being “a touch-base kind of place rather than feeling like you’re doing it all on your own” (A5), and “it generates a love for golf and I am proud to be a part of a club” (A2). In addition, one Active golfer stated, “It is pretty important belonging to a club… it just makes you feel like you’re meant to be there, I think, like you belong” (A3). All five of the Active participants associated the golf club with security and belongingness.

“The club keeps you coming back to play for the little things, rather than just performance. When I go back there like with those older ladies, it’s the right reason to play… Fifty cents a hole, a cup of tea, and just the pure enjoyment they get from playing with each other” (A5).

Active golfers associated the club with positive relationships, enjoyment, and a sense of belonging, “I think it’s important to be in a club in terms of retention, just playing in the presence of people who love the game is when I enjoy it most” (A1). Conversely, three Inactive golfers were emotionally separated from the golf club and expressed only practical implications for maintaining this relationship, “It’s not super important [to belong to a club], the only thing I like about being a member of a private club is you can turn up, play for free, and there is no riff-raff or waiting” (I1). Inactive players expressed a distance from the club, “I know I wasn’t really paying much attention to [people at the club]... I didn’t really have much to do with the club” (I2). The club seemed simply to be convenient and a means-to-an-end for practice and
competition. Clearly absent for these Inactive golfers were the positive feelings and security that Active players associated with their respective golf clubs.

**Gender Comparisons**

A universal attitude was apparent among females regarding feeling isolated in the golf environment in comparison to their male counterparts. Issues were discussed regarding poor designs for ‘feminine’ clothing, little or no female coaches on offer for young golfers, and “the stereotypical idea that golf is a guy’s sport” (A5). Women felt embarrassed to label themselves as a golfer and often opted not to tell their peers that they played golf. The public’s stereotypical view of golf seemed to impact on perceptions of relatedness support as well as public support.

“I never really spoke about [playing golf] to my friends. To be honest I was a little embarrassed because golf is not one of those conventional sports that girls play… I mentioned to one girl I remember and she was like ‘eww, you know, like, isn’t that what lesbians play?’” (I4).

Female golfers felt the public perceived golf to be ‘not cool’ for females, ‘an old-man’s sport’, and ‘very boring’ for girls, “The golf gear is quite masculine and sometimes you don’t really feel like wearing it, you just want to put on a dress or something that makes you feel like a woman” (A3). In order to encourage more women to play golf, participants felt that golf needed to be “more modern” and eradicate the view that golf is for males only or “for those frumpy lesbians, and I didn’t want to be lumped into that sort of a group” (I3). Participants reported that golf needed to be marketed better to increase the profile of the game specifically among young females, and to remove the negative stigma that existed surrounding young girls participation in golf (which was not present for males).

Participant perceptions of gender inequality in the golf environment were similar among both active and inactive groups. However, three of the Active golfers were able
to manipulate this potential drawback to their advantage, “I liked talking to them [boys] about how they picture each round, what they do, and it made me feel like we should have more interaction because the boys are good to learn from” (A4), and “men can hit it further and play more aggressive, it’s good to watch” (A3). Even though Active golfers felt as though they were somewhat marginalized and at a disadvantage in comparison to males in the golf environment, they were able to develop interactions with male golfers.

Male dominance and gender comparisons between females and males in golf was an enduring topic with regard to membership numbers, competitive play, and media attention. All Inactive participants in particular felt that women were at a disadvantage in the golf context and one stated, ‘I can’t help but think it’s a men’s club’ (I1). Female golfers felt less relatedness support in golf as constant comparisons were made between the different treatment that males and females received in the golf context. These negative experiences of isolation and a lack of relatedness for women in golf were revealed in a conversation with an Inactive participant:

“I remember one competition and I’m not kidding you, the girls open prize winner was an electric toothbrush and the guys won something better like a watch, like a digital watch and you’re going ‘oh I want the watch’… It became a joke, like that the prizes were just stupid” (I4).

A lack of relatedness support derived from unfavorable normative comparisons appeared to be rooted in perceived gender inequality, and posed a potential threat to women’s participation. Girls were given the impression from a young age that they were less important in comparison to their male counterparts, and reported not feeling valued by men at the club or society. Financially, female players also felt undermined due to the limited numbers of females in the competitive golf context.
“Guys got a lot more opportunities to play and were given money to go to tournaments but I guess ‘cause the girls have, like, one player, you don’t get a lot of exposure and people helping you out” (I5).

Limited relatedness support due to women being a minority began to affect the perceived competence of participants, “Guys in competition are seen as more prestigious because they are hitting off longer tees and shooting lower scores” (I4). Active golfers also felt the pressure of negative public perceptions from men and commented on this interaction, “the males aren’t very friendly to the female members… they give you looks like they’re very irritated that you are there at all” (A3). Male golfers were also given “more days and time slots and everything available to them because it is more popular with the guys” (A5). Taken together, it appeared that these young women reported, to varying extents, feelings of isolation (i.e., a general lack of relatedness support) due to perceived imbalances between the treatment that they received and the treatment that they observed male golfers receiving.

3.6 Discussion

This investigation focused on the application of SDT to golf, and sought to identify the mechanisms that may contribute to relatedness support and facilitate female retention in golf. Parental, peer and coach support featured as primary sources of relatedness. Golf clubs were also discussed as a contributor to establishing relatedness support, and it was interesting that a non-living entity appeared to be able to satisfy individuals’ needs. Participants in this study that expressed a sense of belonging and connectedness to the club appeared to be more likely to retain active golf participation. Analyses also revealed that golf serves as an example of a sporting environment in which females may struggle to satisfy their relatedness needs due to their perceived ‘minority’ status, and the somewhat undesirable image associated with female (in comparison to male) participation in the sport. Given that needs for relatedness are
central in the promotion of adaptive motivational and behavioral patterns (Ryan & Deci, 2007), these findings may provide important practical implications in terms of targeting dropout amongst female golfers, and encouraging continued engagement in physical activity for females through golf.

Consistent with tenets of SDT, intrinsic motivation is most able to take root in contexts where the need for relatedness is supported – that is, where people feel a sense of connectedness and belonging (Ryan & Deci, 2007). Participants in this study believed that relationships in the golf context were imperative to participation and retention. Specifically, support from parents and peers provided golfers with a sense of encouragement and motivation in social and competitive play. Those who felt a sense of connectedness with parents, coaches, and peers appeared to be more likely to continue playing golf as they received attention and affirmation for their behavior. These findings are consistent with those reported by Calvo, Cervello, Jimenez, Iglesias, and Murcia (2010), who demonstrated that a lack of relatedness satisfaction from social agents (i.e. coach and team members) was a significant predictor of sport dropout. In the present study, parents were key influences upon young females’ enjoyment and retention. In particular, the role of the mother was significant in supporting feelings of relatedness, and the failure to achieve strong mother-daughter bonds often resulted in withdrawal from golf. The player-coach relationship was also deemed significant to women because the playing future of participants hinged on the guidance that these figures provided. Consistent amongst Active and Inactive players was the desire for emotionally supportive coaches that not only provided golf-related instruction, but also a close friendship. These findings are congruent with SDT proposals, which indicate that showing care and valuing someone as a person without any attached contingencies (e.g., positive feedback that is not dependent on good performance) should lead to
individuals feeling more valued and attached to others (Deci & Ryan, 2000; Ryan & Solky, 1996).

Golf is an individual sport that can, unintentionally or intentionally, result in player isolation. The female golfers interviewed in this study expressed a need to experience golf with other people, and more specifically, other women. This enabled young golfers to share their playing and emotional experiences with others, and to obtain a sense of connectedness with other females who shared their interests. Guided by these findings, in order to ensure young female players maintain their involvement in golf, relatedness support may be provided in several ways. Social acceptance and peer relationships are important factors to preventing attrition in female sport participation (Slater & Tiggermann, 2010). Peer relatedness also emerged as a key theme in this study and indicated that female group practice sessions, as well as encouraging female participation in social and competitive tournaments within a club, may help promote female retention in golf. Introducing social events that target females within the golf club may also encourage friendship, competition, and a sense of relatedness for women. Superordinate goal structures, such as via ambrose (i.e., team) scoring formats, may also be used within the club to integrate new members or affiliate golfers who do not have close friendships.

Interestingly, participants derived feelings of relatedness not only from important social agents (e.g. parents, peers, and coaches), but also from the physical and environmental factors associated with their golf club. Golf clubs appeared to have a significant impact on the retention of young females, and participants who felt comfortable and accepted in this environment were more likely to remain involved. It was interesting that Active participants expressed emotional feelings towards a golf club and likened its characteristics to that of a ‘home’ (i.e. support, acceptance, belonging) with no reference to the people within the club. The golf club provided a retreat for
female golfers where they did not feel threatened or insecure. In that sense, participants described deriving relatedness support from a non-living entity in much the same way that they did from social agents. These clubs valued tradition, etiquette, and prestige, to which Active female golfers showed an affiliation with no direct application to specific individuals. On the reverse, as was outlined by Inactive participants in this study, the golf club may be a potential barrier to female retention should players fail to achieve a sense of connectedness and establish feelings of the golf club as a ‘home’. In order to retain female golfers, facilities associated with the club should conduce toward a sense of security and attachment. For instance, security personnel or surveillance cameras might offer a sense of safety for golfers during evening practice. Design factors, such as the layout of changing rooms (to offer privacy and security) and social areas (to facilitate interaction), should also be considered. Finally, as indicated by research on cohesion (e.g., Spink & Carron, 1993), tangible items that are given to members (e.g., membership shirts, lockers) might increase players’ connection with the club. If women connect with a golf club and experience acceptance, support, and belonging then it appears that efforts at retention may be successful.

