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Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Jimmy van der Colk
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Ethics Approval

Ethics approval was granted by the Auckland University of Technology Ethics Committee on 10 March 2015 (15/47) (Appendix B).
Abstract
This study is an exploration of whether golf-related online community use is related to sport involvement, social capital, the social aspect of life satisfaction and golf participation. Golf-related online community use was measured in two ways: total time spent in online communities and the extent of contribution in online communities. The study is best characterised as quantitative research. In total, 101 usable responses to an online questionnaire were received using convenience sampling. The data was analysed with mean difference testing and correlation analyses.

It was found that those who contribute more often in online communities experience greater levels of one of the three dimensions of involvement, bonding and bridging social capital and the social aspect of life satisfaction. There was no significant difference between those who lurked (individuals who do not post but regularly read content in online communities) and those who contributed in two of the three sport involvement dimensions, the influence of golf on the social aspect of life satisfaction and the average number of rounds of golf played per month. The correlation analyses suggest that when an individual spends more time online they are likely to report greater levels of all three dimensions of sport involvement, bonding social capital, bridging social capital and a greater influence of golf on the social aspect of life satisfaction. However, the analysis did not suggest an individual would play more golf, improve their handicap or report greater levels of the social aspect of life satisfaction if they spent more time in online communities. Recommendations are made for future researchers and implications are identified for sport managers.
Chapter 1: Introduction

1.1 Background
It is no exaggeration to say online communities have changed the world. As of December 2014 the average number of daily Facebook users was 890 million (Facebook, 2015). In the United States those with a Facebook account spent an average of 40 minutes per day using the social networking site (SNS) (Facebook, 2014a). These statistics emphasise the significance of SNSs (an online communication platform where users can produce content and interact with the content produced by others) (Ellison & Boyd, 2013).

In the field of sport management there have been numerous journal articles exploring the relationship between elite, often private sector based, sport organisations and the way they manage social media accounts (Eagleman, 2013; Walsh, Clavio, Lovell & Blaszka, 2013). However, the consequences of online community use in a community sport context is unknown (Mahan, Seo, Jordan, & Funk, 2015). Some researchers such as Berger, O'Reilly, Parent, Segum and Hernandez (2008) have expressed concern that screen activities, like online community use, are a factor contributing to a decline in physical activity among youth. It may not be as simple as it seems. Mahan et al., (2015) found sport related online community can increase the amount of time an individual spends participating in physical activity. Thus, spending time on sport related screen activities may initiate physical activities. Mahan et al., (2015) also found individuals who used sport related SNSs were more satisfied with their social life. These findings suggest that sport related online community use may have a positive effect on sport related aspects of life.

1.1.1 Research Context. This dissertation explores the relationship between golf-related online community use and several community sport related outcomes. The project was conducted in partnership with NZ Golf. This partnership extended to NZ Golf advertising a link to an online survey on their website and Facebook page. NZ Golf is a National Sport Organisation (NSO) with the largest member base of any sport in New Zealand (NZ Golf, 2015). Golf is the 7th highest participation sport for adult men and the 17th highest for adult women (Sport New Zealand, 2014). The popularity is even more pronounced in older populations (Sport New Zealand, 2014). However, NZ Golf faces several issues, including a declining membership.

Declining membership is the biggest contributor of declining revenues, which in turn leads to an increased cost of participation (NZ Golf, 2014a). In 2009, Bill
MacGowan, former NZ Golf chief executive, told the New Zealand Press Association that although club membership numbers experienced an increase during 2008 the number base will decline due to a worsening economy, increasing maintenance costs and a resistance to change shown by many clubs (Davidson, 2009). Time has proven MacGowan’s predictions to be correct. During 2008 and 2014 the membership has decreased from 128,965 to 110,159 and the issue has only recently begun to be addressed (NZ Golf, 2014).

In their latest strategic plan it was noted that the organisation has not had a clear and well communicated strategic plan in place for the past 3 years (NZ Golf, 2014a). This is likely the cause of several issues, one being that the “membership base is ageing and declining … [with] very low junior playing numbers” (NZ Golf, 2014a, p. 2). In fact, less than 1% of girls and just 2.5% of boys aged 15-18 are interested in trying golf (IPSOS & Sport New Zealand, 2014). As it stands, golfers are ageing and numbers are declining while young people don’t seem to be that interested in the sport. It is well known that online communities, particularly SNSs, are very popular in younger populations (Braun, 2013; Chung, Park, Wang, Fulk, & McLaughlin, 2010). This makes online communities a potentially useful avenue for golf managers to reach younger target markets.

Obviously, the overriding goal of NZ Golf is to get people playing golf. Therefore golf participation, being of great importance to golf managers who are tasked with maintaining or increasing usage of golf facilities, is one of the outcome variables in this research. The relationship between online community use and golf participation, to be measured as the number of rounds played per month, will be of major importance to golf manager. The association between sport-related SNS use and frequency of physical activity is of interest to health researchers as frequency of participation is known to enhance physical and mental health among older populations (Penedo & Dahn, 2005).

1.2 Constructs and Variables
This research aims to explore the relationships between golf-related online community use and (a) golf participation; (b) the social aspect of life satisfaction; (c) social capital; and (d) involvement. A brief overview of these important psychological constructs as well as the behaviour variables is provided in this section.

1.2.1 Online communities. Online communities, and specifically golf related SNSs/discussion forums are the foci of this study. SNSs are the most popular type of online community and have various characteristics which differentiate them from other types of online communities. First, SNSs have personal profiles which can be controlled
by the user. For example, an individual can supply photos, personal information, text and other such content (Ellison & Boyd, 2013). Second, individuals can become “friends” or “connect” with others, creating a network. Typically, these networks are public which allows others to view them (Ellison & Boyd, 2013). Third, there is a stream which displays the content supplied by an individual’s network (Ellison & Boyd, 2013).

Prior to 2006, when SNSs became increasingly popular, discussion forums were one of the favoured types of online communities (Boyd & Ellison, 2007). A discussion forum is a website which allows a channel for individuals to communicate about a specific topic (Safko, 2012). In comparison, SNSs are very general containing a wide range of provided services. This study is limited to the exploration of golf related activities undertaken by individuals on SNSs and discussion forums. Two types of online community users have been identified in the literature - contributors and lurkers - are considered in this research. A contributor can be considered someone who actively posts content while a lurker seldom posts but regularly reads content (Sun et al., 2014).

Mahan et al.’s., (2015) research explored SNSs, discussion forum use between involvement and running behaviour and the social aspect of life satisfaction. The results found running-related online community use is a mediator between running involvement and the variables, social life satisfaction and running behaviour. The current dissertation design draws heavily on Mahan et al.’s., (2015) research, although the context is quite different. The finding that online communities can positively influence sport related aspects of life sets the stage for the current project.

1.2.2 Sport involvement. Recent research has conceptualised involvement for specific use in the field of sport management (Beaton et al., 2011). Sport involvement is “present when individuals evaluate their participation in a sport activity as a central component of their life that provides both hedonic and symbolic value” (p. 128). This definition includes essential components that have been used to measure involvement as a multidimensional construct in previous leisure research (Wiley et al., 2000). The first dimension, centrality, relates to how much of an individual’s life is focussed around an activity (Wiley et al., 2000). If a golfer plans their days around golf or have most of their social interactions on the golf course golf will be central to their lives. Hedonic value is present if an individual believes an activity to be enjoyable as well as meaningful (McIntyre & Pigram, 1992). Golfers will have high hedonic value if golf is important to them and they enjoy taking part. Symbolic value is present when an individual believes the activity to be a representation of themselves to others (Wiley et
Symbolic value will be higher in golfers who see themselves as a “golfer” and believe other to see them as such. Sport involvement is an important construct because it provides insight into how much an individual values golf. If an individual has a high level of sport involvement they may be more likely to renew a golf membership and consume golf-related products. Also, they may spend more time participating in golf.

1.2.3 The social aspect of life satisfaction. The relationship between golf related online community use and the social aspect of life satisfaction is also explored in this research. This aspect of the current research draws on domain satisfaction theory which implies that overall life satisfaction is the sum total of relevant sub-domains (Sirgy & Wu, 2009; Sirgy, 2012). One common sub-domain is the social aspect of life satisfaction (Sirgy et al., 2011). While only exploring one sub domain of life satisfaction will not provide a complete analysis of overall life satisfaction it is safe to assume that if the social aspect of life satisfaction provides positive affect to an individual this will “spillover” into their overall life satisfaction (Sirgy, 2012). In this dissertation the social aspect of life satisfaction is viewed as one of the various factors which influences an “individuals’ perception of their position in life” (World Health Organization, 1997, p.1). The construct is important as it seeks to identify if one’s social life can be enhanced by the use of golf related online communities, and to identify how much golf related online community use does effect a golfers social life.

1.2.4 Social capital. Social capital is difficult to conceptualise as researchers have not been able to achieve consensus on a single definition despite extensive coverage (Bourdieu, 1986; Coleman, 1988, 1990; Lin, 1999, 2001; Putnam, 2000). Lin (2001) offered a general premise of social capital, stating it is “investment in social relations with expected returns” (p. 30). The current research will draw heavily from the work of Putnam (2000) in which he theorised that there are separate types of social capital - bonding social capital and bridging social capital. Bonding social capital is linked to an individual’s fewer, but closer and more intimate, relationships (Putnam, 2000). These relationships could include family, close friends and exclusive church groups. Bridging social capital includes distant relationships of which an individual is likely to have many more (Putnam, 2000). These relationships could include friends of friends or distant acquaintances. Both types of social capital include advantages and disadvantages and are measured seperately in this research. Social capital is important as it provides insight into the value an individual gains in their relationships from the use of golf related online communities.
1.3 Rationale for this Study
Mahan et al., (2015) recently contributed one of very few articles exploring the effects of online community use at the community level of sport. They found that SNS use is a mediator between involvement and social life satisfaction and running behaviour. They suggested future researchers continue to explore the role of SNSs in a wide range of contexts. Therefore, this research will again explore online community use and its influence on golfers. There are important differences between the current research and that of Mahan et al., (2015). These include (a) the inclusion of social capital; and (b) a more comprehensive conceptualisation/operationalisation of the involvement construct, the social aspect of life satisfaction and intensity of online community use. As stated earlier, there is a lack of research in this important area, which is a further rationale. This is surprising because of the amount of individuals using online communities and the amount of time spent in them each day (Facebook, 2015). This dissertation will contribute research to an important but understudied area.

1.4 Study Purpose and Research Questions
An exploration of the relationships between online community use and the various constructs of interest is new to the field of sport management and the sample size is relatively small. Therefore, this dissertation is positioned as an exploratory study (McNabb, 2013). The purpose of this dissertation is to explore the association between online community use and (a) sport involvement; (b) social capital; (c) golf participation; and (d) the social aspect of life satisfaction. Therefore, the following two research questions are put forward:

RQ1a: How is the amount of time spent in golf-related online communities related to sport involvement?
RQ1b: How is the amount of time spent in golf-related online communities related to social capital?
RQ1c: How is the amount of time spent in golf-related online communities related to golf participation?
RQ1d: How is the amount of time spent in golf-related online communities related to the social aspect of life satisfaction?
RQ 2a: Do lurkers and contributors differ in terms of their sport involvement?
RQ 2b: Do lurkers and contributors differ in terms of their social capital?
RQ 2c: Do lurkers and contributors differ in terms of their golf participation?
RQ 2d: Do lurkers and contributors differ in terms of their social aspect of life satisfaction?

1.5 Overview of Research Methodology
The researcher has views which align with the post-positivist paradigm, these views have heavily influenced the research methodology adopted (see section 3.1). Post-positivist researchers typically believe research needs to be carried out objectively, minimising contact between the researcher and participant (Grant & Giddings, 2002). As a result quantitative research methods were used. To gather a sufficient sample size convenience sampling was utilised. NZ Golf promoted the online questionnaire on both their website, by providing a hyperlink to the online questionnaire, and on Facebook, by posting a link to the questionnaire.

To analyse the data an independent t-test and correlation analyses were conducted. Both types of statistical analyses were seen as appropriate to provide results for the size of the gathered sample.

1.6 Structure of Dissertation
The structure of this dissertation is as follows. Chapter 2 is a review of relevant literature. The review consists of conceptual backgrounds and definitions of the constructs of interest. Chapter 3 lays out the methodology undertaken in this research including the selection of participants, the measures used and an outline of the data analyses conducted. Chapter 4 is a presentation of the findings from the data analysis. In Chapter 5, the results are critically analysed alongside previous findings and the implications of this research are explored. Finally, Chapter 6 is a summary of the results, commentary on the theoretical and practical significance of the results, an identification of the limitations and recommendations for future research.
Chapter 2: Literature Review

Chapter 1 was an overview of the project. Chapter 2 builds on this by providing an in-depth review of relevant literature and justification of the research questions. The background of all relevant constructs is explored. The constructs are also discussed in the context of the field of sport management, including a review of how they have been measured.

2.1 Online Communities

At the beginning of the 1980s computers were mainly used by businesses, engineers and scientists. This quickly changed. In 1998, Kraut et al., reported 40% of all households in the United States owned a computer and 13% had access to the internet. In this early period, Kraut et al. (1998) predicted “the internet could change the lives of average citizens as much as did the telephone in the early part of the 20th century and television in the 1950s and 1960s” (p. 1017). In 2001, 29.37% of the population in developed nations had access to the internet and just ten years later in 2011 that number increased to 73.80% (International Telecommunication Union, 2012).