Women in this study described a lack of relatedness from male counterparts on a golf course, as well as a relative lack of support for their participation in comparison to male players. The lack of women in the golf context limited the opportunity for participants to develop strong support networks with other female golfers. Consequently, a perceived imbalance between the treatment of female and male players was described as a contributor to feelings of isolation and a lack of relatedness support. Active and Inactive participants expressed feelings of gender inequality, not only due to the lack of female participants in golf but also the lack of public support for women to engage in this sport. When participants interacted with women external to golf, their impression was that the public perceived golf as somewhat masculine and unattractive
for females, based on clothing requirements and sexuality stereotypes. Consequently, female golfers felt isolated and often refrained from discussing their love for the game with peers in fear of being ridiculed. In support of this finding, Guilet, Sarrazin, and Pontayne (1996) concluded that girls’ sport involvement will remain problematic (in comparison to males) for as long as some activities are deemed to be stereotypically masculine.

The introduction of ‘ladies only’ tournaments where clothing can be alternative to the norm may present a different perspective of golf to the public and alter its image in a more positive way. To further promote youth female retention, participants suggested that ‘ladies only’ events would also encourage women who were unfamiliar to the game to attend without performance pressures. Although women described feeling inferior to their male counterparts, by no means should men be eradicated from the female golf environment. Instead, implementing strategies that encourage acceptance from the opposite gender may enhance women’s motivation to play. Accordingly, a golf club and its members should seek to develop a sense of equality between players to balance the gender comparisons and reduce the sense of isolation that females reported in this study. To ensure individuals are valued regardless of their gender, golf clubs may seek to generate equality via membership fees, prize money, inclusive environments, and media coverage.

While the findings of this study are noteworthy and provide important practical strategies that may support female retention in golf, several limitations should be recognized. First, although qualitative research provides an in-depth understanding of participants’ experiences, interview questions require participants to recollect memories, and it is possible that these recollections are subject to imprecision. Participants were all gathered from a single region, Western Australian Golf Clubs, and the ability to generalize these findings to other Western countries may be somewhat restricted.
Moreover, participants were interviewed at various stages in their golf experience. The level of participation amongst golfers was not uniform, for example Active participants varied from state representatives to semi-professional. Conversely, Inactive participants had ceased playing golf at different ages and times that may have had an influence on the results due to age-specific environmental and social pressures to participate (i.e. school, university, and work commitments). In an effort to mitigate such effects, the interviewer (first author) provided past tense and present, open-ended questions to enrich the accuracy and comparability of responses from participants.

In light of the results of this study as well as the aforementioned limitations, a number of interesting future research directions may be pursued. For example, interventions with female golfers that seek to foster peer relatedness (i.e. group practice sessions, social activities external to golf, and parental involvement) may demonstrate adaptive motivational responses and influence golf retention for adolescent females. In addition, future research would be worthwhile that adopts prospective, large-scale studies in order to assess relatedness perceptions and participation levels over time. This would enable researchers to identify the developmental changes and significant events (e.g., transition to university) that align with fluctuations in participation levels. In addition, a comparative study with other Western countries (e.g., UK, US) may reveal how relatedness needs are derived from similar (or unique) sources in different locations. Research on this topic could focus on the relative contributions of functional, structural, and perceived social support to relatedness satisfaction (see Holt & Hoar, 2006). Also, investigations into sports other than golf are recommended so that a comprehensive understanding of relatedness support in sport is obtained. Issues associated with relatedness support could be examined from the perspective of similarities and differences between sports (e.g., team-based v individual sports).

Finally, although we focused our attention solely on relatedness perceptions, it would
clearly be worthwhile to examine the relative influence and development of relatedness support alongside (i.e., in conjunction with) the other fundamental psychological needs within adolescent females.

In summary, the results of this qualitative study demonstrate the need for further research regarding the importance of relatedness support for females’ retention in sport. These findings indicate that with a sense of connectedness to family, coaches, peers, and golf clubs, together with the encouraging positive public perceptions about young women in golf, it may be possible to achieve improved golf participation and retention for young females. SDT represents a relevant and practical lens through which future research in this context may be conducted, and this study provides a number of strategies that golf organizations may consider in order to ensure that the relatedness needs of its female players are met.
Table 1. Categories, themes, and exemplar meaning units for Active and Inactive participants

<table>
<thead>
<tr>
<th>Higher-Order Category</th>
<th>Participant Group</th>
<th>Lower-Order Theme</th>
<th>Exemplar Meaning Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>Active</td>
<td>Welcome parental support</td>
<td>“My Dad sends me like four or five emails a week. He asks me about my game and tries to give me advice, that constant support is nice” (A3)</td>
</tr>
<tr>
<td></td>
<td>Inactive</td>
<td>Little support</td>
<td>“Mum wasn’t a big role in golf, but I used to dance before I took up golf at 11 years of age and she did all the dancing stuff with me” (I5)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supportive efforts not welcomed</td>
<td>“Mum didn’t mind that I was playing, but it really did drive a gap between us because I was spending most weekends with Dad and I wasn’t seeing my Mum much” (I4)</td>
</tr>
<tr>
<td>Peers</td>
<td>Active</td>
<td>Meaningful relationships within golf</td>
<td>“I love some of the people that I get to hang around with, even just playing social golf with a few friends, I find that enjoyable” (A5)</td>
</tr>
<tr>
<td></td>
<td>Inactive</td>
<td>Few/no meaningful relationships within golf</td>
<td>“I was never particularly close with the girls I played golf with. They were a lot more bitchy” (I5)</td>
</tr>
<tr>
<td></td>
<td>Active and Inactive</td>
<td>Little peer support from peers outside golf</td>
<td>“My other friends were more interested in going out on Friday and Saturday nights and they always wanted me to go out but I couldn’t” (A3)</td>
</tr>
<tr>
<td>Coaches</td>
<td>Active</td>
<td>Positive relationships with Coach/es</td>
<td>“I get along with my coach like a house on fire, we bond really well” (A1)</td>
</tr>
<tr>
<td></td>
<td>Inactive</td>
<td>Negative relationships with Coach/es</td>
<td>“So even if you were there for an hour session the coach never actually came up and spoke to you or interacted with you at all” (I5)</td>
</tr>
<tr>
<td>Golf Club</td>
<td>Active</td>
<td>Identification with Club</td>
<td>“It is pretty important belonging to a club… it just makes you feel like you’re meant to be there. I think, like you belong” (A3)</td>
</tr>
<tr>
<td></td>
<td>Inactive</td>
<td>No identification with Club</td>
<td>“It’s not super important [to belong to a club], the only thing I like about being a member of a private club is you can turn up, play for free, and there is no riff-raff or waiting” (I1)</td>
</tr>
<tr>
<td>Gender Comparisons</td>
<td>Active</td>
<td>Perception of gender inequality as an opportunity</td>
<td>“men can hit it further and play more aggressive, it’s good to watch” (A3)</td>
</tr>
<tr>
<td></td>
<td>Inactive</td>
<td>Perception of gender inequality as drawback</td>
<td>“I remember one competition and I’m not kidding you, the girls open prize winner was an electric toothbrush and the guys won something better like a watch, like a digital watch and you’re going oh I want the watch” (I4)</td>
</tr>
</tbody>
</table>
3.7 References


Intrinsic motivation and self-determination in exercise and sport (pp. 71-85).
Champaign: Human Kinetics.


Chapter 4

Extended Sections

4.1 Extended Method

This chapter provides both qualitative and quantitative research methods that were used in this study for the purpose of examining female participation in golf. After obtaining permission to conduct the study from the Human Research Ethics Committee Research Services at the University of Western Australia (RA/4/1/4074), flyers were distributed to Western Australian Golf Clubs and Women’s Golf Western Australia. Potential participants were informed that (a) participation was voluntary, (b) they could withdraw from the study at any moment, and (c) anonymity was ensured. Informed consent was gained from all participants prior to administering questionnaires and conducting interviews. The time and location of the interviews was arranged according to participant preference, and all interviews were conducted from August to December 2010.

A Demographic Questionnaire (Appendix G) and combined Basic Psychological Needs Satisfaction (BPNS) and Intrinsic Motivation Inventory (IMI) scales (Ryan, 1982; Kasser, Davey & Ryan, 1992) were administered solely by the researcher at the University of Western Australia (Appendix H). Questionnaires required approximately 10 minutes to administer and were completed by each participant prior to the formal interview commencing. There was no time restriction on the completion of participant questionnaires, and the researcher was removed from the interview room at this time. The questionnaires served as a multidimensional measurement tool to assess the participants’ experiences and perceptions of golf. The two scales assessed interest, competence, effort/importance, pressure/tension, choice/autonomy, value/usefulness and relatedness. The IMI scale consists of a set of 7 domains for assessment that has been manipulated to include all items of concern to the study. The alterations to the IMI
scale do not affect reliability, as McAuley, Duncan, and Tammen (1989) concluded that the item presentation order and the inclusion or exclusion of sub-scales appears to have no impact on participant responses. Interviews were audio-recorded to allow for subsequent transcription. At the completion of each interview, participants were thanked, asked for feedback and given the opportunity to respond and ask questions about the study.

**Interview Guide**

The semi-structured interview (Appendix E and F) was comprised of 5 stages. The participant was unaware of the staged topics; (i) introductory questions, (ii) autonomy, (iii) competence, (iv) relatedness and, (v) reflective discussion. The researcher began with introductory questions that reiterated those completed in the demographic questionnaire that served to initiate comfort and prepare the participant for the interview style. Stage 2, 3, and 4 related to the theoretical framework underlying the study, SDT. Questions were designed to explore the topics of autonomy (i.e., *Did you always have the freedom to choose to play golf?*), relatedness (i.e., *Who was an influence to your golf participation?*), and competence (i.e., *Can you describe your level of ability as a golfer?*). The standardized interview guide for Active and Inactive participants focused on specific, pre-determined issues, but it also permitted flexibility and additional probing from the researcher (Whittemore, Chase, & Mandle, 2001). The interview style catered for the elaboration of subject matter and ensured the most appropriate response was provided from the participant without pressure or narrow expectations from the interviewer (Amis, 2005). Throughout the interview, participants were asked questions (e.g., *I enjoy playing golf competitively*?), which required the use of a 7-point likert scale (*not true at all* to *very true*). The scale was used to provide additional quantitative data and aid as stimulus for the discussion of each assessment item. For the final interview stage, participants were asked questions
regarding the barriers to female participation in golf and explore the experiences of other golfers and reasons for their withdrawal or continued participation in the competitive arena (i.e., ‘Why do you think other girls quit golf and you continued to play?’ or ‘Why do you think other girls continued with golf and you stopped?’). These exploratory questions provided an insight into the barriers that may affect young women and cause them to withdraw from participating in competitive and/or social golf.

**Trustworthiness of Interview**

Lincoln and Guba (1985) suggested that the credibility, as opposed to the internal validity, be the criterion upon which the truth-value of qualitative data collection process be measured. The quality of the interview data collected was a reflection of the quality of the researcher/participant relationship. It was critical that the participants were fully compliant and motivated (Kellehear, 1993). To achieve the end goal, the purpose, value, and structure of the data collection and evaluation process were discussed with the female participants in detail, prior to the commencement of the interviews. This assisted the process of ‘getting along’ deemed critical by Kellehear (1993). In addition, the researcher’s background as an established secondary school teacher contributed to the ease in which rapport was quickly built with the female golfers, due to the researcher’s experience with adolescent and adult sports-oriented women. With a semi-structured approach to the interview process, the respondents were encouraged by prompting to elaborate on any additional items that participant’s deemed relevant or of personal interest to them and their golf experiences. The subjects responded with enthusiasm, to the opportunity to ‘have their say’ about the likes and dislikes of their experience. To confirm the suitability and intention of the interview questions, each were reviewed by four experienced researchers at the University of Western Australia. All provided valuable feedback as to wording and ambiguity in questions, which were altered accordingly.
4.2 Extended Results

Quantitative Results

This section provides additional information relating to the quantitative research methods that were not discussed in chapter 3 (the paper) of this thesis. Quantitative data included questionnaire scores obtained by the IMI and BPNS scales (Ryan, 1982; Kasser et al., 1992) and were analyzed using the Statistical Package for Social Science (Coakes et al., 2010). Tables 2 and 3 display the questionnaire items and descriptive statistics for the IMI questionnaire (Table 2.) and the BPNS questionnaire (Table 3.). The IMI questionnaire items reflect the key elements required to assess participants’ self determined motivation; interest/enjoyment, competence, and effort, pressure/tension, choice, and value/usefulness. To specifically target the three basic psychological needs; autonomy, competence, and relatedness, the BPNS Scale was also administered to participants (Appendix H).

The IMI questionnaire subscales of ‘effort’ ($t \ (8) = 3.547, p = 0.008$) and ‘value/usefulness’ ($t \ (8) = 2.412, p = 0.042$) produced results that were significantly different between Active and Inactive participants. For both questionnaire items, Active participants noted that effort was necessary when playing golf and believed that golf was more important and of value than scores presented by Inactive participants. The remaining items did not reveal significant scores in t-test group comparisons, possibly due to the purposive sampling method in which a small sample size was needed to explore and illustrate an in-depth understanding (Silverman, 2000) of golf participation in women.
Table 2. Descriptive Statistics for Intrinsic Motivation Inventory Scale Scores

<table>
<thead>
<tr>
<th>Participant Grouping</th>
<th>Interest/Enjoyment</th>
<th>Competence</th>
<th>Effort</th>
<th>Pressure/Tension</th>
<th>Choice</th>
<th>Value/Usefulness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active (n=5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>0.566</td>
<td>0.502</td>
<td>0.794</td>
<td>1.538</td>
<td>0.718</td>
<td>0.818</td>
</tr>
<tr>
<td>Inactive (n=5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>4.685</td>
<td>4.966</td>
<td>3.760</td>
<td>2.840</td>
<td>6.171</td>
<td>5.342</td>
</tr>
<tr>
<td>SD</td>
<td>1.482</td>
<td>0.309</td>
<td>1.519</td>
<td>1.785</td>
<td>0.996</td>
<td>0.435</td>
</tr>
<tr>
<td>T</td>
<td>1.892</td>
<td>0.339</td>
<td>3.547</td>
<td>0.493</td>
<td>0.052</td>
<td>2.412</td>
</tr>
<tr>
<td>P</td>
<td>0.095</td>
<td>0.743</td>
<td>0.008</td>
<td>0.635</td>
<td>0.960</td>
<td>0.042</td>
</tr>
<tr>
<td>Effect Sizes</td>
<td>1.31</td>
<td>0.49</td>
<td>2.35</td>
<td>0.31</td>
<td>0.03</td>
<td>1.60</td>
</tr>
</tbody>
</table>

Note. *p*<0.05 indicated significant difference between the mean scores of active and inactive participants (2-tailed significance).
### Table 3. Descriptive Statistics for Basic Psychological Needs Satisfaction Questionnaire

<table>
<thead>
<tr>
<th>Participant Grouping</th>
<th>Autonomy</th>
<th>Competence</th>
<th>Relatedness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active (n=5)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>5.714</td>
<td>5.660</td>
<td>6.320</td>
</tr>
<tr>
<td>SD</td>
<td>0.494</td>
<td>0.524</td>
<td>0.670</td>
</tr>
<tr>
<td>Inactive (n=5)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>5.600</td>
<td>4.833</td>
<td>5.325</td>
</tr>
<tr>
<td>SD</td>
<td>0.778</td>
<td>0.278</td>
<td>0.950</td>
</tr>
<tr>
<td>t</td>
<td>0.277</td>
<td>1.403</td>
<td>1.922</td>
</tr>
<tr>
<td>p</td>
<td>0.789</td>
<td>0.198</td>
<td>0.091</td>
</tr>
<tr>
<td>Effect Sizes</td>
<td>0.18</td>
<td>2.06</td>
<td>1.22</td>
</tr>
</tbody>
</table>

*Note.* $p<0.05$ indicated significant difference between the mean scores of active and inactive participants (2-tailed significance).
Qualitative Results

The high-order categories labeled in the study results include Relatedness, Competence and Autonomy. The five themes that emerged under the category of Relatedness; Parents, Peers, Coaches, Golf Clubs, and Gender Comparisons, has been extensively discussed in the paper (Chapter 3). Within the additional three categories, Competence yielded two themes; Perceived Ability and the Handicap; Autonomy was represented by one theme; Perceived Choice to Participation, and Environmental Barriers, which revealed two themes; Time Constraints and Cost.

Competence

Perceived Ability

As part of the selection criteria for participants in this study, female golfers were required to have experience in the competitive golf arena. Consequently, all of the women interviewed were moderate to highly competent golfers. To support this statement, the average handicap for Active participants was a respectable 7 (A1= 24, A2= 1, A3= 9, A4= 0, and A5= 1). Inactive participants could no longer provide an accurate handicap due to their extended absence from the golf environment. These Inactive participants had once achieved an average handicap of 5.2 (I1= 2, I2= 16, I3=3, I4= 2, and I5=3) when they were actively involved in golf. These handicap scores enabled comparisons to be made between the two groups.

Participants were asked the question, “How do you rate your ability in golf?” to which all women stated either moderate or highly competent. With further probing, it became apparent that Inactive golfers set high expectations of their personal ability and this often left them feeling incompetent when expectations were not met in practice and
competition. For example, one golfer that was selected as a state team member said: “I wasn’t the best by any means and there were times when I absolutely hated it and felt like if I didn’t play well (in competitions) that was it, that was the end” (I2). This sentiment was further supported by the comment: “I was generally better than the other girls in the state team… but there wasn’t that internal drive for me anymore to play, because I think of how hard I had to train and how long it took me to improve… I hated losing” (I3). As individuals, Inactive golfers felt competent in their ability to successfully play golf; however, they began to question their competence in golf when competition became a means for participation. “I got pretty good, pretty quick and then it became a bit too competitive between the girls” (I2). Inactive players compared their ability to other members of high-level teams (i.e. Australian and Interstate Team) and presented feelings associated with a loss of confidence and self-esteem. “For me I would rate my ability as moderate to highly competent and feeling competent was related to winning competitions and having a good handicap. But it was probably my short game that was never really good enough” (I1). Inactive participants reported an element of doubt in their ability to achieve success in golf; however, Active players were perceivably confident.