The increase of people with access to the internet brought about innovations which changed the way everyday people lived their lives. Online communities like social networking sites and discussion forums are examples of such innovations. While social networking sites have been around since 1997 they were not very popular until 2003 to 2006 when popular SNSs were developed (Boyd & Ellison, 2007). Facebook’s current popularity is evidence supporting Kraut et al’s., (1998) prediction that the internet could change the lives of average citizens. Discussion forums are also popular, although they are not as widely used. The most popular golf discussion forum is Golf WRX which is the 14,689th most popular website globally (Alexa, 2015). The popularity of these websites justifies an exploration of implications.

As online communities have grown in popularity so too has the amount of research focussing on them (Rains & Brunner, 2014). However, online communities are a recent phenomenon with no widely accepted definition. The boundaries of what is or is not an online community are “fuzzy” (Preece & Maloney-Krichmar, 2005). This could be because the arrival of the internet has caused some confusion as to what constitutes a community, challenging early views in the field of sociology (Gruzd, Wellman, & Takhteyev, 2011). In this research Porter’s (2006) definition of online communities is adopted: “an aggregation of individuals or business partners who interact around a shared interest, where the interaction is at least partially supported
and/or mediated by some protocols or norms” (p. 3). Inherent to this definition is that both SNSs and discussion forums are types of online communities.

The key difference between SNSs and discussion forums is how people interact around a shared interest. Boyd and Ellison (2007) noted that forums are based around an area of interest while SNSs place an individual at the centre of their community. For example, a discussion forum such as *The Sand Trap* invites individuals to discuss many aspects of golf (see Figure 1). In the forum “Golf Talk” individuals are asked to discuss “general golf topics such as stories, etiquette, television shows, movies” while other forums like “Member Swings” ask golfers to “post video of their swings for discussion with others as well as tracking progress and storing notes” (The Sand Trap, 2015). The area of interest in *The Sand Trap* is clearly golf. Alternatively, SNSs provide more ways an individual can connect and share interests. In the golf specific context of this research individuals may “like” golf-related “pages” on Facebook and be exposed to its content (see Figure 2). They can then interact with individuals in a variety of ways, including writing a “comment” and “liking” content. On Facebook, they could use the instant messaging service to contact “friends” and discuss golf. As well as this, they could post pictures or video of golf-related content on an individual’s “profile” to interact with their “friends.” These examples show the wide ranging options a user of a SNS has to communicate about golf.

![Image of The Sand Trap forum](image1.png)

**Figure 1:** Example of a discussion forum
In 2007, quite soon after SNSs became popular, Boyd and Ellison (2007) published a seminal piece. From their work came the most widely adopted definition of SNS. However, because the way individuals use SNSs has changed dramatically since 2007 they put forth a “more accurate and nuanced definition” in 2013 (Ellison & Boyd, 2013). They state:

A social network site is a networked communication platform in which participants 1) have uniquely identifiable profiles that consist of user-supplied content, content provided by other users, and/or system-provided data; 2) can publicly articulate connections that can be viewed and traversed by others; and 3) can consume, produce, and/or interact with streams of user-generated content provided by their connections on the site (Ellison & Boyd, 2013, p. 157).

Discussion forums, another type of online community, are one of the first online communication tools (Safko, 2012). Safko (2012) describes a discussion forum as a “website application that manages and provides a medium for ongoing online discussion on a particular subject” (p. 119). In practice discussion forum websites often have an
overall “forum” which contains “sub-forums” containing “threads.” “Threads” are started by members of the website and all other members can join the discussion.

2.1.1 **Lurkers and contributors.** In online communities there are two types of participants - passive and active. Researchers refer to those who participate passively as lurkers and those who participate actively as contributors (Sun, Rau, & Ma, 2014). Lurker is a word used to describe the individuals in online communities who use or read content but do not, or only seldom, contribute (Sun, Rau, & Ma, 2014). There is general agreement in the literature that lurkers outnumber contributors in online communities by a large margin. One recent study by van Mierlo (2014) found there are three times more lurkers than contributors while others report lurkers make up more than 90% of the population in online communities (Nonnecke & Preece, 2010). However, researchers have not found consensus on whether lurkers have a positive or negative affect in their online communities. They have been referred to negatively as “free-riders” in research. For example, Kollock and Smith (1994) state “there is the temptation to free-ride: asking questions but not answering; gathering information but not distributing it” (p. 114). Later, in this same article lurkers are accused of not contributing to the give and take essential in online communities (Kollock & Smith, 1994). On the other hand there are also various authors who portray lurkers in a more positive manner. Nonnecke et al., (2006) believes lurking is a passive introverted behaviour of which individuals can learn about a community before joining it. Even more positive is Edelman (2013) who believes lurking is not just an important passive step to joining an online community but an active and important aspect of online communities.

Contributors are, as the term suggests, those who contribute content in online communities (Sun et al., 2014). Research on lurkers often seeks to discover factors which encourage posting, with the ultimate aim of converting lurkers into contributors (Rafeili, Ravid, & Soroka, 2004; Sun et al., 2014). Without contributors there would be no content and, by extension, no online communities. However, there is also an understanding that if there are too many contributors an “information overload” will occur (Rafaeli et al., 2004). This research explored whether lurkers and contributors experience different outcomes from their participation in online communities in relation to the research variables of involvement, social capital, the social aspect of life satisfaction and the volume of golf played.

2.1.2 **Online communities in sport management literature.** Online communities are a new area of research. Only in very recent times have some articles in
this topical area been published in *Sport Management Review* and *Journal of Sport Management*, two of the field’s top journals.

The results of one study found online communities and similar activities have a negative effect on sport participation because “screen activities” are a competing behaviour for time from adolescents’ (Berger et al., 2008, p. 300). Berger et al. (2008) suggested that screen activities prevent individuals from taking part in physical activity due to a lack of time. This is a concern for policy makers in the ‘real world’ as well. The Australian Sports Commission (2011) noted “competition from other activities … are challenging the market relevance and value of sport to many Australians, resulting in an increasingly sedentary lifestyle, particularly among our young” (p. 1). These concerns are warranted as social networking sites, undoubtedly one of the sources of competition to time, are still growing in popularity (Facebook, 2014). As a result it may be wise to research ways to utilise online communities to have as positive of an effect on sports as possible.

Earlier studies identified motivations for consuming sport online. Kur, Ko and Valacich (2007) found convenience, information seeking, diversion of day-to-day activities, developing and maintaining human relationships and economic motives as important motivations to consume sport content online. These findings are similar to Seo and Green (2008) who identified all of the same motives for online consumption but added technical knowledge, fan-ship, entertainment, and team support. The above studies explored websites which provide goods for consumption. In the current research the key focus is the effect of online communities. Therefore, it is likely members of SNSs and discussion forums will have stronger levels of motivation to exchange information, gain social support, make new friends and general enjoyment of interacting with others than was found in the research of Hur, Ko and Valacich (2007) and Seo and Green (2008). Most other studies exploring online communities in sport management have been heavily focussed on their relationship with consumption (Delia & Armstrong, 2015; Filo, Funk, & Hornby, 2009).

Mahan et al (2005) examined runners and found that time spent using running related online communities positively mediated the effect of involvement on the distance individuals ran per week. In addition, an individual’s perceived level of the social aspect of their life satisfaction was greater for those who used running related online communities more often.

**2.1.3 Measuring online community use.** In early research on SNSs Ellison, Steinfield and Lampe (2007) developed the Facebook intensity scale. The scale was
created “to obtain a better measure of Facebook usage than frequency or duration indices” (Ellison et al., 2007, p. 1150). Two items require participants to self-report their behaviour to measure how engaged they are to Facebook. The other six items on the scale measure ones emotional connection to the SNS. Researchers in the field of computer-mediated communication have been somewhat critical of Ellison et al.’s., (2007) scale.

Burke, Marlow and Lento (2010) believe measuring friend count and time on site is adequate to identify intensity of SNS use. The reason for Burke et al.’s., (2010) criticism is that attitudinal self-report measures have been found to be problematic as there is a high chance of the occurrence of central tendency and acquiescence bias. Zhang and Leung (2014) are also critical of the subjective nature of the scale stating “the measure may lead to a tendency to report the perceived general popularity of Facebook while responding to question items” (p. 11).

There have also been scales developed to identify individuals as either a lurker or contributor (Kang, 2014; Nonnecke, Andrews, & Preece, 2006). One scale measures the frequency which an individual comments in online communities. If they comment quite often (i.e., once per day or once per week) they will be categorised as a contributor while those who seldom post (i.e., less than once per month or never) will be categorised as lurkers. This makes sense because a contributor is described as someone who regularly posts content while a lurker is described as an individual who seldom posts but regularly reads content in online communities (Sun et al., 2014).

2.2 Involvement

The origins of the involvement construct can be traced back to the end of the 19th century (Johnson & Eagly, 1989), however it is Sherif and Cantril’s (1947) seminal work which is widely credited with shaping the construct to how we understand it today. Sherif and Cantril (1947) wrote “when any stimulus or situation is consciously or unconsciously related to them by the individual, we can say there is ego-involvement” (p. 147). During the 1940s Allport (1943, 1945) stated “ego-involvement … is a condition of total participation of the self – as knower, as organizer, as observer, as status seeker, and as socialized being” (Allport, 1943, p. 459). These early descriptions of involvement show one needs to feel related to something for involvement to be present. During its conceptual beginnings in the field of social psychology, involvement was commonly used to explore social issues, such as war and political participation (Allport, 1943; Sherif & Cantril, 1947).
Krugman’s (1965) research was important, not because of its findings, but because it used involvement to explain behaviour outside of the field of social psychology. In this work it was argued television advertising will only be effective if the consumer has higher levels of involvement towards a projected message. After Krugman’s (1965) article on involvement many researchers analysed what is now termed consumer involvement. Throughout the 1980s involvement was developed by researchers in the field of marketing in journals such as *Journal of Marketing Research, Journal of Consumer Research* and *Advances in Consumer Research* (Laurent & Kapferer, 1985; Rothschild, 1984; Zaichkowsky, 1985). Typically, research on involvement in this field aimed to predict behaviour and spending patterns of consumers (Wiley, Shaw, & Havitz, 2000). During this era the scales created by Laurent and Kapferer (1985) and Zaichkowsky (1985) are the most notable contribution for the field of sport management.

The field of leisure adopted and significantly developed the involvement construct. Initially researchers operationalising involvement in this field were very heavily influenced by consumer involvement theory. Rothschild (1984), a researcher in the field of marketing, created a definition which was widely accepted and general enough for researchers in other fields to adopt. Rothschild (1984) defined involvement as “a state of motivation, arousal or interest” (p. 217). Havitz and Dimanche (1997), two influential leisure researchers, built on Rothschild’s (1984) definition. They defined involvement as an “unobservable state of motivation, arousal or interest toward a recreational activity or associated product, evoked by a particular stimulus or situation, and which has drive properties” (Havitz & Dimanche, 1997, p. 246). Recent leisure research often cites either Rothschild’s (1984) or Havitz and Dimanche’s (1997) definition (Havitz, Kaczynski, & Mannell, 2013; Ridinger, Funk, Jordan, & Kaplanidou, 2012).

There have been various empirical works exploring the involvement construct in leisure literature. In 1990 Havitz and Dimanche provided several propositions. In a 1999 article Havitz and Dimanche (1999) reviewed 52 articles which included leisure involvement data sets and compared the findings to their propositions. Of their findings, two are of importance to this dissertation. First, strong support was shown for involvement as a mediator for participation and, second, support was shown for the use of multifaceted measures to determine ones level of involvement. Involvement research in the field of leisure has explored relationships between leisure involvement and participation in physical activity (Decloe, Kaczynski, & Havitz, 2009; Havitz,
Kaczynski, & Mannell, 2013), loyalty to a recreation agency (Iwasaki & Havitz, 1998, 2004) and volunteer experiences (Lu & Schuett, 2014). Although these studies were published in leisure journals, there is clear relevance to sport management and the current project.

2.2.1 **Sport involvement.** A clear overlap between the fields of leisure and sport management brings to light the oddity that the involvement construct has received comparatively less attention in sport management research. However, involvement is beginning to more frequently appear in sport management journals. Studies in this field have typically focussed on consumption. This is likely a lasting influence of the early contributions to involvement from the field of marketing. Kerstetter and Kovich (1997) were the first to apply involvement in sport management literature. They found a significant positive relationship between university sport association and involvement (Kerstetter & Kovich, 1997). Various studies since have found positive relationships between involvement and fan loyalty (Dwyer, 2011), brand loyalty (Kunkel, Hill & Funk, 2013), sporting attendance (Armstrong, 2002; Hill & Green, 2000) and running related expenditure (McGehee, Yoon, & Cardenas, 2003). Most of the articles focussing on the relationship between involvement and consumption were published between the late 1990s and early 2000s. Later articles focussed on the relationship between involvement and societal outcomes, which are more relevant to this research. Inoue, Funk and Jordan (2013) found a positive relationship between running involvement and perceived level of self-sufficiency in homeless individuals. In Mahan et al.’s., (2015) study it was found that SNSs had a mediating effect between involvement and social life satisfaction and running volume.