Active participants were confident in expressing their ability in golf. “I was good at most sports that I did, but there was just something about golf that came quite naturally” (A5), and “Everyone at the club says that I am good at golf and I know I am as well” (A4). Clearly players that maintained their golf participation were self-assured and felt satisfaction in working towards improving their competence in golf. “What motivates me is the excitement that I get from pulling off a shot that I have worked towards, and then I try and play it in competition and pull it off, it’s that sense of achievement” (A5). Active participants expressed feelings of competence in golf,
which ultimately led to increased confidence for competition and a more positive attitude towards their ability in this context.

The clear difference between Active and Inactive participants lay in their motivation to play when their perceived competence was low. Participants were asked the question: “How would your enjoyment be affected if you were playing very well?” All participants reported they would enjoy golf more with increased success in competition. In addition, female golfers were asked: “How would your enjoyment be affected if you began to play poorly?” Inactive participants felt that they would enjoy golf less and would be more inclined to decrease their level of participation. “My enjoyment in golf is directly proportionate to how I am playing” (I1), and “I just don’t enjoy golf when I go out and have a shocking game” (I3). Active golfers seemed to find motivation in poor personal golf performance. These players enjoyed golf most when they were playing well; however, they did not feel as though their participation would be negatively affected if they began to play worse. This notion was supported by an Active golfer: “Even if I played the worst I’ve ever played tomorrow, I would still come back the next day and keep going” (A3), and “If I started to play worse, it would make me strive to be better” (A2). Active participants sought motivation from their negative performances in competition and practice; however, their enjoyment for golf was unwavering. This approach led to an increased retention to golf, whilst feelings of failure to achieve in competitions and low enjoyment levels were indicators of withdrawal.

**Handicap**

A key motivator for Inactive and Active participants was the personal goal of handicap reduction. “The handicap definitely pushed you on, because the next goal would be to break the handicap” (I2), and “I’d say one of my main motivators to play is to drop the handicap” (A1). Even though all participants viewed the handicap system as
a stimulus for retention to golf, Inactive players expressed more frustration with their ability to reduce this score. One player stated that: “A handicap is a big motivator at first because it’s easier to drop when you’re on a high handicap but then it gets harder and harder so it makes it difficult to keep up” (I4). In addition, another female golfer withdrew from golf only six-months after she achieved her peak handicap saying: “I was at my lowest handicap but it got to the stage where there just wasn’t much passion behind it to get lower and I still had to refine my skills and consistency” (I3). Inactive players seemed to use the handicap as a performance indicator, whilst Active players appeared to be motivated from the challenge and enjoyment of decreasing their handicap. “Achieving a handicap made me feel like I wanted to play more” (A3), and “It was more the excitement of receiving your new handicap, because I wanted to get it down as low as I can” (A2). A handicap score gave Active players a specific goal and was used by Active participants to re-define their perception of what it is to be highly competent in golf. Conversely, those players that withdrew from golf perceived the handicap reduction as an additional pressure that served to negatively impact on interest and motivation.

**Autonomy**

*Perceived Choice to Participate*

Active female participants valued the freedom of choice that they experienced in golf. These women expressed a sense of autonomy in their choice to participate, without an obligation to satisfy others. The issue of control was apparent amongst golfers in that they reported a desire to dictate their participation in golf. The more in control a player felt, the more enjoyment they experienced and a desire to continue playing golf. “When I first started playing I really enjoyed golf, but I started to enjoy it even more when I became more in control of my game” (A3). This Active golfer felt a
sense of achievement through being in command of her participation and performance. Similarly, other Active women expressed autonomy in golf when they discussed their perceived choice to participate and its affect on their retention.

“I definitely chose to play golf, I was never forced to play. I started making my own decisions about playing golf when I was young, so I always knew I could pull out if I stopped enjoying it. But obviously I choose to play because I keep enjoying it” (A2).

The constant reference to enjoyment and choice to participate seemed to come hand in hand with Active golfers. Their perceived choice to participate seemed to give them a sense of control over their decisions and consequently increased their enjoyment. “I don’t think it’s all about winning, I’m just out there for a good time and experience” (A4). Inactive players seemed to experience external pressures that restricted their perceived autonomy and level of enjoyment.

“My enjoyment would reduce when I was told I had to do something that I’d rather not. When you got told you had to go down there [golf course], the less you wanted to and I just didn’t enjoy it” (I5).

This sentiment was shared by another Inactive participant: “I loved the competitiveness but then people began pushing me from all angles and I think I lost enjoyment ‘cause it got to the stage where I was just playing golf because my family expected me to” (I3). Female players that withdrew from golf seemed to experience undue pressure to participate from family members and golf club personnel.

“Cause I had signed a contract with my club, I had to be down there to play most of the time… There was just that pressure to perform at a certain level, I couldn’t just go out there and play, I had to win and that really killed it for me” (I4).
This pressure seemed to negatively affect the women’s enjoyment of golf and often left them in a sense of emotional turmoil. “It was very emotional, there were a lot of meltdowns on the course… you felt panic, disappointment, the pressure that if you played badly, if you stuffed up just once that could be it” (I2). Consequently, the decrease in enjoyment, pressure from external sources, and lack of choice to participate became a barrier for these young women and a reason for withdrawal from golf.

**Environmental Barriers**

*Time Constraints*

A universal understanding that golf is a very time demanding sport was highlighted by both Active and Inactive golfers. “Golf was very demanding of your time. A club competition may last up to four days and if you want to get a practice in before, that’s another day to include” (I1). Inactive players seemed to perceive time as a barrier to participation and even a contributor to their dropout. “Golf takes up a lot of time and that was one of my deciding factors, I gave up golf so I could study for my TEE” (I4), and “Time is a big thing, you start to fall out of love with the game because my studies became a priority and I just didn’t have the motivation or time to play” (I3). These golfers confirmed a conflict when trying to manage their golf commitments and educational requirements.

While Active participants expressed a similar sentiment in that golf is time consuming, they did not portray that same negative attitude of their Inactive counterparts. Active golfers believed that a balance could be achieved between golf and external commitments.

“Golf is a sport that requires a lot of time, but it’s not as bad as some people make it out to be. To manage going to university and playing golf, it’s all about balance and the odd sacrifice” (A5).
To overcome this barrier, Active golfers seemed to understand when to reduce their golf contact hours and prioritize other aspects of their life. For example: “It’s very time consuming, especially when you hit year 11 and 12, also it’s at that time that competitive golf is increasing… sometimes you just have to choose school over golf (A1)”. In order to maintain that enjoyment for the game there needed to be balance between the time invested in golf and the requirements of school, social activities, and work commitments. Active players reported an ability to achieve stability and possessed the flexibility to prioritize their time so that life demands did not pose a threat to their golf retention.

**Cost**

Active and Inactive golfers identified the financial demands of golf. Women discussed the cost for equipment, clothing, and membership fees, as well as travel expenses for major competitions. “It costs a lot of money to play, if you get to a high level where you’ve got to travel… especially when you’re 16 or 17, you can’t just go over east and play on your own so one of your parents has to come and then you have a hotel and that all costs” (I5). Female golfers felt reliance upon family members to bear the financial burden, particularly as they were still at school or studying at university. “It’s pretty expensive playing golf, my Dad supports me with rent, golf clubs, and membership fees. I don’t think I could do it by myself” (A3), and “It costs heaps but my parents are my bank, they’re the people paying for the tournaments” (A4).

Active players also identified the financial pressures experienced by Inactive golfers and understood how this may impact on an individual’s golf retention. “I think money is a big factor when it comes to golf. People don’t realize how expensive it really is to just simply play, but if you have people behind you and supporting you it makes a difference” (A5). An Inactive participant shared this sentiment: “I hate to think how much my grandparents actually spent on memberships, competitions and coaches,
it is an expensive sport to play and it’s not something that you can do cheaply” (I3). Players that had financial support seemed to retain active participation in golf for a longer period of time. Those that did not meet the costs associated with golf reported a need to withdraw from competitions and even golf completely. “(A lack of) Financial support stops a lot of girls from playing, because there’s only a couple of major tournaments in WA, so you have to travel” (I5), and “It’s just too expensive, I know girls that were playing competitively and had to drop out of school just to pay… if the costs weren’t so high a lot of girls would keep playing” (A1).

4.3 General Discussion

The paper inserted in this thesis has its own discussion section, which addresses the most significant findings and implications of the study. The concept of female golfers’ need for relatedness was the primary focus of the paper and should be referred to for an in-depth understanding of its application to the golf context. As SDT underlies this research project, the concept of psychological needs satisfaction has been a focus for this discussion. Relatedness support, as examined in the paper, is an important contributor to female retention in golf (i.e. parental, peer, and coach, golf club, and male support). As autonomy and competence are considered to be primary needs for fostering self-determined motivation (Ryan & Deci, 2000a), a further analysis of their role in female retention to golf has not been neglected in this study. In the following discussion section, additional results concerning perceived competence and autonomy will be examined with an emphasis on the qualitative findings that were exposed throughout the interview process of Active and Inactive participants.

4.3.1 Perceived Competence and Enjoyment

It has been reported that enjoyment is a key construct for understanding and
explaining the motivation and experiences of sport and exercise participants (Scanlan & Simons, 1992; Wankel, 1993). Women in this study often spoke of their retention to golf in relation to their levels of enjoyment. Active and Inactive participants felt that their enjoyment of golf would increase with winning and achieving success in the competitive arena. Success can increase estimations of competence or efficacy and bring about positive feelings such as happiness or pride, increase self-esteem and motivate continued task engagement (Deppe & Harackiewicz, 1996). The interesting difference between the participants in this study was not the effect of winning, rather the effect of losing on enjoyment levels. People that are intrinsically motivated for an activity will demonstrate volition and willingness to persist at the activity when no external contingencies are present, experiencing interest and enjoyment while doing so (Vansteenkiste & Deci, 2003). Consequently, fostering feelings of enjoyment optimizes positive affective experiences and enhances the development of intrinsic motivation (Kimiecik & Harris, 1996). In this study, Active golfers expressed no variation in their level of enjoyment when they played poorly in competition or practice. Active participants identified a strong internal drive to work even harder at their game even when their performance outcomes were unfavorable. These golfers appeared to focus on their own performance, rather than comparing themselves with the other female golfers. Mastery goals involve a focus on performing a task to learn and or improve on a skill, relative to one’s previous performance (Conroy et al., 2007). Conversely, performance goals involve a focus on outperforming others and are quite common in athletes given the prominent role of social comparison in competitive sports (Conroy et al., 2007). Active golfers identified the attributes of a mastery approach to performance. For example, an Active golfer in this study said: “Although I am playing in top level events and I know I’m the best in the tournament, my goal is to just achieve a top 10 place” (A2). This attitude to performance was shared by another Active golfer: “I get a lot of
excitement from pulling off a shot that I have practiced a lot of times and then played in competition… I try not to look at my performance (in competition) as a whole score outcome, but more like an achievement of each skill” (A5). Active golfers may satisfy their need for perceived competence via goal setting and evaluating their performances in part, rather than peer comparison in competition.

Conversely, Inactive participants’ enjoyment was negatively affected by losing in competition. Similar to Active players, Inactive players expressed a desire to win; however, when the outcome was a loss, the Inactive player cohort expressed less motivation to persevere playing golf. Consistent with previous work, enjoyment is an important sport participation motivational variable, particularly in the youth (Ewing & Seefeldt, 1990; Gould, Feltz, & Weiss, 1985; Hashim, 2007). Inactive participants expressed a decrease or total loss of enjoyment for golf when losing in competition. These players possessed a high level of competence in golf, although they reported characteristics consistent with a performance goals approach in that they discussed their ability with reference to other female golfers in the same level of competition. By comparing their personal ability to others, Inactive participants expressed feelings consistent with a low level of perceived competence. With reference to goal achievement theory, an ego-evolved individual will define their success in a normative fashion, with the aim to outperform others or to win with less effort (Wang & Biddle, 2007). Inactive golfers did not possess the motivation to consistently participate in practice sessions and enter tournaments to develop their golf competence, as they felt it was ‘too much effort’. For example, an Inactive golfer stated, “The more you put in to golf, the more you expect to achieve and you’re your expectations don’t get met you feel like it’s not worth it… I just don’t have time to spend hours on the golf course every day” (I5). Female golfers that remained competitively active displayed higher levels of perceived competence and designed goals and expectations that were not
merely based on performance outcomes. They not only sought motivation from winning but also losing and this consequently led to golf persistence. Inactive participants reflected on memories of failure to achieve in the golf context and discussed feelings associated with a loss of confidence in their ability.

4.3.2 Autonomy Support

To have the freedom of choice to dictate their participation, female golfers positively associated enjoyment and an increased desire to remain competitive in golf. Research suggests that controlling environments undermine intrinsic motivation and pressuring an individual to think, act or feel a particular way diminishes self-determined motivation (Reeve & Deci, 1996). Female golfers that experienced external pressure from parents became withdrawn from competitive golf. In the initial stages of women’s participation, parents played an important role of support and guidance. Research by Baxter-Jones and Maffulli (2003) found young athletes’ involvement in high-level sport to be heavily dependent on parents. As the young golfers matured and developed a more in-depth knowledge of the game, they often surpassed the need for parental direction and became independent.

Active golfers discussed feelings associated with autonomy from a young age by choosing to participate and having flexibility in their competitive regimes. Autonomy support from various people (i.e. parents, peers, and coach) positively predicts autonomy, relatedness and competence need satisfaction, as well as intrinsic motivation (Edmunds, Ntoumanis, & Duda, 2007; Frederick & Ryan, 1995). SDT posits that satisfaction of all three psychological needs will foster self-determined motivation and adherence to specific physical activities (Deci & Ryan, 2000). Inactive participants experienced parental pressures, such as being ‘pushed’ to practice and enter competitions. These players remained active in golf to simply satisfy their parents’
expectations; however, their participation in golf was short-lived. Ultimately, the lack of perceived autonomy felt by these women played an influential role in their enjoyment and eventual golf dropout. A study by MacPhail, Gorely, Kirk, and Kinchin (2008), found physical education classes to be more enjoyable for children when greater opportunities for autonomy were provided. Similarly, Gagne et al., (2003) researched autonomy support in gymnasts and discussed the positive effects of parental autonomy support on their child’s motivation. This particular study identified autonomy support from parents to not only influence gymnasts’ quality of sport participation (i.e. enjoyment) but also behavioral involvement. The freedom of choice to participate is a significant facilitator of female sport retention.

4.3.3 Environmental Barriers

Research into the barriers to female participation in sport has exposed several environmental factors, such as limited facilities, clothing, and low perceived competence, cost, and time (Taggart & Sharp, 1996; Weiss, 1994). In this study, Active and Inactive female golfers discussed the potential barriers to golf participation, in addition to those psychological needs covered in light of SDT. Cost and time were the most significant environmental barriers that golfers faced in this context. All female golfers felt the pressures of cost and time, although participants that withdrew from golf appeared to be most affected by these variables. Research has revealed that insufficient time due to work and study commitments is the most significant constraint to adolescents’ participation in sport (Australian Bureau of Statistics, 2007). A study into parental perceptions about children’s sport participation revealed that one third of parents were ‘a lot more likely’ to allow their children to engage in sport if the cost was lower. Parents perceived cost as a key barrier to their child’s sport participation and were most significant in families with daughters (Hardy, Kelly, Chapman, King, &
Farrell, 2010). Active and Inactive participants in this study identified the pressures associated with the cost and time required to successfully participate in golf. Financial support from parents and family played an important role in the retention of adolescent participants. If participants were deprived of this financial assistance, withdrawal from golf was a consistent outcome. Active participants managed time better by developing key strategies, such as prioritizing and handling barriers to participation with flexibility, and this was essential for golf retention.

To increase the chances of retention, young women may benefit from guidance and education regarding time management. Throughout adolescence it can be difficult for young women to manage the time demands associated with study, work, sport, social activities, and family commitments (Taggart & Sharp, 1996). A suggestion to golf organizations would be to educate their respective participants to equip them with the necessary skills to retain golf participation without sacrificing other aspects of their life (i.e. study and work). In addition, golf clubs may need to investigate payment plans or provide alternative financial support for elite female golfers that are unable to meet cost requirements, such as scholarships, loans etc. By providing assistance with the aim of minimizing the effect of cost and time pressures in golf, female golf retention could be enhanced.
4.3.4 Results Diagram

Figure 2.

Categories and Themes derived from Qualitative Research in Active and Inactive Female Golf Participants.

Note. Underlined categories within the blue boxes represent the basic psychological needs within SDT. Themes represented within the white boxes indicate variables that were discussed in relation to golf retention.
4.4 Conclusion

This research aimed to determine the barriers and facilitators of female retention to golf. Prior research into female dropout from sport has been provided (Department of Sport & Recreation Australia, 2005; English Women’s Golf Association, 2007); however, this work was undertaken in the absence of a theoretical framework. The research reported in this thesis involved an examination of the three needs (competence, autonomy, and relatedness) discussed within SDT as important for the facilitation of self-determined motivation. Findings from this study provide a useful means to understanding motivational processes in women, particularly in the physical activity context.

Active and Inactive female golfers were interviewed to develop a rich understanding of the factors that may encourage or impede retention to golf. Qualitative results revealed female’s strong desire to satisfy relatedness in the golf context. Active participants identified connectedness from parents, peers, and coaches, and golf clubs as important to retention, whilst Inactive players reported an absence of relatedness for these themes. Additional higher-order categories of competence and autonomy were explored and revealed a need for their satisfaction to foster more self-determined forms of motivation, as referenced by feelings of enjoyment. Moreover, to further facilitate female golf retention, financial assistance and education are required to ensure families can meet the costs associated with golf, and players can more confidently manage their time. These changes will potentially serve to limit the effect of barriers to female golf retention and provide an ideal environment for women to play golf.
References


*Qualitative Health Research, 11*, 522-537.