Involvement in sport management research is becoming an independent construct from other fields. Beaton et al.’s., (2011) conceptual piece was written to test the involvement constructs utility as a staging mechanism for the PCM and to clear up confusion of how involvement should be conceptualised and operationalised in the field of sport management. Involvement has been operationalised various ways in sport management research, often creating confusion (Beaton et al., 2011). Authors in the field have measured it as a unidimensional construct (Armstrong, 2002; Hill & Green, 2000; McGehee, Yoon, & Cardenas, 2003) and a multidimensional construct (Beaton, Funk, Ridinger, & Jordan, 2011; Dwyer, 2011; Inoue, Funk, & Jordan, 2013; Kerstetter & Kovich, 1997; Kunkel, Hill, & Funk, 2013; Mahan, Seo, Jordan, & Funk, 2014). Beaton et al., (2011) pointed out that researchers commonly define involvement as multidimensional and measure it as unidimensional or vice versa. They imply this is one
reason researchers stray away from exploring the involvement construct in the field of sport management.

To “[bring] clarity to the concept … in the context of sport management research” Beaton et al., (2011, p. 126) put forward a definition of sport involvement. They state “sport involvement is present when individuals evaluate their participation in a sport activity as a central component of their life that provides both hedonic and symbolic value” (Beaton et al., 2011, p. 128). This definition is adopted for use in the current dissertation as it was in recent studies by Inoue et al. (2013) and Kunkel et al. (2013). The definition has two clear benefits which make it useful for this dissertation. First, it is specific to sport and, second, it clearly states all three facets of involvement, providing clear guidelines of how sport involvement is to be measured. The three facets of involvement typically include hedonic value, centrality and symbolic value in the fields of sport management and leisure (Beaton et al., 2011; Ridinger et al., 2012; Wiley et al., 2000). Hedonic value should be thought of as a combination of importance and pleasure as it has been measured as such in previous literature (McIntyre & Pigram, 1992). Centrality is concerned with the predominance of a certain activity on an individuals lifestyle (Wiley et al., 2000). Finally, symbolic value is concerned with an individuals internally motivated expression of the self and the externally motivated representation of themselves to others (Wiley et al., 2000).

2.2.2 Measuring sport involvement. General support was identified from 50 leisure involvement data sets for a proposition stating that “multifaceted scales are more appropriate than single faceted scales for measuring leisure and tourism involvement” (Havitz & Dimanche, 1990, p. 182). Therefore, showing strong support for the use of multidimensional scales to measure this construct.

Laurent and Kapferer (1985) created the Consumer Involvement Profile (CIP), which was vital in future attempts at developing a measurement tool for involvement (Ridinger et al., 2012). The CIP measures five facets of involvement “to keep the full picture of consumer involvement” (Laurent & Kapferer, 1985, p. 43). The five facets included in their scale are (Laurent & Kapferer, 1985):

1. Perceived importance of a product to an individual
2. Amount of negative consequences
3. The chance of negative consequences
4. The symbolic value of a product to an individual
5. The hedonic value of a product to an individual
Each of the above facets included 3 to 5 items and measured involvement in a marketing context (Laurent & Kapferer, 1985). In an attempt to measure involvement in a leisure context McIntyre (1989) adapted the CIP. This attempt found involvement can be measured using three facets which McIntyre (1989) referred to as attraction, self-attraction and centrality. For the purpose of clarity these facets will be referred to as hedonic value, symbolic value and centrality in this study as these are the terms used in the definition adopted (Beaton et al., 2011).

Previous works in sport management and leisure literature those who measure involvement as a multidimensional construct typically cite Laurent and Kapferer (1985) and McIntyre (1989) as sources used to adapt their scale (Beaton et al., 2011; McIntyre & Pigram, 1992; Wiley et al., 2000). Kyle and Mowen (2005) also created an involvement scale for the field of leisure, which is also appropriate for the closely related field of sport management. This scale was adapted from the earlier works of McIntyre (1989) and McIntyre and Pigram (1992). McIntyre (1989) claims the scale measures enduring involvement (EI) rather than situational involvement (SI). For the purpose of clarity it makes sense to separate these two concepts. EI is what has been reviewed thus far in the review. SI is “the current and immediate feeling of EI as impacted by specific circumstances” (Havitz & Mannell, 2005, p. 156). In other words, SI could explain why individuals experience higher levels of involvement while under specific circumstances. In this dissertation the reader should be aware that when the term involvement is used it refers to EI, not SI.

2.3 Social Aspect of Life Satisfaction
The improvements to an individual’s mental well-being as a result of physical activity is an understudied, yet important, phenomenon (Beaton & Funk, 2008; Penedo & Dahn, 2005). It is well supported in the literature that physical activity provides many benefits to an individual’s physical health, such as decreases in obesity related risks, decreased risk of cardiovascular disease and lower chances of developing arthritis (Penedo & Dahn, 2005). However, there is much less evidence of the relationship between physical activity and mental well-being (Beaton & Funk, 2008; Penedo & Dahn, 2005).

The concept of life satisfaction originated when some of the most influential philosophers spoke of happiness. Aristotle (1986), for example, believed happiness came to those who expressed excellent character or virtue. Others believed happiness was the motive which influenced every individual’s behaviour, in the words of Pascal (1995), “including those who go and hang themselves” (p. 45). William James (1902), a man described as the father of modern psychology, stated happiness was “for most men
at all times the secret motive for all they do” (p. 76). Life satisfaction as a concept has a very long history which will not be reviewed here. Instead, the current review will only explore the theoretical aspects relevant to the social aspect of life satisfaction.

2.3.1 **Prudential happiness and the bottom-up spill over theory.** In more recent times, three philosophical views of happiness have been identified in the field of psychology, these include (a) psychological happiness; (b) prudential happiness; and (c) perfectionist happiness (Sirgy, 2012). These philosophical views capture an array of different concepts of well-being. Prudential happiness is the most relevant to the concept of domain satisfaction, of which the social aspect of life satisfaction sits inside.

Prudential happiness is often referred to as subjective well-being. Inside of this view researchers have explored the concept of domain satisfaction. Domain satisfaction with life is the sum total of an individuals satisfaction with various sub domains (Sirgy, 2012). A scale to measure the domains of life satisfaction was developed by Cummins (1996) in which, an individual’s perceptions of their material well-being, health, productivity, intimacy, safety, community and emotional well-being were measured to gain insights into their complete satisfaction with life.

Typically, when life satisfaction is measured using domain satisfaction the bottom-up spillover theory is implied. The bottom-up spillover theory is “the spillover of affect from subordinate life domains to superordinate ones” (Sirgy, 2012, p. 240) (see Figure 3). For example, an individual could get a pay rise and become more satisfied with the material well-being domain of life satisfaction. Assuming all other sub-domains remain at the same level of satisfaction, this individual would become more satisfied with their overall satisfaction of life. However, if an individual gets divorced this will likely lead to an individual becoming less satisfied with the intimacy domain of life satisfaction, becoming less satisfied with their overall satisfaction of life. Diener (2009) showed life events, such as the ones used in the previous example, do contribute to positive and negative affect which “spillover” into overall life satisfaction.

2.3.2 **Empirical research on the social aspect of life satisfaction.** Life satisfaction research was seen as a key issue in politics during the 1970s (Andrews & Crandall, 1975). Andrews (1974, 1975) were among the first research articles attempting to identify “social indicators” of life satisfaction (Andrews & Crandall, 1975, p.1). In this research Andrews (1975) measured three facets of life satisfaction including “self-efficacy”, “family life” and “material well-being” (p. 13). Since then there have been several articles analysing life satisfaction in leisure research (London,
Past life satisfaction research which considered the social aspect of life satisfaction has found it to be an important domain. London et al. (1977) observed individuals who expressed satisfaction with leisure activities and their work demonstrated higher levels of perceived quality of life. Leisure activities and activities with family and friends contributed the highest amount of variance in this study (London et al., 1977). Another study conducted by Sirgy et al. (2011) supports these findings. Sirgy et al. (2011) showed social aspects, among other aspects, were significant predictors of overall life satisfaction. In the qualitative part of this mixed-methods study participants reported that meeting new people, making friends, spending time with friends and spending time away from home and family were sources of positive affect (Sirgy et al., 2011). A qualitative study by Mactavish et al. (2007) shows caregivers of individuals with an intellectual disability believe good friends and family are an important component of having a good quality of life. As well as this Diener (1984) stated “a direct influence on happiness has been found for social participation even after factors such as health and socioeconomic status are controlled” (p. 557). These findings show the social aspect of life satisfaction is an important domain in overall life satisfaction.

Unfortunately, there is very little research in the field of sport management carried out on the social aspect of life satisfaction. Other than the Mahan et al. (2015) study, which found SNSs positively mediated the relationship between involvement and social life satisfaction, there has been no research specifically analysing the social aspect of life satisfaction. A study by Sato et al. (2014) in the leisure sciences found eight life domains, one of which was social life, explained 32% of overall life satisfaction in runners. However, social life satisfaction was found to be an insignificant indicator in that study.

2.3.3 Measuring the social aspect of life satisfaction. In Mahan et al.’s. (2015) study the social aspect of life satisfaction was measured by a single item taken from a much more comprehensive scale measuring 10 domains of life satisfaction by Sato, Jordan and Funk (2014). Sato et al., (2014) explored the role of running in enhancing quality of life. In developing the scale they reviewed various works which recently developed scales to measure domain life satisfaction (Sirgy et al., 2011, Dolnicar, Yanamandram and Cliff, 2012). Generally, scales measuring domain
satisfaction of life have one item to measure each domain (see Figure 3). One of these items is often related to the social aspect of life.

Figure 3. The bottom-up spill over theory. Note: Adapted from “How does a travel trip affect tourists’ life satisfaction?,” by M. Sirgy et al., 2011, Journal of Travel Research, 50(3), p. 264.

2.4 Social Capital
Social capital originates from Karl Marx’s classical theory of capital (Marx, 1995). In Karl Marx’s book Capital: An abridged edition it is argued the higher class in society exploits the lower class to gain value (Marx, 1995). This exploitation is possible because of the control of production means, how commodities are circulated in society and the consumption behaviours of the lower class (Lin, 1999; Marx, 1995). Capital is referred to as both the investment and the value gathered as a result of those investments (Marx, 1995). The original works of Marx were written in the second half of the 1800s, since this time his theories have been built upon by various authors who have conceptualised neo-capital theories (Lin, 1999). These include human capital, cultural capital and, of particular interest to this research, social capital.

2.4.1 Conceptualising Social Capital. Social capital is a broad concept with no widely accepted definition, although various notable authors have contributed to the discussion. Social capital was defined by Bourdieu (1986) as “the aggregate of the actual or potential resources which are linked to possession of a durable network of
more or less institutionalized relationships of mutual acquaintance and recognition” (p. 248). In Bourdieu’s (1986) seminal piece social capital was referred to as influencing a group rather than the individual. Social capital can produce two types of profit which come from being involved in a group; these include material profits and symbolic profits. Material profits are services coming from a positive relationship and symbolic profit comes from being involved in a prestigious group (Bourdieu, 1986).

While Bourdieu (1986) wrote about prestigious groups, much like the class view adopted by Marx (1995), later authors did not share this view. Coleman is another influential author who was heavily influenced by Loury (1977), an economist who introduced the term social capital. Loury (1977) used the term to describe “the set of resources that inhere in family relations and in community social organization and that are useful for the cognitive or social development of a child or young person” (p. 300). Coleman (1988, 1990) adopted this definition and theorised social capital as a concept applicable to a group, such as a family, rather than a class. The purpose of Coleman’s (1988) paper was to “introduce into social theory a concept, ‘social capital,’ paralleling the concepts of financial capital, physical capital, and human capital” (p. 118). He applied social capital to high school dropout rates, arguing high school dropout rates could be explained by social capital in the family (Coleman, 1988). One argument was stronger bonds between child and parent would allow the child to have access to more time and greater access to knowledge from their parents, providing a greater social benefit for this child.

Yet another influential researcher in the conceptualisation of social capital, Robert Putnam, argued there is value in social connections which are built on trust and allow individuals to effectively act together within the norms of reciprocity (Putnam, 2000). Putnam’s vast body of work was notable for its observation of the decline of “social connectedness” in the United States, indicated by various predictors including loosening family bonds, less Americans voting, less people socialising with neighbours and less people attending social sporting leagues (Putnam, 1995). Of particular interest, less people attended bowling leagues which inspired the title of the classic journal article, *Bowling alone: America’s declining social capital*, and book, *Bowling alone: The collapse and revival of American community*. The notion that social capital leads to positive community outcomes is a major focus of social capital in the sport management context (Heere et al., 2013; Nicholson & Hoye, 2008).

Later, Putnam (2000) introduced two different types of social capital - bridging and bonding social capital. Bridging social capital is inclusive, allowing many
individuals to join a group. The connection between individuals is described as being weaker and relationships in this category do not provide emotional support, however, there are some advantages. Putnam (2000) was largely influenced by Granovetter (1973) who essentially described what is now termed bridging social capital. In this study Granovetter (1973) found a positive relationship between “weak ties” and finding employment. Bonding social capital includes exclusive groups, disallowing a large amount of individuals to enter. An individual involved in an exclusive group will be provided with social and psychological support. Putnam (2000) mentions both bonding and bridging social capital have their strengths and weaknesses and should be seen as separate from each other. In fact, Putnam (2000) believes bonding social capital is essential for “getting by” while bridging social capital is needed for “getting ahead.” Bonding social capital and bridging social capital are often used as separate facets when measuring social capital (Ellison et al., 2007; Jin, 2013).

The latest author to have heavily influenced the direction of social capital is Lin (1999, 2001). Lin (2001) defined social capital as “resources embedded in one’s social networks, resources that can be accessed or mobilised through ties in the network” (p. 29). While this definition adds to the various already available Lin (1999) also provided a general premise of social capital when he stated social capital is “investment in social relations with expected returns” (p. 30).

2.4.2 Social capital in sport. Research on social capital has emerged in sport management journals and books over the last ten years. Typically, research in this field focusses on the community outcomes from sport (Frost, Lightbody, & Halabi, 2013; Heere et al., 2013; Maxwell & Taylor, 2010; Skinner, Zakus, & Cowell, 2008). Other studies have explored the relationship between social capital and volunteering (Peachey, Bruening, Lyras, Cohen, & Cunningham, 2015) and also between social capital and salary for sport administrators (Barros & Barros, 2005).

The studies which explored the relationship between sport and community outcomes generally found positive results. Frost et al., (2013) found sport clubs in Australia provide many opportunities for the development of social capital. These opportunities included activities, such as volunteering on boards, which allowed individuals to work towards a common goal. Frost et al., (2013) believes this brought about feelings of belonging, empowerment, trust and reciprocity. Putman (2000) theorised these feelings are important to gain social capital. Maxwell and Taylor (2010) explored one struggling community club utilising case study research to identify how it became successful. They concluded social capital was useful in the transformation from
an unsuccessful to very successful community sport club (Maxwell & Taylor, 2010). However, there was one negative aspect of bonding social capital identified in this study. One non-Muslim woman believed the sport club became too focussed on Muslim practices and consequently left the club. This example shows that those outside of a close knit group may despise it, as theorised by Putnam (2000).

Quantitative studies focussing on social capital are not as common in sport management journals. One explored the effects of national identity gained from a mega event on social capital (Heere et al., 2013). Again, Putnam’s (2000) theory of social capital provided the conceptual basis of the research. The study found national identity explained 10-11% of variance in social capital, concluding national identity only has a small impact on social capital. Heere et al., (2013) suggested the increase in social benefits gained from a mega-event were not sufficient to warrant hosting one. The second analysed whether or not sport administrators with high levels of social capital earned more money (Barros & Barros, 2005). This study measured social capital by assessing an individual’s ties, including relatives, colleagues and friends who were helpful for their career as a sports administrator. Barros and Barros (2005) concluded greater social capital did lead to higher earnings. This finding again showed value was gained as a result of social capital.

2.4.3 Measuring social capital. As previously mentioned, most studies exploring social capital in the field of sport management tend to use measurements which demonstrate collective community action. This is likely due to the work of Putnam (2000) who gave various examples of how the decline of collective community action showed a decrease in social capital. One such example is the study by Heeres et al., (2013) which measured social capital using a scale developed by Onyx and Bullen (2000). This scale measures participation in the local community, feelings of trust, tolerance of diversity and work connections among others.

Another way of measuring social capital is by utilising Putnam’s (2000) theory of bridging and bonding social capital. Various high quality studies have utilised a scale developed by Williams (2006) called the Internet Social Capital Scale (ISCS) (Burke, Marlow, & Lento, 2010; Ellison, Steinfield, & Lampe, 2007; Steinfield, Ellison, & Lampe, 2008; Ellison, Steinfield, & Lampe, 2011; Valenzuela, Park, & Kee, 2009). The ISCS was developed because the way relationships form is vastly different with the internet than before it. In the development of this scale Williams (2006) drew heavily from several researchers who contributed to the social capital discussion. The influence
of Putnam (2000) is most obvious as the scale separates bonding social capital from bridging social capital.

2.5 Creation of Research Questions
At this point it is appropriate to address how the literature review impacted the creation of the research questions. The use of online communities is an understudied area in the field of sport management. So far, Mahan et al., (2015) has published the only study in a top sport management journal which explores the impact of using online communities on community sport related outcomes. They found that using running related online communities positively affected the amount that an individual ran, an individual’s level of involvement and their social life. The current study set out to test the same promising relationships explored in the Mahan et al., (2015) study but remained open to identifying alternative scales to measure variables and to identifying other relationships which may affect sport-related aspects of life.

The literature review has identified a different way to measure online community use. Mahan et al., (2015) used minutes per day to measure this variable. The current dissertation will also use this measure, but will add the extent of contribution as a measure. Lurkers and contributors were identified as groups who use online communities differently (Kang, 2014; Nonnecke et al., 2012). As a result of this there are two questions. One to analyse how time in online communities affects golf related outcomes, and the other to analyse how one’s extent of contribution in online communities affects sport related outcomes.

Analysing literature in the field of computer-mediated communication also identified social capital as a commonly measured construct which found promising results (Ellison et al., 2007). Social capital is often measured in the field of sport management, also with promising results (Heere et al., 2013; Peachey et al., 2015). As well as this, it provides another aspect of understanding to the respondents social outcomes. Social life satisfaction is used to measure how satisfied one is with their social life and social capital complimented these findings by providing insight into how valuable ones social connections are (Putnam, 2000).

Social life satisfaction was measured by Mahan et al., (2015) and again in this research. However, this dissertation added another measure. Mahan et al., (2015) measured the influence of running on life satisfaction. This study used this same measure in the context of golf but added another measure to identify how satisfied one is with their social life. As a result, it allowed the researcher to identify how satisfied one was with their social life and how much golf influenced their satisfaction.
The involvement construct was measured in Mahan et al.s., (2015) research with a three item scale. As was identified in the literature review there is substantial evidence suggesting the use of more comprehensive multifaceted scales (Havitz & Dimanche, 1997). This research measured each of the three involvement facets with four items. This research put forward two research questions. These are:

RQ1a: How is the amount of time spent in golf-related online communities related to sport involvement?
RQ1b: How is the amount of time spent in golf-related online communities related to social capital?
RQ1c: How is the amount of time spent in golf-related online communities related to golf participation?
RQ1d: How is the amount of time spent in golf-related online communities related to the social aspect of life satisfaction?

RQ 2a: Do lurkers and contributors differ in terms of their sport involvement?
RQ 2b: Do lurkers and contributors differ in terms of their social capital?
RQ 2c: Do lurkers and contributors differ in terms of their golf participation?
RQ 2d: Do lurkers and contributors differ in terms of their social aspect of life satisfaction?

In the following section ‘methodolgy and methods’ the researcher outlines the process of how these research questions were explored.
Chapter 3: Methodology and Methods

As the research questions are outlined it is now appropriate to provide an overview of the methodology and methods adopted. This includes an acknowledgement of the paradigmatic view of the researcher. Different research paradigms influence the methodology and methods favoured by researchers (Grant & Giddings, 2002). Survey methodology is outlined as the framework utilised in the current research. The methods are then described. Included within this is an outline of the demographic information of the respondents and a description of the process used to collect and analyse the data. Finally, some of the relevant ethical considerations are considered.

3.1 Research Paradigm

The paradigmatic view of a researcher will heavily influence the methodology and methods adopted in research (Grant & Giddings, 2002; Crotty, 1998). For this reason it is important to reflect upon the current researchers’ paradigmatic view and identify how these views may have shaped this dissertation. The researcher is most aligned with the post-positivist paradigm. This paradigmatic view is based on his ontological and epistemological views (Crotty, 1998). Ontology has been defined as “our most basic beliefs about what kind of being a human is and the nature of reality” (Grant & Giddings, 2002, p. 12). Basically, ontology is what we believe to be true and how we find these truths. It is the researcher’s belief research can only identify probable truths and if new or conflicting evidence is presented the current view of the truth may need to change, or at least questioned.

Grant and Giddings (2002) define epistemology as “the nature of the relationship between the enquirer and known, what counts as knowledge, and on what basis we can make knowledge claims” (p. 12). This definition has three key aspects to be explained. First, it is the belief of the researcher that the relationship between the researcher and the researched needs to be as objective as possible, however, it is not possible to be completely objective. This is in line with theory describing the epistemological views of post-positivist researchers (Grant & Giddings, 2002; Robson, 2011). Secondly, knowledge, or probable truths, should be based on the best available evidence at the time. Yet, individuals should be willing to change their idea of current truths if new conflicting evidence is presented. Again, this is line with the post-positivist view (Polkinghorne, 1983). Thirdly, knowledge claims can be made if researchers consistently find similar results through research. The researcher believes the hypothetical-deductive method is ideal to test current knowledge. The hypothetical-deductive method is a procedure “in which hypotheses are generated, measurements
devised, and data analyses conducted” (Zhang, Wang, Colucci, & Wang, 2011, p. 60). While the hypothetical-deductive method is the researchers preferred method to make knowledge claims he also sees the value in qualitative methods, where more contact with the research participants occurs. This is a defining trait of the post-positivist researcher which is believed to have brought about mixed-methods research (Giddings & Grant, 2006). The methods were selected to allow an objective relationship between the researcher and the researched, one of the key views of the typical post-positivist researcher. Having no researcher-participant contact, beyond what is written on the survey, is more objective than other methods such as telephone surveys or interviews where there is a greater chance the researcher will influence the results through interviewer bias and interviewer variance.

It is also appropriate to consider how results are interpreted in light of research paradigm. In the final section of the dissertation, relationships explored in previous literature are discussed in order to identify if there is support for the findings of this dissertation. If most other research was in support the researcher recognised the relationship found is likely to exist in the ‘real world.’ Although, if the results were not in line the researcher will not claim others may be wrong as he admits the limitations of the current research are too great to change current views.

3.2 Participants
Of the 126 responses to the online questionnaire, 101 were usable. The reasons for the removal of 25 responses are outlined in Table 1. The online communities which were used by these respondents included; Facebook (79.2%), Google+ (34.7%), Twitter (22.8%), Golf WRX (16.8%), Free Golf Info (14.9%), LinkedIn (8.9%), The Sand Trap (5.0%) and Swing Profile (3.0%). One may note an unusually high proportion of respondents reported using Google+. Upon reflection, this may be because a large number of respondents are older and may simply have mistaken the SNS, Google+, for the search engine, Google.

Of the respondents, 73.3% were male and 25.7% were female. The age of participants ranged from 16 to 83 years ($M = 47.1$, $SD = 16.79$). In terms of relationship status, most participants were married or in a civil union (64.4%), 9% were separated or divorced and 22.8% were never in a civil union or marriage. The sample was reasonably highly educated with 42.7% holding at least a Bachelor’s Degree, 50.6% having attained a high school Certificate and 2% holding no qualification. As expected the majority of responses came from highly populated areas of New Zealand; Auckland (44.6%), Canterbury (9.9%), Wellington (8.9%), Bay of Plenty (7.9%), Otago (6.9%).
Waikato (6.9%), Manawatu/Wanganui (4.0%), Southland (4.0%), Hawkes Bay (3.0%), Gisborne (2.0%), Taranaki (1.0%) and Northland (1.0%).

The demographic profile shows the sample is generally representative of the golfing population. New Zealand golf members consist largely of males (75.8%) (NZ Golf, 2014). Also, golf participation is highest between 35-49 years (Sport New Zealand, 2014). However, 44.6% of the respondents are from Auckland, this is a large overrepresentation as only 13.1% of golfers are members of Auckland golf clubs (NZ Golf, 2014). The other regions appear to be more accurately represented by the sample (NZ Golf, 2014). Though, even if the sample represents the population we cannot infer the results are representative of the population as the data was gathered using convenience sampling (de Leeuw et al., 2008).

3.3 The Population and Sample Frame
In this research, the population of interest includes individuals aged 16 and older who play golf in New Zealand and use golf-related online communities. We cannot be sure of the exact size of the population of interest, but there have been estimates of the size of the wider golfing population recently. Golf NZ reported a total of over 110,000 members in 2014 (NZ Golf, 2014). This estimate is somewhat troublesome as it only includes members whereas the current research explored all golfers. In a recent survey carried out by Sport NZ an estimate was made for the population of all golfers. It found 15% of all males and 4.6% of all females participated in golf during the 12 months in New Zealand prior to responding (Sport New Zealand, 2014). This amounts to 238,000 men and 139,000 females. In Sport NZs (2014) survey the population included individuals over the age of 16, which is similar to the way in which this research was framed. However, we cannot estimate the total number of individuals who use golf-related online communities within the golfing population.

The sample frame is “the set of target population members that has a chance to be selected into the survey sample” (Groves, et al., 2004). In this research the sample frame includes all NZ Golf members or casual golfers in New Zealand who use golf-related online communities and are 16 years and over that can be accessed by the sampling design. Individuals who are under the age of 16 are not able to partake in this study. AUTEC requires written consent given by a parent or legal guardian of potential participants under the age of 16. This was not a viable option in this large scale survey. Golfers without access to the internet are also excluded from this study as a direct result of the choice to use an online questionnaire as the method of implementation. Inclusion criteria is displayed in Table 1.
Table 1

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<th>Selection criteria</th>
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<td>Golfer</td>
<td>Does not play golf</td>
<td>Does not use golf-related online communities</td>
</tr>
<tr>
<td>Use golf-related online communities</td>
<td>Does not use golf-related online communities</td>
<td></td>
</tr>
<tr>
<td>16 and over</td>
<td>Does not have access to the internet</td>
<td></td>
</tr>
<tr>
<td>Have internet access</td>
<td></td>
<td>Did not have access to the internet</td>
</tr>
<tr>
<td>Completed majority of questionnaire</td>
<td></td>
<td>Did not complete majority of the questions</td>
</tr>
</tbody>
</table>

3.4 Data Collection

3.4.1 Methods of implementation. To gather data from a large sample an online questionnaire is appropriate. This method of data collection was selected over others including face-to-face interviews, telephone surveys and mail surveys because of its particular benefits (see Table 2). Advantages of web-based questionnaires include (a) low cost compared to other methods of data collection; (b) ease of accessing a large pool of potential participants; (c) allows for participants to complete the questionnaire in their own time, taking their time to think about the question; (d) time efficiency as they are sent out via email and responses are collected online instantly with no need for the respondent to mail them back to the researcher (Mesch, 2012). However, there are also negatives associated with online questionnaires, including the reality that (a) some people do not have access to the internet and, by extension, do not have access to a web based survey; (b) response rates of web based surveys tend to be low; and (c) web based surveys may present challenges to those not technologically inclined, particularly older adults (Manzo & Burke, 2012; Mesch, 2012).