APPENDICIES

ADMINISTRATIVE FORMS

APPENDIX A:

Human Research Ethics Committee Approval
Dear Professor Whipp

**SCIENCE RERC– ETHICS APPROVAL**

*Understanding the golf ecology that serves to facilitate female interest, participation and retention*

**Student(s):** Natalie Robin Williams - Masters - 10326404

Ethics approval for the above project has been granted by the Science RERC from 22 February 2010 to 28 February 2011 in accordance with the requirements of the *National Statement on Ethical Conduct in Human Research* (National Statement) and the policies and procedures of The University of Western Australia.

You are reminded of the following requirements:

1. The application and all supporting documentation form the basis of the ethics approval and you must not depart from the research protocol that has been approved.
2. The Human Research Ethics Office must be approached for approval in advance for any requested amendments to the approved research protocol.
3. The Chief Investigator is required to report immediately to the Human Research Ethics Office any adverse or unexpected event or any other event that may impact on the ethics approval for the project.
4. The Chief Investigator must inform the Human Research Ethics Office as soon as practicable if a research project is discontinued before the expected date of completion, providing reasons.

Any conditions of ethics approval that have been imposed are listed below:

**Special Conditions**

*None specified*

The University of Western Australia is bound by the National Statement to monitor the progress of all approved projects until completion to ensure continued compliance with ethical standards and requirements.

Please note that the maximum period of ethics approval for this project is five (5) years from the date of this notification. However, ethics approval is conditional upon satisfactory progress reports being received by the designated renewal date for continuation of ethics approval. The Human Research Ethics Office will forward a request for a progress report communication for your completion approximately four weeks before this renewal date.

**If your progress report is not then received by the renewal date, your ethics approval will expire, requiring that all activities relating to the project cease immediately.**

If you have any queries please do not hesitate to contact Kate Kirk on (08) 6488 3703.

Please ensure that you quote the file reference – RA/4/1/4074 – and the associated project title in all future correspondence.

Yours sincerely

[Signature]

Peter Johnstone
Manager
Human Research Ethics
APPENDIX B:

Thesis Declaration
DECLARATION FOR THESES CONTAINING PUBLISHED WORK AND/OR WORK PREPARED FOR PUBLICATION

The examination of the thesis is an examination of the work of the student. The work must have been substantially conducted by the student during enrolment in the degree.

Where the thesis includes work to which others have contributed, the thesis must include a statement that makes the student’s contribution clear to the examiners. This may be in the form of a description of the precise contribution of the student to the work presented for examination and/or a statement of the percentage of the work that was done by the student.

In addition, in the case of co-authored publications included in the thesis, each author must give their signed permission for the work to be included. If signatures from all the authors cannot be obtained, the statement detailing the student’s contribution to the work must be signed by the coordinating supervisor.

Please sign one of the statements below.

1. This thesis does not contain work that I have published, nor work under review for publication.

   Signature........................................................................................................................................

2. This thesis contains only sole-authored work, some of which has been published and/or prepared for publication under sole authorship. The bibliographical details of the work and where it appears in the thesis are outlined below.

   Signature......Natalie Williams............. .........................................................

3. This thesis contains published work and/or work prepared for publication, some of which has been co-authored. The bibliographical details of the work and where it appears in the thesis are outlined below.

   The student must attach to this declaration a statement for each publication that clarifies the contribution of the student to the work. This may be in the form of a description of the precise contributions of the student to the published work and/or a statement of percent contribution by the student. This statement must be signed by all authors. If signatures from all the authors cannot be obtained, the statement detailing the student’s contribution to the published work must be signed by the coordinating supervisor.

   Signatures........................................................................................................................................
APPENDIX C:

Information Sheet to Parents and
Parent/Child Consent Form
INFORMATION SHEET FOR PARENTS

Title of Research Study

‘Understanding Golf: Female interest, participation and retention.’

Researchers at The University of Western Australia are investigating women in golf and the potential barriers that may discourage them from participating in this sport. You have been invited to participate in this research project, which will involve a questionnaire and personal interview to discuss your golf experiences.

Your daughter has been invited to participate in this research project and we would like to request your permission for your child’s involvement in the study. Her participation is entirely voluntary and highly valued. Your daughter will be free to withdraw from the study at anytime without prejudice.

Details of this research are as follows:

1. Purpose

The purpose of this study is to develop an understanding of the golf environment that serves to facilitate female interest, participation and retention. The study will aim to expose the potential barriers that may influence the golf behaviours of women.

Your child’s participation in this study will assist in understanding the potential barriers and facilitators that affect the golf participation of women.
2. Procedures

The study will consist of a written questionnaire that will seek to ascertain your child’s current golf behaviours. In addition, a 45-minute interview with the primary researcher, Mrs Natalie Williams, will form the main component of the research method. The interview will be semi-structured, whereby your child will be asked a series of categorical questions that relate specifically to her past and current golf experiences.

Voice-recording will be used during interviews for the purpose of research coding and analysis only. They will not be available to anyone outside of the UWA research team. During the study, they will be stored under lock-and-key by the researcher. After the study, they will be given to the chief investigator for secure storage within the School of Sport Science, Exercise and Health’s facilities.

3. Risks

Your child will not be exposed to any risks throughout the duration of this study or as a result of her participation.

4. Benefits

The potential benefits of this study will be to provide practical information to major golf organisations on the establishment of an ideal golf environment that will serve to enhance the interest, participation and retention of golf behaviours in females. The research undertaken will target the specific barriers related to golf adherence as a means of proposing an intervention program for golf associations. The study will recognize the psychological, physical and environmental needs of females in the golf context and how these can be supported to encourage adherence to golf.

The information that your child presents to this study will be valuable to golf organisations in the planning and delivery of golf to women of all contexts.

5. Confidentiality

Your child’s information provided in the questionnaire will be completely confidential. Neither her name nor personal information will appear in any publication. All data collected will be handled in a safe and secure manner by the researchers.

All survey responses and interview transcripts will be stored in a locked filing cabinet in a locked office of a staff member in a building of the Sports Science, Exercise and Health (SSEH), UWA. Only the researcher and the supervisor of this project will have access to the data.
6. Your Child’s Rights as a Participant

Please note that if your child completes any of the questionnaires, it is considered evidence of consent to participate in this study. However, prior to implementing the questionnaire and interview, written consent will be required from a parent or legal guardian if your child is under the age of 18 years. Your child’s participation in this study does not prejudice any right to compensation that you may have under statute of common law. Participation is voluntary and you are free to withdraw from the study at any time without prejudice. You do not have to justify your decision.

8. Agreement Form (participation in interviews)

If you would like to provide consent for your child/ward to participate in this study, please complete the parent/child consent form. A nil reply would mean no consent has been given.

If you or your child chooses to withdraw during the study, we may wish to retain the data that we have recorded from you but only if you agree, otherwise your records will be destroyed.

For further clarification on the procedures employed in the research study, please feel free to contact the primary researchers at:

Mrs Natalie Williams  phone: 0402 903 592  email: 10326404@student.uwa.edu.au
Assoc/Prof Peter Whipp  phone: 6488 2793  email: pwhipp@cyllene.uwa.edu.au

We would like to thank you in anticipation for allowing your daughter to be involved in this study.

Mrs Natalie Williams
Assoc/Prof Peter Whipp
PARENT/CHILD CONSENT FORM

Title of Research Study

‘Understanding Golf: Female interest, participation and retention.’

I _____________________________ have read the information provided and any questions I have asked have been answered to my satisfaction. I agree to allow my daughter, ______________________________ to participate in this study, comprising of a written questionnaire and interview, realising that I may withdraw her at any time without reason and without prejudice. I understand that all information provided is treated as strictly confidential and will not be released by the researchers unless required to by law. I have been advised as to what data is being collected, what the purpose is, and what will be done with the data upon completion of the research.

I agree that research data gathered for the study may be published provided my name or other identifying information is not used.

Parents’ Signature : ___________________________  Date : ___________________________
APPENDIX D:

Information Sheet to Participants and
Participant Consent Form
Dear Participants,

Researchers at The University of Western Australia are investigating women in golf and the potential barriers that may discourage them from participating in this sport. You have been invited to participate in this research project, which will involve a questionnaire and personal interview to discuss your golf experiences.

**Title of Research Study**

‘Understanding Golf: Female interest, participation and retention.’

**Researchers:**

Mrs Natalie Williams       Masters in Science
Associate Professor Peter Whipp  Associate Professor: Health and Physical Education
Dr James Dimmock          Assistant Professor: Sport and Recreation Management
Dr Ben Jackson            Research Associate: Exercise, Health and Sport
                             Psychology

**1. Purpose**

The purpose of this study is to develop an understanding of the golf environment that serves to facilitate female interest, participation and retention. The study will aim to expose the potential barriers that may influence the golf participation of women.
2. Procedures
The study will consist of a written questionnaire that will seek to ascertain the participant’s current golf behaviours. In addition a 45-minute interview with the primary researcher, Mrs Natalie Williams, will form the main component of the research method. The interview will be semi-structured, whereby participants will be asked a series of categorical questions that relate specifically to past and current golf experiences.