3.4.1.1 Procedure. All aspects of the procedure utilised in this research are approved by AUTEC. To gather the data an online questionnaire was advertised on NZ Golf’s website and NZ Golf’s Facebook page (see Appendix E). The opening page included all information required by AUTEC, including; (a) an invitation to participate; (b) information on the research goals; (c) how the data was going to be used and stored confidentially; (d) how the researcher gained access to their contact details; (e) a statement that the research would lead to a Masters Degree; (f) how participants can agree to participate; (g) how long the survey would take to complete and (f) information on the incentive used. An incentive was used to intice respondents (Manzo & Burke, 2012). The full questionnaire is displayed in Appendix D, it should be noted that some questions are not relevant to this research and were requested by NZ Golf. The online
questionnaire was cross sectional as it only collected data at one point in time (Creswell, 2014), it was open between 6\textsuperscript{th} May 2015 and 26\textsuperscript{th} May 2015. *Survey Monkey* was the instrument used to collect data, it claims to be “the world’s most popular online survey software” (Survey Monkey, 2015). Creswell (2014) recommends using *Survey Monkey* for academic questionnaires because of its ease of use, convenience for distribution and its ability to provide descriptive statistics which can be downloaded to software commonly used to analyse data.

### Table 2

**Positives and negatives of survey modes**

<table>
<thead>
<tr>
<th>Mode</th>
<th>Positives</th>
<th>Negatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online surveys</td>
<td>No direct researcher-respondent contact</td>
<td>Low response rate</td>
</tr>
<tr>
<td></td>
<td>Opportunity to use visual cues</td>
<td>Cannot provide further instruction</td>
</tr>
<tr>
<td></td>
<td>Less time pressure</td>
<td>Higher coverage errors – no control over who completes the questionnaire</td>
</tr>
<tr>
<td></td>
<td>Confidential and anonymous</td>
<td>No opportunity to probe</td>
</tr>
<tr>
<td></td>
<td>Very cheap</td>
<td>(Manfreda &amp; Vehovar, 2008)</td>
</tr>
<tr>
<td></td>
<td>Fast turnaround time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Manfreda &amp; Vehovar, 2008)</td>
<td></td>
</tr>
<tr>
<td>Mail surveys</td>
<td>No direct researcher-respondent contact</td>
<td>Low response rate</td>
</tr>
<tr>
<td></td>
<td>Opportunity to use visual cues</td>
<td>Expensive (although cheaper than face-to-face interviews and telephone surveys)</td>
</tr>
<tr>
<td></td>
<td>Less time pressure for respondents</td>
<td>Cannot provide further instruction</td>
</tr>
<tr>
<td></td>
<td>Confidential and anonymous</td>
<td>No opportunity to probe</td>
</tr>
<tr>
<td></td>
<td>(de Leeuw &amp; Hox, 2008)</td>
<td>No control of who in a house completes the questionnaire</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Long turnaround time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(de Leeuw &amp; Hox, 2008)</td>
</tr>
<tr>
<td>Face-to-face interviews</td>
<td>Greater explanation of research and instructions</td>
<td>Interviewer bias</td>
</tr>
<tr>
<td></td>
<td>Can observe reaction of respondents</td>
<td>Interviewer variance</td>
</tr>
<tr>
<td></td>
<td>Opportunity to probe</td>
<td>Time consuming</td>
</tr>
<tr>
<td></td>
<td>High response rate</td>
<td>Interviewers require training</td>
</tr>
<tr>
<td></td>
<td>(Loosveldt, 2008)</td>
<td>(Loosveldt, 2008)</td>
</tr>
<tr>
<td>Telephone surveys</td>
<td>Opportunity to probe</td>
<td>Interviewer bias</td>
</tr>
<tr>
<td></td>
<td>Less interviewer bias than face-to-face interviews</td>
<td>Interviewer variance</td>
</tr>
<tr>
<td></td>
<td>(Steeh, 2008)</td>
<td>Time consuming</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Expensive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Steeh, 2008)</td>
</tr>
</tbody>
</table>

### 3.4.2 Sampling considerations

A sample is “a small set of cases a researcher selects from a large pool” (Neuman, 2014, p. 246). In the social sciences there is an aim
to generalise the results derived from a sample to a wider population (Babbie, 1990). However, in this study we must be very cautious in generalising to the larger population as convenience sampling was used (Creswell, 2014).

### 3.4.2.1 Sampling Design

Convenience sampling was undertaken in this research. Convenience sampling is not the ideal strategy for this research, however, NZ Golf could not offer access to email addresses of their members which made probability sampling, the “gold standard” in quantitative research, impossible (Neuman, 2014). The major disadvantage of using a nonprobability sampling technique, such as convenience sampling, is that “it is not appropriate to apply statistical inference to generalize to a general population” (de Leeuw, Hox, & Dillman, 2008). Instead, we can only apply statistical inference to the population of the respondents to the questionnaire (de Leeuw, Hox, & Dillman, 2008). One positive of this approach was gaining access to casual golfers as well as NZ Golf members by advertising the link to the questionnaire on Facebook.

### 3.5 Constructing the questionnaire

Thus far in the dissertation, the conceptual and operational definitions of the research variables have been described (see Table 3). The following sections highlight the measures used in the questionnaire. In this research, existing scales which have proven reliable and valid in past literature were adapted. There were multiple consultations with the supervisors of this project regarding the questionnaire in general, once the supervisors were satisfied employees at NZ Golf were also consulted. When the NZ Golf employees were satisfied the questionnaire was disseminated.

#### 3.5.1 Measures

There are five constructs which were measured including (a) sport involvement; (b) intensity of golf related online community use; (c) the social aspect of life satisfaction; (d) social capital; and (e) golf participation. As well as this the questionnaire gathered data of the respondents demographic profiles. Earlier, the definitions and theoretical backgrounds of the constructs were explored. This section provides a brief overview of the operationalisation of each construct as well as reporting previous test results of validity and reliability. The full questionnaire can be seen in Appendix D. To relate the research variables and their operational definitions to the specific items on the questionnaire Table 3 is provided at the end of this section.

#### 3.5.1.1 Demographic profile

The questionnaire included several items to capture the demographic profile of participants. These items identified the respondents gender, age, relationship status, education level, golf handicap and their region of residence.
3.5.1.2 Golf related online community use. Online community use was captured by 3 items. First, participants checked all SNSs and discussion forums they use for golf-related activities. A list of 10 online communities was presented as well as an ‘other’ comment box. The ten online communities provided in the questionnaire were decided by identifying the most popular golf-related discussion forums and SNSs using Alexa, an online tool which shows the popularity of websites (Alexa, 2015), and by consulting with golfers in the NZ Golf academy programme on what online communities they use for golf-related purposes. If an individual reported to not use golf-related online communities their response was excluded from the study. Second, respondents were asked “approximately how minutes per day do you spend on golf-related activities across all of your online communities?” This is an adapted version of a common question asked as part of Ellison et al.’s., (2007) Facebook Intensity Scale. The Facebook Intensity Scale has been validated and found to be reliable (α = .83) (Ellison et al., 2007). Third, individuals will be asked to self-report whether they comment on golf-related online community content once per day, once per week, once or less per month or never. This scale has been used in the past by Kang, 2014 and Nonnecke et al., 2006. If an individual indicated they comment in online communities once per week or more they were included in the group ‘contributors’. If they indicated to post once a month or less they were included in the group ‘lurkers.’

3.5.1.3 Sport involvement. In this research sport involvement was defined as a multidimensional construct and is consequently measured as such. Kyle and Mowen’s (2005) scale, which was adapted from McIntyre and Pigram’s (1992) original scale, is to be utilised. This scale consists of four items measuring each of the three measured facets of involvement typically measured in leisure and sport management literature, including; centrality, hedonic value and symbolic value. Participants were asked to indicate their level of agreement with each of the 12 items on a 7-point Likert-type scale from strongly disagree to strongly agree. Kyle and Mowen (2005) reported items measuring centrality (α = .87), hedonic value (α = .79) and symbolic value (α = .79) were reliable.

3.5.1.4 The social aspect of life satisfaction. The social aspect of life satisfaction was measured with two items. The first was one of the ten items Sato et al., (2014) used to measure overall life satisfaction. The second is used by Sirgy et al., (2011), also to measure overall life satisfaction. The rationale for this was explained in section 2.3. The item to measure influence of golf and golfing activities on general
satisfaction with social life was adapted from Sato et al., (2014). Participants indicated the level of influence on a 7-point Likert-type scale, from “decreased satisfaction” to “increased satisfaction.” In Sato et al.’s., (2014) research it was found the scales composite reliability was satisfactory with a value of .92. The average variance extracted (AVE) were also .71 for the full scale, which means convergent validity and discriminant validity was adequate. As well as this, an item to measure general social life satisfaction was adapted from Sirgy et al.’s., (2011) scale. Again, a 7-point Likert-type scale was used ranging from “strongly disagree” to “strongly agree.” The scale was validated and found to have adequate reliability by Sirgy et al., (2011).

### 3.5.1.5 Social capital

This study adapted Williams’ (2006) ISCS to measure social capital. Ellison et al., (2007) used ten items from Williams (2006) original 20-item scale, this study will use most of the same ten used by Ellison et al., (2007). Some were changed at the request of NZ Golf. Five items measured bonding social capital and the other five items measured bridging social capital. Respondents were asked to report their level of agreement with each of the ten items on a 7-point Likert type scale, ranging from “strongly disagree” to “strongly agree.” Both Ellison et al., (2007) and Williams (2006) reported adequate reliability using cronbach’s alpha. Ellison et al., (2007) found bridging social capital had an alpha value of .87 and bonding social capital had an alpha value of .75. In Williams (2006) also found adequate internal reliability with alpha values all over .84. As well as this, Williams (2006) reports strong construct validity for the scale.

### 3.5.1.6 Golf participation

The purpose of this measure is to assess the frequency which the respondents participate in golf. A single ratio type item was presented, respondents were asked “in a typical month during the golf season how many rounds of golf do you play?” This measure required respondents to self-report the number of rounds of golf participated in during a regular month during the golf season.

### 3.6 Data Analysis

This section will provide an explanation of the data analyses chosen to provide an insight into the research questions. The first research question is:

- **RQ1a:** How is the amount of time spent in golf-related online communities related to sport involvement?
- **RQ1b:** How is the amount of time spent in golf-related online communities related to social capital?
RQ1c: How is the amount of time spent in golf-related online communities related to golf participation?
RQ1d: How is the amount of time spent in golf-related online communities related to the social aspect of life satisfaction?

To answer this question bivariate correlation was utilised. “Correlation measures the strength of the linear association between two quantitative variables” (Sharpe, De Veaux, & Velleman, 2012). Basically, it is used to identify how similarly the means of two separate variables behave. The software IBM SPSS Statistics 22 was used to carry out the bivariate correlation.

The second research question requires slightly more complex statistical analyses. This research question reads:

RQ2a: Do lurkers and contributors differ in terms of their sport involvement?
RQ2b: Do lurkers and contributors differ in terms of their social capital?
RQ2c: Do lurkers and contributors differ in terms of their golf participation?
RQ2d: Do lurkers and contributors differ in terms of their social aspect of life satisfaction?

To measure this the respondents were broken into two separate groups, lurkers and contributors. Item ten on the questionnaire was used to create these groups (see Appendix D). Individuals who indicated they commented in online communities at least once per week were included in the group of contributors, if they commented once per month or less they were placed into the group of lurkers (Kang, 2014). This is because lurkers are described as individuals who seldom post but often read content in online communities while contributors often contribute content (Sun et al., 2014). Once two groups were created an independent t-test was used to find the difference in the means between lurkers and contributors and the research variables in question. The independent-means t-test is appropriate because the participants were assigned to their group (Field, 2009). The dependent-means t-test is suitable when all participants take part in both experimental groups, which did not occur in this research (Field, 2009).

The key difference between these tests is that in the dependent-means t-test the equation analyses the difference between the scores of each participant under each condition, whereas, in the independent-means t-test the equation analyses the difference between groups (Field, 2009). To conduct the independent-means t-test the programme IBM SPSS Statistics 22 was used.
To calculate the effect size of the independent-means $t$-test a further calculation is required. This involved using values of the $t$-statistic and the degrees of freedom, both of which are found in the SPSS output. The equation, known as Pearson’s correlation coefficient, is (Field, 2009):

$$r = \frac{t^2}{\sqrt{t^2 + df}}$$

According to Cohen (1988, 1992) Pearson’s correlations coefficient, $r$, provides an indication how great the effect size of the result is. In the $t$-test the value of $r$ represents the effect size of the difference between means. These are detailed below (Cohen, 1988; Cohen, 1992):

- $r = .10$ (small effect)
- $r = .30$ (medium effect)
- $r = .50$ (large effect)
<table>
<thead>
<tr>
<th>Construct/Variable</th>
<th>Definitions</th>
<th>Reference</th>
<th>Relevant Questionnaire Items (Appendix D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sport involvement</td>
<td>“Present when individuals evaluate their participation in a sport activity as a central component of their life that provides both hedonic and symbolic value”</td>
<td>Beaton et al., 2011, p. 128</td>
<td>12</td>
</tr>
<tr>
<td>Hedonic value</td>
<td>“A combination of importance and pleasure”</td>
<td>Wiley et al., 2000, p. 20</td>
<td>12</td>
</tr>
<tr>
<td>Symbolic value</td>
<td>This facet includes “internally motivated free expression of self, and externally motivated self-representation to others”</td>
<td>Wiley et al., 2000, p. 21</td>
<td>12</td>
</tr>
<tr>
<td>Centrality</td>
<td>Centrality is present if “other aspects of an individual’s life are organized around that activity or if the activity occupies the main place in which interactions with friends occur”</td>
<td>Wiley et al., 2000, p. 21</td>
<td>12</td>
</tr>
<tr>
<td>Online community use</td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Time in Online</td>
<td>The amount of time an individual spends in golf-related online communities</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Community</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lurker</td>
<td>Those who seldom post but regularly read content in online communities</td>
<td>Sun et al., 2014</td>
<td>10</td>
</tr>
<tr>
<td>Contributor</td>
<td>Those who actively post content in their online communities</td>
<td>Sun et al., 2014</td>
<td>10</td>
</tr>
<tr>
<td>The social aspect of life satisfaction</td>
<td>One of the various aspects which influences an “individuals’ perception of their position in life”</td>
<td>World Health Organization, 1997, p. 1</td>
<td>18, 19</td>
</tr>
<tr>
<td>Social capital</td>
<td>“Investment in social relations with expected returns”</td>
<td>Lin, 2001, p. 31</td>
<td>17</td>
</tr>
<tr>
<td>Bonding social capital</td>
<td>“Occurs when strongly tied individuals … provide emotional or substantive support for one another”</td>
<td>(Williams, 2006, p. 597)</td>
<td>17</td>
</tr>
<tr>
<td>Bridging social capital</td>
<td>“Occurs when individuals from different backgrounds make connections … [they] have only tentative relationships, but what they lack in depth they make up for in breadth”</td>
<td>(Williams, 2006, p. 597)</td>
<td>17</td>
</tr>
<tr>
<td>Golf Behaviour</td>
<td>The number of rounds a golfer plays during the in-season</td>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>
3.7 Ethical Considerations
This research project gained ethical approval from AUTEC on the 10\textsuperscript{th} March 2015 (Appendix B). This section aims to clarify how the key ethical issues for this project are being managed. Groves et al., (2004) believe the most important ethical considerations in social research are informed consent and confidentiality.

Groves et al., (2009) listed several essential elements of informed consent. These include statements of (p. 379):

1. The research purpose, duration of time required by respondents and procedures used by the research
2. Foreseeable risks or discomfort
3. Benefits that may reasonably be expected
4. How confidentiality of records identifying the subject will be maintained
5. Whom to contact with further questions about the research and subjects’ rights
6. The research being voluntary

All of these elements were satisfied in the current research project. The information sheet, which the participants read before completing the online questionnaire, explains how the above six elements of informed consent are dealt with in this research project (see Appendix D).

Confidentiality is another ethical consideration which requires significant attention. A breach of confidentiality could potentially have adverse consequences for the participants (Singer, 2008). The major issue in relation to confidentiality in this project is the management of the incentive prize draw. To manage this there are two separate datasets which result when a participant completes the questionnaire. The first data set consists of the results of all measures and the second will contain participant contact information for those who opted into the prize draw. To enter the prize draw the participants will be required to follow a URL attached to the questionnaire which will lead to a separate questionnaire asking for their name and contact details. As a result it will not be possible to match any participant’s response to their name and contact details.

Also, to ensure participant confidentiality AUTEC appropriately requires the data to be stored in a secure location and deleted after a minimum of six years. In this research project the results from participants will initially be stored on SurveyMonkey, a secure website which is password protected (SurveyMonkey, 2015). The data will then...
be transferred onto a *Microsoft Excel* spreadsheet and saved onto a USB flash drive to be stored in a secure location.

This concludes the methodology and methods section. In the following section, ‘results’, the researcher reports the findings. These findings were reached using the methods outlined in this chapter.
Chapter 4: Results

Thus far in this research paper we have reviewed the literature, put forward research questions and outlined the methods used to find answers. In this section the researcher reports the findings.

4.1 Descriptive Statistics

Respondents, on average, spend 25.05 ($SD = 30.28$) minutes in golf related online communities per day. This amounts to 22.48% ($SD = 21.042$) of their total time in online communities. 52% of the respondents are lurkers as they comment in the online communities once a month or less, the remaining 48% are contributors as they comment more than once per month. During the golf season respondents played 7.18 ($SD = 6.16$) rounds of golf per month and had a handicap of 12.37 ($SD = 8.51$). The respondents also typically reported high satisfaction with their social lives ($M = 5.72$, $SD = 0.98$) and a generally positive effect from golf and golfing activities on their social aspect of life satisfaction ($M = 5.32$, $SD = 1.19$).

<table>
<thead>
<tr>
<th>Facet</th>
<th>Item</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hedonic value</td>
<td>Golf is very important to me</td>
<td>5.88</td>
<td>1.34</td>
</tr>
<tr>
<td></td>
<td>Golf offers me relaxation when pressures build up</td>
<td>5.33</td>
<td>1.46</td>
</tr>
<tr>
<td></td>
<td>Participating in golf is one of the most satisfying things I do</td>
<td>5.92</td>
<td>1.18</td>
</tr>
<tr>
<td></td>
<td>I really enjoy golf</td>
<td>6.40</td>
<td>1.04</td>
</tr>
<tr>
<td>Centrality</td>
<td>I find a lot of my life is organised around golf</td>
<td>4.94</td>
<td>1.67</td>
</tr>
<tr>
<td></td>
<td>Golf has a central role in my life</td>
<td>5.24</td>
<td>1.70</td>
</tr>
<tr>
<td></td>
<td>I enjoy discussing golf with my friends</td>
<td>5.60</td>
<td>1.43</td>
</tr>
<tr>
<td></td>
<td>I find a lot of my life is organised around golf activities</td>
<td>4.74</td>
<td>1.74</td>
</tr>
<tr>
<td>Symbolic value</td>
<td>Participating in golf says a lot about who I am</td>
<td>4.73</td>
<td>1.67</td>
</tr>
<tr>
<td></td>
<td>You can tell a lot about a person by seeing them participate in golf</td>
<td>5.10</td>
<td>1.71</td>
</tr>
<tr>
<td></td>
<td>When I participate in golf I can really be myself</td>
<td>5.27</td>
<td>1.41</td>
</tr>
<tr>
<td></td>
<td>When I participate in golf others can see me the way they want to see me</td>
<td>4.92</td>
<td>1.48</td>
</tr>
</tbody>
</table>

All facets of the involvement construct had acceptable reliabilities as cronbach’s $\alpha$ had values above .7 for all facets (Kline, 1999). The facets hedonic value ($\alpha = .77$), centrality ($\alpha = .87$) and symbolic value ($\alpha = .81$) were each measured with four items.
(see Table 4). Because of the acceptable internal consistency of the items composite variables were created for each facet of involvement. Hedonic value ($M = 5.88, SD = 0.96$), centrality ($M = 5.14, SD = 1.39$) and symbolic value ($M = 4.98, SD = 1.26$) all have means over four, the mid-point of the 7-point Likert type scale used.

Both bonding social capital and bridging social capital had acceptable reliability as the cronbach’s $\alpha$ values were above .7 (Kline, 1999). Bonding social capital ($\alpha = .81$) and bridging social capital ($\alpha = .84$) were measured with five items each (see Table 5). Because of the acceptable internal consistency of the items composite variables were created for both facets of social capital. Bonding social capital ($M = 4.70, SD = 1.31$) and bridging social capital ($M = 5.07, SD = 0.97$) both have means above four, the central point of the 7-point Likert type scale used.

### Table 5

<table>
<thead>
<tr>
<th>Social Capital items</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Facet</strong></td>
<td><strong>Item</strong></td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>Bonding</td>
<td>There are several golfers I can trust</td>
<td>5.65</td>
<td>1.32</td>
</tr>
<tr>
<td></td>
<td>Golfers I interact with would put their reputation on the line for me</td>
<td>4.43</td>
<td>1.69</td>
</tr>
<tr>
<td></td>
<td>There is a golfer I can turn to for advice about making very important decisions</td>
<td>5.05</td>
<td>1.76</td>
</tr>
<tr>
<td></td>
<td>I feel comfortable discussing intimate personal problems with some golfers I know</td>
<td>4.11</td>
<td>1.96</td>
</tr>
<tr>
<td></td>
<td>I know golfers well enough to get them to do anything important</td>
<td>4.30</td>
<td>1.77</td>
</tr>
<tr>
<td>Bridging</td>
<td>Interacting with golfers makes me feel like part of a larger community</td>
<td>5.23</td>
<td>1.34</td>
</tr>
<tr>
<td></td>
<td>Interacting with golfers makes me want to try new things</td>
<td>4.35</td>
<td>1.48</td>
</tr>
<tr>
<td></td>
<td>I am willing to spend time to support general golf activities</td>
<td>5.32</td>
<td>1.12</td>
</tr>
<tr>
<td></td>
<td>Because of golf I come into contact with new people all the time</td>
<td>5.63</td>
<td>1.26</td>
</tr>
<tr>
<td></td>
<td>Interacting with golfers reminds me that everyone is connected</td>
<td>4.93</td>
<td>1.31</td>
</tr>
</tbody>
</table>

### 4.3 Correlation Results

To explore the first research question a correlation analysis was conducted. The first research questions are:

RQ1a: How is the amount of time spent in golf-related online communities related to sport involvement?
RQ1b: How is the amount of time spent in golf-related online communities related to social capital?
RQ1c: How is the amount of time spent in golf-related online communities related to golf participation?
RQ1d: How is the amount of time spent in golf-related online communities related to the social aspect of life satisfaction?

In this analysis we explored if the amount of time one spends in an online community is related to the social aspect of life satisfaction, social capital, sport involvement and rounds of golf played per month (see Table 6). The bivariate correlation highlighted various significant relationships between the research variables of interest. However, it is important to first point out that age has a medium and negative correlation to time spent in golf-related online communities, $r = -.37, p < .001$. This indicates the younger respondents typically reported spending a greater amount of time in golf-related online communities.

Investigation of the data on Table 6 shows two of the four relationships under exploration were significantly correlated. These included the relationship between the amount of time spent in online communities and (1) social capital and (2) sport involvement. Both aspects of social capital, bridging and bonding social capital, found medium strength and significant correlations, $r > .30, p < .01$. The three facets of involvement, symbolic value ($r = .28, p < .01$), hedonic value ($r = .25, p < .05$) and centrality ($r = .29, p < .01$), have effect sizes approaching medium strength. The other two relationships were not significantly correlated; the social aspect of life satisfaction ($p > .05$) and golf participation ($p > .05$). However, time in online community activities and the social aspect of life satisfaction did show a small and significant correlation ($r = .20, p < .05$). It should also be noted that most of the correlations among the constructs/dimensions of interest were relatively low (i.e., below .7) which is an indication of divergent validity (i.e., the measures were capturing different aspects of the golfer’s underlying psychology).

In summary, this study found a significant and positive relationship between the variables in RQ1a and RQ1b. However, there was no significant relationship found between the variables in RQ1c and RQ1d.

4.2 T-test results
An independent-means t-test was used to compare means between lurkers and contributors. Individuals were characterised as lurkers if they reported commenting
once per month or less. On the other hand, contributors are those who self-reported to commenting once per week or more. A summary of results is seen in Table 7. The independent $t$-test was used to explore the second research question seeking to identify the differences between lurkers and contributors in golf-related online communities and (a) sport involvement; (b) social capital; (c) the social aspect of life satisfaction; and (d) golf participation.
Table 6

**Bivariate correlations**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<th>6</th>
<th>7</th>
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<th>9</th>
<th>10</th>
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<tbody>
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<td>1.</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Time in online community</td>
<td>.159</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Age</td>
<td>-.365***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Rounds per month</td>
<td>.159</td>
<td>.050</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Handicap</td>
<td>-.085</td>
<td>.481**</td>
<td>-.053</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Bonding social capital</td>
<td>.339**</td>
<td>-.217*</td>
<td>.217*</td>
<td>-.147</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Bridging social capital</td>
<td>.321**</td>
<td>-.165</td>
<td>.340**</td>
<td>-.095</td>
<td>.744***</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>7.</td>
<td>Symbolic value</td>
<td>.276**</td>
<td>-.137</td>
<td>.246*</td>
<td>-.120</td>
<td>.476***</td>
<td>.484***</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>8.</td>
<td>Hedonic value</td>
<td>.251*</td>
<td>-.154</td>
<td>.155</td>
<td>-.217*</td>
<td>.421***</td>
<td>.532***</td>
<td>.546***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Centrality</td>
<td>.293**</td>
<td>-.203*</td>
<td>.261**</td>
<td>-.267***</td>
<td>.444***</td>
<td>.573***</td>
<td>.615***</td>
<td>.670***</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Social aspect of life satisfaction</td>
<td>.166</td>
<td>-.001</td>
<td>.067</td>
<td>-.016</td>
<td>.046</td>
<td>.160</td>
<td>.220*</td>
<td>.133</td>
<td>.030</td>
</tr>
<tr>
<td>11.</td>
<td>Influence of golf on the social aspect of life satisfaction</td>
<td>.204*</td>
<td>-.144</td>
<td>.236*</td>
<td>-.149</td>
<td>.445***</td>
<td>.543***</td>
<td>.466***</td>
<td>.384***</td>
<td>.482***</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01, ***p < .001
On average, participants spent more time in golf related online communities if they were categorised as contributors ($M = 31.77$, $SE = 5.07$) rather than lurkers ($M = 16.98$, $SE = 2.99$). This difference was significant $t(94) = -2.46$, $p < .05$ and represents a small effect size $r = .24$. The results of a chi-square test showed there was no significant association between gender and whether or not an individual would be a contributor or lurker, $p > .05$. This shows there is an equitable percentage of females and males in both groups of the $t$-test.