Voice-recording will be used during interviews for the purpose of research coding and analysis only. They will not be available to anyone outside of the UWA research team. During the study, they will be stored under lock-and-key by the researcher. After the study, they will be given to the chief investigator for secure storage within the School of Sport Science, Exercise and Health’s facilities.

3. Risks
There will be no personal risks associated with being a participant in this study.

4. Benefits
The potential benefits of this study will be to provide practical information to major golf organizations on the establishment of an ideal golf environment that will serve to enhance the interest, participation and retention of golf behaviors in females. The research undertaken will target the specific barriers related to golf adherence as a means of proposing an intervention program for golf associations. The study will recognize the psychological, physical and environmental needs of females in the golf context and how these can be supported to encourage adherence to golf.

5. Confidentiality
All information and personal details supplied by participants will remain anonymous. Participant names and personal information will be completely confidential and will not appear in any publication associated with this study. All data collected will be handled in a safe and secure manner by the researchers. Survey responses and interview transcripts will be stored in a locked filing cabinet in a locked office of a staff member in a building of the Sports Science, Exercise and Health (SSEH), UWA. Only the researcher and the supervisor of this project will have access to the data.

6. Your Rights as a Participant
Please note that if you complete any of the questionnaires, it is considered evidence of consent to participate in this study. Your participation in this study does not prejudice any right to compensation that you may have under statute of common law. Participation is voluntary and you are free to withdraw from the study at any time without prejudice. You do not have to justify your decision.
If you do withdraw during the study, we may wish to retain the data that we have recorded from you but only if you agree, otherwise your records will be destroyed.

For further clarification on the procedures employed in the research study, please feel free to contact the primary researchers at:

Mrs Natalie Williams  
*phone:* 0402 903 592  
*email:* 10326404@student.uwa.edu.au

Assoc/Prof Peter Whipp  
*phone:* 6488 2793  
*email:* pwhipp@cyllene.uwa.edu.au

Please note:

The Human Research Ethics Committee at The University of Western Australia requires that all participants are informed that, if they have any complaint regarding the manner, in which a research project is conducted, it may be given to the researcher or, alternatively to the Secretary, Human Research Ethics Committee, Registrar’s Office, University of Western Australia, Nedlands, WA 6907 (telephone number +61-8-6488-3703). All study participants will be provided with a copy of this Information Sheet and Consent Form for their personal records.
PARTICIPANT CONSENT FORM

Title of Research Study
‘Understanding Golf: Female interest, participation and retention.’

I _____________________________ have read the information provided and any questions I have asked have been answered to my satisfaction. I agree to participate in this study, comprising of a written questionnaire and interview, realising that I may withdraw at any time without reason and without prejudice. I understand that all information provided is treated as strictly confidential and will not be released by the researchers unless required to by law. I have been advised as to what data is being collected, what the purpose is, and what will be done with the data upon completion of the research.

I agree that research data gathered for the study may be published provided my name or other identifying information is not used.

Participant Signature : ___________________ Date : ______________________

The Human Research Ethics Committee at the University of Western Australia requires that all participants are informed that, if they have any complaint regarding the manner, in which a research project is conducted, it may be given to the researcher or, alternatively to the Secretary, Human Research Ethics Committee, Registrar’s Office, University of Western Australia, 35 Stirling Highway, Crawley, WA 6009 (telephone number 6488-3703). All study participants will be provided with a copy of the Information Sheet and Consent Form for their personal records.
INTERVIEW QUESTIONS

APPENDIX E & F:

Active and Inactive Participant Interview Questions
INTRODUCING QUESTIONS

INTERVIEWER: Natalie Williams

INTERVIEWEE:

DATE:

LOCATION:

STAGE 1.

**Personal History Identification**

- How and why did you first become involved in Golf?
- Could you describe the main things that motivated you to play golf?
- If you could rate your level of enjoyment towards golf now, what number would you select? (Likert Scale)
- Can you describe any fluctuations in this rating throughout your golfing experience? Can you think of a time when enjoyment was at its highest? (Probe with why?).
- Can you think of a time when your motivation was at its highest (lowest), why was that?

STAGE 2.

**COMPETENCY**

- Can you describe your level of ability as a golfer? (novice, some competence, moderately competent, highly competent, expert) Why? (Probe for specific characteristics)
- What do you believe is essential to be a ‘good’ golfer? Why?
- What makes you feel more competent in golf?
- How old were you and how did you feel when you first achieved a handicap?
- Having achieved a handicap, what tournaments and competitions have you been involved in? (If many, what was your highest level of competition and when?)
- Why did you enter into competitions?
- Have you won any golf competitions? How did winning make you feel? Was this a key motivator for you and why?
- Can you describe how your ability in golf has changed over time? Why?
- And, if at all, could you describe how that impacted on your feelings about golf?

We previously spoke of your level of enjoyment in golf, how would you rate this statement?
‘To enjoy golf, you must be good at it?’

Do you think your level of enjoyment would be influenced in you started to play better or worse?
If you began to play poorly would you be more inclined to play golf more often or less often? Why?

STAGE 3.

RELATEDNESS

- Who was the main influence that sparked an interest in golf for you? Does this person continue to motivate you to play? If not, who is the key figure of encouragement for your participation in golf?
- Can you describe the classes that you have been involved in throughout your golf experience?
  - Number of participant
  - Single versus mixed gender classes
  - Private versus group
- Can you describe the kind of lesson that you enjoy most? Why?
- Would you say you are friends with the other people in the class? Did you meet outside the golf environment?
- Are these friends different from your school friends or mainstream friends? Why?
- How did your friends influence your golf involvement? (participation, interest & retention)
- Can you describe the best (worst) coach you ever had?
- Was your long-term coach male or female? Do you have a preference, why?
- How did your coach influence your participation/interest/retention in golf?
- Do you prefer to play a round of golf by yourself or with others? Why?
- How important is it to you to belong to a club? Why?
- Do you feel as though you are a part of the club association, do you fit in with the other golfers?
- What do you think a club’s core values are?
- Are the club’s traditions and rules in-line with your own values?
- Can you recall the time when you most enjoyed golf? Do you recall anything to do with friends, family or your coach, that was important for you at this time? How did this relate to your enjoyment?
- Do you think that being a part of a club influences a golfer’s participation, retention and interest?
- Aside from your coach and golf friends, are there any other people who have influenced your golfing involvement? If so, who, how, why?

Rate this statement ‘I enjoy playing golf alone’.

Rate this statement ‘I enjoy playing golf in a group’.

Rate this statement ‘The most influential factor to my enjoyment of golf is who I play with’.

STAGE 4.

AUTONOMY

- Did you always choose to play golf or has there been a time where you felt forced to participate? How does that make you feel about playing?
- Do you think you are a motivated person? What makes you motivated, why?
- What kind of role do your parents play in your golf participation? How do that make you feel in terms of your motivation?
• At practice, is there someone who designed your golf sessions, or do you have an active role in the decision-making process/do you have the opportunity to dictate how a training session ran? Were you comfortable with this?
• How does your coach provide you with flexibility and freedom of choice?
• What time and day do you generally play tournaments? Do you like this or would you change it? Do you have the power to change this? Can you describe this?

Rate this statement ‘Having the freedom to design training/practice is the most important factor to enjoying golf’.

Rate this statement, ‘Having rules at a Golf Club ensures that maximal enjoyment is achieved for all its members?’

Rate this statement, ‘Girls get an equal opportunity in all aspects of a Golf Club.’

STAGE 5.

Reflection

• Can you describe a time when you were not playing golf regularly or contemplated quitting? Why was that?
• Why do you think other girls do not continue with golf as you have?
• Can you relate to these barriers or are there other barriers that influenced your choices to continue playing golf? In that case, what has made you continue?
• What would you say were the major factors that enable you to continue playing golf?
• In comparison to the others that you have known to drop out of golf, what do you think lead you to continuing playing?
• Have your reasons for playing golf changed at all during your overall experience? Why?
• In a perfect situation, what would you change in a golf environment, specifically with the aim of promoting participation for girls?

FINISH

• So, that brings us to the end of the interview. Is there anything to do with your golf experience that we have not discussed that you would like to add?
• Do you have any questions?
• May I ask for some feedback? How do you feel the interview went and do you have any suggestions for the future?
• Thank you. When we have completed our findings, I will be sure to provide a copy of this to you.
F: INACTIVE PARTICIPANT

INTERVIEW QUESTIONS

INTERVIEWER: Natalie Williams

INTERVIEWEE:

DATE:

LOCATION:

STAGE 1.

Personal History Identification

• How and why did you first become involved in Golf?
• Could you describe the main things that motivated you to play golf?
• If you could rate your level of enjoyment towards golf now, what number would you select? (Likert Scale)
• Can you describe any fluctuations in this rating throughout your golfing experience? Can you think of a time when it was at its highest? (Probe with why?).

STAGE 2.