There were no significant differences between the means of the two groups for both golf participation $t(98) = -1.32$, $p > .05$ and handicap $t(95) = 1.17$, $p > .05$. However, on average, contributors ($M = 7.96$, $SE = 1.20$) did play more rounds per month than lurkers ($M = 6.33$, $SE = 0.48$). As well as this, contributors ($M = 11.86$, $SE = 1.07$) had a better handicap than lurkers ($M = 13.53$, $SE = 1.37$). Although the differences between rounds played per month and handicap were insignificant they both represented small effects, $r = .13$ and $r = .12$ respectively.

Typically, participants reported a higher level of bonding social capital if they were a contributor ($M = 4.98$, $SE = 0.19$) rather than a lurker ($M = 4.39$, $SE = 0.18$). The difference was significant $t(98) = -2.25$, $p < .05$ and represents a small effect, $r = .22$. Again, for bridging social capital contributors ($M = 5.32$, $SE = 0.13$) generally had greater levels than lurkers ($M = 4.38$, $SE = 0.15$). The difference was significant $t(98) = -2.45$, $p < .05$ and represents a small effect size, $r = .24$.

Table 7

<table>
<thead>
<tr>
<th>Variable</th>
<th>Lurkers</th>
<th>Contributors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rounds per month</td>
<td>48</td>
<td>52</td>
</tr>
<tr>
<td>Handicap</td>
<td>46</td>
<td>51</td>
</tr>
<tr>
<td>Bonding social capital</td>
<td>48</td>
<td>52</td>
</tr>
<tr>
<td>Bridging social capital</td>
<td>48</td>
<td>52</td>
</tr>
<tr>
<td>Symbolic value</td>
<td>46</td>
<td>51</td>
</tr>
<tr>
<td>Hedonic value</td>
<td>48</td>
<td>52</td>
</tr>
<tr>
<td>Centrality</td>
<td>48</td>
<td>50</td>
</tr>
<tr>
<td>General social life satisfaction</td>
<td>48</td>
<td>52</td>
</tr>
<tr>
<td>Golf social life satisfaction</td>
<td>48</td>
<td>52</td>
</tr>
</tbody>
</table>

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This independent t-test found only one of the three dimensions of involvement to have a significant difference between lurkers and contributors. Usually, contributors ($M = 5.45, SE = 0.20$) reported greater levels of centrality, one of the three involvement facets, than lurkers ($M = 4.78, SE = 0.20$). The difference was significant $t(96) = -2.42, p < .05$ and represents a small effect size, $r = .24$. For symbolic value contributors ($M = 5.15, SE = 0.17$) again reported a higher average mean than lurkers ($M = 4.82, SE = 0.19$). This difference was found to be insignificant $t(95) = -1.32, p > .05$; however, it represents a small effect $r = .13$. For the third involvement facet, hedonic value, contributors ($M = 6.01, SE = 0.12$) also reported greater values than lurkers ($M = 5.72, SE = 0.15$). This difference was not significant $t(98) = -1.50, p > .05$; although, it did represent a small effect size $r = .15$.

In most cases contributors ($M = 5.96, SE = 0.14$) reported a greater level of social life satisfaction than lurkers ($M = 5.44, SE = 0.15$). The difference was significant $t(98) = -2.77, p < .05$ and represents a small effect size, $r = .27$. However, participating in golf and golf-related activities, such as online community usage, did not influence social life satisfaction significantly $t(98) = -1.15, p > .05$. There was a slight difference between the means. Contributors ($M = 5.44, SE = 0.17$) reported a slightly greater influence of golf on their social life satisfaction than lurkers ($M = 5.17, SE = 0.17$).

In summary, there were various differences found between lurkers and contributors. Contributors were found to have significantly greater levels of sport involvement and social capital. However, there was no significant difference between means of lurkers and contributors and the variables golf participation and the social aspect of life satisfaction.

The results were reported in this section. In the following chapter the researcher discusses the results and reports on their significance.
Chapter 5: Discussion

This section is an evaluation of and reflection on the results presented previously. This includes discussion of the significance of the results.

5.1 Time in golf-related online communities

In the current dissertation there were two types of data analyses performed. The first was a correlation analyses to explore the first research question:

RQ1a: How is the amount of time spent in golf-related online communities related to sport involvement?
RQ1b: How is the amount of time spent in golf-related online communities related to social capital?
RQ1c: How is the amount of time spent in golf-related online communities related to golf participation?
RQ1d: How is the amount of time spent in golf-related online communities related to the social aspect of life satisfaction?

All three dimensions of sport involvement were found to have a small, positive correlation with the amount of time spent in golf-related online communities. This suggests that individuals who spend more time in golf-related online communities are likely to evaluate their participation in golf as a central aspect of their lives which also provides hedonic and symbolic value (Beaton et al., 2011). Recently, Mahan et al., (2015) found running involvement was associated with increased SNS usage, supporting this result of the current dissertation. Past research has provided a theory which likely explains this correlation.

Research in the field of consumer research has often shown individuals with high levels of involvement display greater information-seeking behaviour (Dholakia, 1998; Laurent & Kapferer, 1985; Mittal, 1989). This means those with greater involvement levels for an activity are more likely to actively seek out information concerning the particular activity. Therefore, it is possible those with greater levels of involvement will spend more time in online communities to seek information.

Both bonding and bridging social capital were found to have a significant positive correlation with the amount of time spent using golf-related online communities. This finding shows that those spending more time using golf-related online communities may increase the chance of an individual receiving and providing emotional or substantive support to golfers who share a strong connection (Williams,
It also shows that as time spent in golf-related online communities increases the number of weaker relationships with others who play golf may also increase (Williams, 2006). In the past, the relationship between online community use, measured by time spent in online communities, and social capital has been explored extensively. Most of the results support the findings of the current dissertation.

One comprehensive longitudinal study spanning three waves of data collection from 2008 to 2010 found online community users scored significantly higher than non-online community users among three of four dimensions of social capital (Brandztaeg, 2012). These dimensions included face-to-face interaction, number of acquaintances and bridging social capital. Ellison, Steinfield and Lampe (2007) surveyed university students and found online community use had positive and significant relationships with bridging social capital and bonding social capital. These authors followed up the study, this time conducting interviews as well as disseminating two waves of surveys, and again found online community use was positively associated with social capital (Ellison, Steinfield, & Lampe, 2008). In a later study Ellison, Vitak, Gray and Lampe (2014) surveyed adults and similarly found bridging social capital was positively and significantly associated with online community use. These studies, the same way as the current dissertation, show support for the results found in the current dissertation.

Other studies have explored the relationships between online community use and social interaction and relationship building, two variables closely related to social capital as conceptualised in the current dissertation. Jin (2013) found greater intensities of online community use lead to a higher chance an individual would build social relationships. Another study by Cheung, Liang and Leung (2014) found similar results, online community use was positively and significantly associated with two measures of social interaction - seeking affection and seeking recognition. There appears to be general consensus in the literature with almost all articles finding a positive and significant relationship between online community use and social capital.

The relationship between the number of rounds of golf played per month and time spent in golf-related online communities was found to be insignificant. This result shows an individual does not necessarily play more rounds of golf if they spend more time in golf-related online communities. Generally, other studies have found differing results between online community use and behaviour. Positive relationships between online community use and behaviour in civic engagement (Cheung et al., 2014; Theocharis & Quintelier, 2014), consumer activity (Gironda & Kargaonkar, 2014),
romantic relationship activity (Utz & Beukeboom, 2011) and political participation (Zunga et al., 2012) have been found in past research.

More specific to sport management, Mahan et al. (2015) theorised that because SNSs allow easily accessible communication channels among like-minded athletes they would have the ability to enhance motivation and, as a result, create more engaged sportspeople. This theory was supported by the results as individuals who used running-related SNSs more often also ran more miles per week (Mahan et al., 2015).

Bivariate correlation did not support a significant relationship between the social aspect of life satisfaction and the amount of time spent in golf-related online communities. This finding shows that if an individual spends more time in golf-related online communities they are not more likely to perceive their social life to be greater. Past studies have reported mixed results when exploring the relationship between life satisfaction and online community use.

In their seminal article Ellison et al., (2007) concluded that SNS use interacted with several measures of psychological well-being. Adding that there may be benefits of SNS use for individuals experiencing low life satisfaction. Valenzuela et al., (2009) also found a positive and significant relationship between online community use and life satisfaction in their study of 2,603 participants. A qualitative study of nine “at risk” individuals of social exclusion found online communities provide opportunities for social inclusion (Notley, 2009). Online communities were found to be helpful because these individuals were able to keep in contact with individuals overseas easily, reach out to new friends and join virtual communities alongside various individuals with similar interests (Notley, 2009). Without online communities it would have been more difficult for these “at risk” individuals to develop relationships.

However, other studies, like the current dissertation, failed to report positive relationships between online community use and life satisfaction. Brandtzaegs (2012) study of 1,372 participants found online community users reported significantly more loneliness than non-users. As well as this Park and Lee (2014) found a limited effect of online community use and two measured psychological outcomes, sense of belonging and campus life satisfaction.

The current dissertation also examined the relationship between the influence of golf on life satisfaction and golf-related online community use. Bivariate correlation found a small and significant relationship between the influence of golf on the social aspect of life satisfaction and the amount of time spent in online communities. This shows that in the sample of this dissertation the more time an individual spends in golf-
related online communities the greater the influence of golf on the social aspect of life satisfaction. Mahan et al., (2015) measured this relationship in the past also finding a positive and significant relationship between the two variables in runners.

5.2 Differences between Lurkers and Contributors
The second set of analyses sought to explore the second research question:

RQ 2a: Do lurkers and contributors differ in terms of their sport involvement?
RQ 2b: Do lurkers and contributors differ in terms of their social capital?
RQ 2c: Do lurkers and contributors differ in terms of their golf participation?
RQ 2d: Do lurkers and contributors differ in terms of their social aspect of life satisfaction?

This research question consists of four relationships which were tested through the use of an independent $t$-test. The first analyses explored whether or not contributors and lurkers experience a significantly different relationship with the three dimensions of sport involvement. No significant differences between lurkers and contributors were found for the involvement dimensions of symbolic and hedonic value. However, for centrality, it was found that contributors had a significantly higher mean than lurkers. This result shows that contributors are more likely to organise their lives around golf and / or golf provides the most interactions with friends (Wiley et al., 2000).

From the social aspect in Wiley’s (2000) conceptualisation of centrality it makes sense that those who contribute more in golf related online communities will perceive golf as the main place where interactions with friends occur. One of the key aims of online communities, particularly SNSs, is to provide opportunity for interaction with friends (Ellison et al., 2007; Notley, 2009). However, the results also show that contributors do not find golf more important and pleasurable than lurkers, nor do they believe golf to be a place of expression of external- or self-representation any more than lurkers (Wiley et al., 2000).

The lack of significant difference between contributors and lurkers in symbolic value is a surprising finding. One might reasonably expect a golfer to contribute in online communities to express themselves to others as a golfer because online communities are commonly portrayed as a platform for individuals to express themselves (Livingstone, 2008; McGoldrick, 2013; Moreno, 2010). However, most studies exploring online communities are carried out on younger demographics while this study was carried out on an older population ($M = 47.1, SD = 16.79$). Perhaps older populations do not use golf-related online communities as a platform to express
themselves as much as younger people. Older people may not feel the need to post in online communities if they find golf more important and pleasurable. Overall, findings of all three facets of involvement suggest golfers may comment in online communities for social interaction and not because they wish to express themselves or because they perceive golf to be more important or pleasurable. There is no previous research to compare these relationships to.

The next relationship explores whether or not there are significant differences between the means of contributors and lurkers on social capital. In this study the conceptualisation of social capital was heavily influenced by Putnam (2000) and thus consists of two facets, bridging and bonding social capital. Contributors had a significantly higher mean for both bridging and bonding social capital. These findings suggest that contributors are more likely to make connections with individuals from different backgrounds as well as receive emotional or substantive support from their connections (Williams, 2006). These findings were expected as they are similar to much of the previous research.

Rafaeli et al., (2004) and Burke et al., (2010) both found activity in online communities was positively correlated with social capital. However, there are significant differences between the data collection procedures utilised and the ways which social capital is measured. Rafaeli et al., (2004) measured activity using log data directly from 82 online communities. Log data includes the time one spent online as well as activity involved in, such as commenting, browsing, creating a thread etc. Burke et al’s., (2010) research consisted of fairly similar conceptualisations of bonding and bridging social capital as did the current dissertation and also explored the relationship between level of engagement in an online community and social capital. They found general site engagement, measured in various ways respondents posted content, was associated with bridging social capital. Also, directed communication between pairs was more positively associated with bonding social capital in their study.

The results of the independent t-test did not identify a significant difference between lurkers and contributors and the number of rounds of golf played per month. No studies were located which have examined the relationship between an individual’s willingness to contribute in online communities and their level of participation in sport.