COMPETENCY

• Can you describe your highest level of ability as a golfer? (novice, some competence, moderately competent, highly competent, expert) Why? (Probe for specific characteristics)
• What do you believe is essential to be a ‘good’ golfer? Why?
• What makes you feel more competent in golf?
• How did you feel when you first achieved a handicap?
• Having achieved a handicap, what tournaments and competitions have you been involved in? (If many, what was your highest level of competition and when?)
• Why did you enter into competitions?
• Have you won any golf competitions? How did winning make you feel? Was this a key motivator for you and why?
• Can you describe how your ability in golf has changed over time? Why?
• And, if at all, could you describe how that impacted on your feelings about golf?

We previously spoke of your level of enjoyment in golf, how would you rate this statement? ‘To enjoy golf, you must be good at it?’

Do you think your level of enjoyment would be influenced in you started to play better or worse?
If you began to play poorly would you be more inclined to play golf more often or less often? Why?
STAGE 3.

**RELATEDNESS**

- Who was the main influence that sparked an interest in golf for you? Does this person continue to motivate you to play?
- How has this relationship changed since you stopped playing competitively?
- Can you describe the classes that you have been involved in throughout your golf experience?
  - Number of participant
  - Single versus mixed gender classes
  - Private versus group
- Can you describe the kind of lesson that you enjoy most? Why?
- Would you say you were friends with the other people in the class? Did you meet outside the golf environment?
- Were these friends different from your school friends or mainstream friends?
- How did your friends influence your golf involvement? (participation, interest & retention)
- Can you describe the best (worst) coach you ever had?
- Was your long-term coach male or female? Do you have a preference, why?
- How did your coach influence your participation/interest/retention in golf?
- Did you prefer to play a round of golf by yourself or with other? Why?
- How important is it to you to belong to a club? Why?
- Do you feel as though you are a part of the club association, do you fit in with the other golfers?
- What do you think a club's core values are?
- Are the club’s traditions and rules in-line with your own values?
- Can you recall the time when you most enjoyed golf? Do you recall anything to do with friends, family or your coach, that was important for you t this time? How did this relate to your enjoyment?
- Do you think that being a part of a club influences a golfer’s participation, retention and interest?

Rate this statement ‘I enjoy playing golf alone’.

Rate this statement ‘I enjoy playing golf in a group’.

Rate this statement ‘The most influential factor to my enjoyment of golf is who I play with’.

STAGE 4.

**AUTONOMY**

- Do you think you are a motivated person? What makes you motivated, why?
- Can you think of a time when your motivation was at its highest (lowest), why was that?
- Did you always choose to play golf or has there been a time where you felt forced to participate? How does that make you feel about playing?
- What kind of role did your parents play in your golf participation? How did that make you feel in terms of your motivation?
- At practice, was there someone who designed your golf sessions, or did you have an active role in the decision-making process/did you have the opportunity to dictate how a training session ran? Were you comfortable with this?
- How did your coach provide you with flexibility and freedom of choice?
• What time and day did/do you generally play tournaments? Did you like this or would you change it? Do you have the power to change this? Can you describe this?

Rate this statement ‘Having the freedom to design training/practice is the most important factor to enjoying golf’.

Rate this statement, ‘Having rules at a Golf Club ensures that maximal enjoyment is achieved for all its members?’

Rate this statement, ‘Girls get an equal opportunity in all aspects of a Golf Club.’

STAGE 5.

Reflection

• Can you identify and describe some reasons why you withdrew from golf?
• Why do you think other girls do not continue with golf? Are there any barriers that they may have faced that you did not experience?
• What would enable you to continue playing golf?
• What do you think has led others to continue playing?
• Did your reasons for playing golf change at all during your overall experience? Why?
• In a perfect situation, what would you change in a golf environment, specifically with the aim of promoting participation for girls?

FINISH

• So, that brings us to the end of the interview. Is there anything to do with your golf experience that we have not discussed that you would like to add?
• Do you have any questions?
• May I ask for some feedback? How do you feel the interview went and do you have any suggestions for the future?
• Thank you. When we have completed our findings, I will be sure to provide a copy of this to you.
QUESTIONNAIRES

APPENDIX G & H:

Demographic Questionnaire &

UWA Golf Questionnaire
Name: _____________________________________________

D.O.B: ________________________  Age: ________________________

Address: _____________________________________________________

Email: _____________________________________________________

Contact Number: _____________________________________________

Please tick or provide a written answer to the questions below, in regards to your golf experience.

1. *Indicate the highest level of education achievement:*
   - Secondary Education
   - Tertiary Education (Bachelor Degree)
   - Postgraduate Study (Diploma, Honors and Masters)
   - Other _____________________________________________

2. *Indicate the number of years that you have been involved with golf as a participant:*
   - 0-3 years
   - 3-5 years
   - 5-7 years
   - 7-10 years
   - More than 10 years

3. *How long have you had a handicap?*
   - Never had a handicap
   - Less than 6 months
   - 6 months to 1 year
   - 1-2 years
   - 3-5 years
   - More than 5 years (please indicate: ________________ years)
   - No longer have an accurate handicap

4. *What is the lowest handicap you have achieved: __________________ Year ________

   Current Handicap ___________________________
5. *Indicate how regularly you play golf non-competitively (socially) at this point in time:*

- [ ] More than once a week
- [ ] Once a week
- [ ] Once a fortnight
- [ ] Once a Month
- [ ] Once every 6 months
- [ ] Once a year

6. *Indicate how regularly you play golf competitively at this point in time:*

- [ ] Never
- [ ] More than once a week
- [ ] Once a week
- [ ] Once a fortnight
- [ ] Once a Month
- [ ] Once every 6 months
- [ ] Once a year

7. *Are the answers you have given for participation regularity (Question 6. and 7.) representative of your normal golfing activities? If not, what is a better representative of your golfing activities over the past 12 months?*

   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________

8. *List the clubs that you have been involved with as a member.*

   ____________________________________________________________
   ____________________________________________________________

9. *Have you represented any organization or association for Golf?*

   ____________________________________________________________
**INSTRUCTIONS:**

Using the scale below, please rate each of the following questions with respect to your experience with golf.

**NOTE:** The answer to each question should reflect your *current* perceptions of golf (how you feel about golf, now).

### QUESTIONS:

<table>
<thead>
<tr>
<th>Question</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>I enjoy playing golf very much.</td>
<td></td>
</tr>
<tr>
<td>Golf is fun to do.</td>
<td></td>
</tr>
<tr>
<td>I think golf is boring</td>
<td></td>
</tr>
<tr>
<td>Golf does not hold my attention at all.</td>
<td></td>
</tr>
<tr>
<td>I would describe Golf as very interesting.</td>
<td></td>
</tr>
<tr>
<td>I think Golf is quite enjoyable.</td>
<td></td>
</tr>
<tr>
<td>While I play Golf, I think about how much I enjoy it.</td>
<td></td>
</tr>
<tr>
<td>I think I am pretty good at playing Golf.</td>
<td></td>
</tr>
</tbody>
</table>

1 = Not at all  2 = Somewhat True  3 = Slightly True  4 = True  5 = Very True  6 = Somewhat False  7 = Not at all
I think I play Golf pretty well, compared to other players. __________________

After working at playing Golf for awhile, I feel pretty competent. ____________

I am satisfied with my performance in playing Golf. ___________________________

I am pretty skilled at playing Golf. __________________________

Golf is an activity that I can’t do very well. __________________________

I put a lot of effort into playing Golf. __________________________

I do not try very hard to do well at playing Golf. __________________________

I try very hard when playing Golf. __________________________

It is important to me to do well at playing Golf. __________________________

I do not put much energy into playing Golf. __________________________

I do not feel nervous at all while playing Golf. __________________________

I feel very tense while playing Golf. __________________________

I am very relaxed in playing Golf. __________________________

I am anxious while playing Golf. __________________________

I feel pressured while playing Golf. __________________________

I believe I have some choice about playing Golf. __________________________

I feel like it was not my own choice to play Golf. __________________________

I do not really have a choice about playing Golf. __________________________

I feel like I have to play Golf. __________________________

I play Golf because I have no choice. __________________________

I play Golf because I want to. __________________________

I play Golf because I have to. __________________________

I believe playing Golf could be of some value to me. __________________________
I think that playing Golf is useful.

I think that Golf is important to do.

I am willing to play Golf again because it has some value to me.

I think playing Golf can help me.

I believe playing Golf can be beneficial to me.

I think Golf is an important activity.

I feel like I am free to decide for myself to play golf.

I really like the people I interact with in golf.

Often, I do not feel very competent in golf.

I feel pressured in golf.

People I know tell me I am good at golf.

I get along with people I come into contact with in golf.

I pretty much keep to myself and don't have a lot of social contacts in golf.

I generally feel free to express my ideas and opinions in golf.

I consider the people I regularly interact with in golf to be my friends.

I have been able to learn interesting new skills recently in golf.

In my daily life, I frequently have to do what I am told at golf.

People at golf care about me.

Most days I feel a sense of accomplishment from golf.

People I interact with in golf tend to take my feelings into consideration.

In golf, I do not get much of a chance to show how capable I am.

There are not many people that I am close to in golf.

I feel like I can pretty much be myself in golf.
The people I interact with regularly in golf do not seem to like me much._________

I often do not feel very capable in golf. ___________________________

There is not much opportunity for me to decide myself how to do things in golf. ___

People are generally pretty friendly towards me at golf. _____________

END OF QUESTIONNAIRE.