Scholars in other fields have explored the relationship between engagement in online communities and behaviour change, generally finding different results than the current dissertation. A 2003 article found that those more active in online communities have strong positive intentions to use information in a way which will benefit their
offline activities (Takahashi, Fujimoto, & Yamasaki, 2003). Another study identified a positive and significant correlation between intention to quit smoking and an individual’s participation level in online communities, representing a medium sized-effect (Phua, 2011). In seminal work on the theory of planned behaviour it was proposed that intention to alter behaviour is a strong indicator of actual behaviour change (Ajzen, 1990). The findings of the current dissertation do not support those in other research areas.

For the relationship between extent of contribution in golf-related online communities and the social aspect of life satisfaction the difference between the means of the groups was significant. Other research has supported the findings of the current dissertation. Burke et al., (2010) reported individuals who contribute less in online communities experience greater feelings of loneliness, whereas direct communication between peers was associated with decreased feelings of loneliness. It should be of no surprise that loneliness is a major contributor of low levels of the social aspect of life satisfaction (Sirgy et al., 2011). Another article found that lurkers in online communities reported lower levels of the social aspect of life satisfaction (Krasnova, Wenninger, Widjaja, & Buxman, 2013). As well as this, Brandzaeg (2012) reported lurkers have a lower number of offline acquaintances and experience greater levels of loneliness than those who contribute more. The results of this dissertation are supported by the wider literature on the topic. Therefore, those who contribute a greater amount in online communities are more likely to have a greater perception of the quality of their social life. Thus, if we assume the bottom-up spill-over theory exists, greater contribution in online communities will increase an individual’s perception of their position in life (Sirgy, 2012).

No significant difference was noted between the lurkers and contributors for the influence of golf on the social aspect of life satisfaction. This result shows that participating in golf may not influence the social aspect of life satisfaction. This may show that contributors in golf-related online communities are also more likely to be contributors in other online communities where they would gain an increased social aspect of life satisfaction.

Now that the results and their significance have been discussed it is time to conclude the findings, report limitations and discuss the implications for sport managers.
Chapter 6: Conclusions

In this study research questions have been justified, posed, tested and discussed in the context of relevant research. This last chapter includes a brief summary of the important results, implications of the results for sport managers, recommendations for researchers in the field of sport management and an acknowledgement of the limitations which affected this research.

6.1 Differences between Lurkers and Contributors

Significantly higher means were found in contributors when compared to lurkers in four of the explored variables. Centrality, the dimension of involvement containing a social element, and both aspects of social capital were found to be greater in those who contribute in online communities. Social life satisfaction was also significantly greater in those who contribute in online communities. This is likely an extension of a greater number of social interactions and a perceived greater value gained from them. These results are in line with those of Brandstaaeg (2012) who concluded “the usage of SNSs and social contact are supplementary, and might extend existing levels of social contact” (p. 484).

There was no significant difference between contributors and lurkers in relation in the other four variables. Those who contribute in online communities more often do not play significantly more rounds of golf per month. They also do not find the sport to be an internal expression or external representation of themselves more so than lurkers, nor do they find it more important and/or pleasurable. Finally, golf and golfing activities did not provide a significant difference in its influence on the social aspect of life satisfaction between the two groups.

The results of the independent t-test suggest golfers who contribute in golf related online communities receive benefits to their social life. However, this does not result in increases of the amount of golf played.

6.2 Bivariate correlation results

Bivariate correlation identified that golfers who spend more time in golf-related online communities will find golf more pleasurable and important, more of an internal expression and external representation of themselves and more central in their life (Wiley et al., 2000). As well as this, they will have more strong relationships with other golfers who provide emotional and substantive support. They will also have weaker ties with golfers from different backgrounds (Williams, 2006). Finally, golf will provide a greater positive influence on their social lives.
Bivariate correlation also showed the amount of time spent in golf-related online communities did not significantly impact the amount of golf played or their social life satisfaction. However, the conclusions derived through the statistical analyses should be interpreted with caution for various reasons. The effect sizes of the results were all small, indicating a small difference in the means of the above identified significant relationships. Also, the sample was small, the sampling technique was non-random and the process of questionnaire dissemination has likely excluded many in the targeted population. These issues are explored further in the limitation section.

The findings of the current research ease the early, highly publicised, beliefs that online community use has largely negative effects on psychological well-being and social aspects of life (Kraut, et al., 1998).

6.3 Implications for sport managers
The first research question explored whether or not those who contribute in golf-related online communities experience greater benefits in certain research variables than lurkers. It was found they did in most research variables, suggesting that it is beneficial to entice individuals to contribute in online communities. Most businesses have a profile on at least one SNS. A practical recommendation to sport managers is to encourage commenting on their posts in SNSs. This is commonly done by simply asking questions. For example, “ICC – International cricket Council” asked “what is your favourite memory of the tournament?” on Facebook encouraging fans of their Facebook page to answer the question by commenting (International Cricket Council, 2015).

The second research question found that, in general, spending more time in online communities was associated with greater benefits for the research variables. Therefore, it would be beneficial to entice individuals to spend more time in online communities. One common way this is currently done is by using SNSs, the most popular type of online community, to post links leading golfers to sport related content which takes up more of their time. This could include directing individuals to lesser used sites like Golf WRX, where all the content is golf-related, or golf-related news articles.

6.4 Limitations and Future Recommendations
The limitations of this dissertation strongly influenced the final outcome of this project. The major limitation was a small sample size. Early consultations with NZ Golf in the planning stages of this research indicated they would the researcher access to their database and the questionnaire would be distributed via email. Instead the questionnaire was only advertised online. This did not provide an accurate representation of the
golfing population in New Zealand and those without internet access were automatically excluded. Also, those who do not use Facebook and the NZ Golf website were inadvertently excluded as these were the only two websites the questionnaire was advertised on. As well as this, it added an extra exclusion criteria. Because there was only a very low number of respondents indicating to not be online community users they were excluded from the study. The findings provided by contrasting those who do not use online communities with those that do would have provided interesting insight into the implications of online community use in older people, an understudied population in research on online communities.

The other limitation caused by a small sample size was drastic changes to the methods utilised. Pairing with NZ Golf was expected to bring about a large sample size. As it turned out this was not the case. Therefore, the researcher could not use structural equation modelling to analyse the data, as was intended, because a larger sample size is required to use such a complex model. Also, the research questions needed to be modified to fit the purpose of an exploratory research project rather than a confirmatory one.

This study adopted convenience sampling to gather the sample used in this project. The major limitation of using a non-random sampling approach is that we cannot generalise the results to the golfing population but only the sample gathered for this project (Groves, et al., 2004). Also, sampling error is likely to be greater because convenience sampling was used (Bryman, 2012). Sampling error will always occur because there will be differences in results between the sample collected and the actual population (Lohr, 2008).

Respondents to questionnaires are more likely to have high levels of involvement. This relationship was observed by Filo et al., (2014). Also, individuals profiled as lurkers are less likely to respond to questionnaires. In this study there was almost a 50/50 split between lurkers and contributors which is almost certainly an over representation of contributors. Previous research has found contributors typically only make up between 10% and 30% of individuals in online communities (Nonnecke & Preece, 2010).

By addressing these limitations in future endeavours one could produce more rigorous research. This can be done by adopting random sampling techniques. An obvious way this could be achieved is by sending a link to a questionnaire to email addresses of a large membership. Therefore, participants who do not use golf-related online communities have a greater chance to respond to the questionnaire. Also,
gathering a larger sample size is necessary to be able to generalise results to a population and to conduct more rigorous statistical analyses.

Now, the attention will be moved to the wider area of online community use research in the field of sport management. Only recently has research focusing on online community use and its effects on sport-related outcomes come into focus in the field of sport management (Mahan et al., 2015). The one empirical piece by Mahan et al., (2015) found usage of online communities is a mediator between involvement and social life satisfaction and running behaviour. However, to analyse the data multiple regression was used. The author of the current dissertation recommends the use of SEM to test the same relationship. SEM has been found to have significant advantages over multiple regression in testing for mediation, including (Byrne, 2012; MacKinnon, 2008; Gunzler, Chen, Wu, & Zhang, 2013):

- Taking a confirmatory approach rather than exploratory
- Estimates error variances parameters explicitly
- Measures unobserved variables and/or observed variables
- Has higher statistical power
- Can measure multiple dependent variables in one model
- The model fit data is provided

Therefore, while Mahan et al., (2015) found promising results showing a relationship between online community use and increased time participating in sport their findings need to be supported by superior data analyses to add credibility to the results.

More generally, sport management researchers need to research the impact of online communities on sport-related outcomes. In 2007 Ellison et al., wrote the first seminal article exploring Facebook, since this time online communities have only become more popular and become a larger part of the average individual’s life (Facebook, 2014, Facebook, 2015). It is a logical assumption that online communities do impact on the sport and recreation industry, it is about time to find out how.

6.5 Concluding Remarks
The purpose of this dissertation was to explore the association between online community use and (a) sport involvement; (b) social capital; (c) golf participation; and (d) the social aspect of life satisfaction. Partnering with NZ Golf this dissertation explored the effects of online communities on golfers. After receiving 101 usable responses to the questionnaire the relationships set out in the purpose were analysed using an independent means t-test and correlation analyses.
In summary the research explored whether or not individuals who spend more time in golf-related online communities or contributed more in these online communities experienced any benefits. It was found research that more time in online communities is significantly correlated with greater levels of social capital and sport involvement. However, time in online communities was not linked to greater golf participation or enhancements in the social aspect of life satisfaction. Those who contributed more in their online communities were found to experience enhanced levels of involvement and social capital. Again though, those who contribute more did not report greater levels of golf participation or the social aspect of life satisfaction.

This research added to the promising findings suggesting sport-related online communities positively affect sport related aspects of life (Mahan et al., 2015). Although further research utilising more rigorous methods is required and suggested by this dissertation it seems sport managers would be wise to encourage individuals to spend greater time and contribute more in sport related-online communities. If used wisely social media could be used to benefit members of sport organisations.
References


Appendices

Appendix A: Approval of Research Proposal

15 February 2015

Jimmy Van Der Colk
126 Tasman Street
Nelson 7010

Dear Jimmy

Re: Master of Business (Thesis) Research Proposal

The Postgraduate Research Examination Board discussed your postgraduate research proposal at its meeting on 12 February 2015. Your topic, ‘Exploring the impact of social networking sites on running involvement, running behavior, social life satisfaction and social capital’ with Dr Michael Naylor and Associate Professor Geoff Dickson as supervisors has been approved. The Board noted the following to take into consideration while completing your thesis:

- The Board noted that the cost of survey monkey would need to be increased to cover a few months
- The Board noted that the budget limit for MBus dissertation is $500 maximum
- The Board felt that the sample size was large for a 45 point MBus Dissertation

It is important that you meet with your supervisor as soon as possible to discuss further development of your research proposal, and to finalise your supervisory agreement. If you included a budget in your PGR1, this has been approved. You will find enclosed an application form for the Masters Contestable Fund. This fund usually contributes to such costs as the printing and postage costs involved with surveys. Please discuss this with your supervisor before applying. Please submit the completed form to the Postgraduate Research Office, after you have incurred the expenses, with official receipts for reimbursement.

Please note that if you are unable to submit your dissertation by the end of your enrolment period, you will need to apply for an extension by completing a variation of record form (PGR2). Extension fees will be payable according to AUT’s Standard Qualification Regulations, Section 3, Paragraphs 3.4 and 3.5: “The student shall pay the appropriate additional fees for extension on a pro-rata basis”.

We wish you the best for your continuing study.

Yours sincerely

Dr Andy Godfrey
Chair - Postgraduate Research Examination Board

Postgraduate Research Office
AUT Faculty of Business and Law
Level 8, 42 Wakefield Street
Kerikeri, GPO 3240, New Zealand
Ph: 09 407 5100
Fax: 09 407 5199
E-mail: postgrad@aut.ac.nz
Web: www.aut.ac.nz
Appendix B: AUTEC Ethical Approval

10 March 2015

Michael Naylor
Faculty of Health and Environmental Sciences

Dear Michael

Re Ethics Application: 15/47 Exploring the impact of social networking sites on running involvement, running behaviour, social life satisfaction and social capital.

Thank you for providing evidence as requested, which satisfies the point raised by the Auckland University of Technology Ethics Committee (AUTEC) Secretariat. Your ethics application has been approved for three years until 9 March 2018.

As part of the ethics approval process, you are required to submit the following to AUTEC:

- A brief annual progress report using form EA2, which is available online through http://www.aut.ac.nz/researchethics. When necessary this form may also be used to request an extension of the approval at least one month prior to its expiry on 9 March 2018;
- A brief report on the status of the project using form EA3, which is available online through http://www.aut.ac.nz/researchethics. This report is to be submitted either when the approval expires on 9 March 2018 or on completion of the project.

It is a condition of approval that AUTEC is notified of any adverse events or if the research does not commence. AUTEC approval needs to be sought for any alteration to the research, including any alteration of or addition to any documents that are provided to participants. You are responsible for ensuring that research undertaken under this approval occurs within the parameters outlined in the approved application.

AUTEC grants ethical approval only. If you require management approval from an institution or organisation for your research, then you will need to obtain this.

To enable us to provide you with efficient service, please use the application number and study title in all correspondence with us. If you have any enquiries about this application, or anything else, please do contact us at ethics@aut.ac.nz.

All the very best with your research,

Kate O'Connor
Executive Secretary
Auckland University of Technology Ethics Committee

Cc: James van der Colk jimmyvdc@gmail.com
Appendix C: Invitation of Participation in Research

17 February 2015

Mr. Kenny Halliday
Community Manager
New Zealand Golf

Kenny,

We are seeking the support of New Zealand Golf to complete a project exploring the use of golf-related social networking site (SNS) by New Zealand’s golfers. The project is part of Jimmy Van der Valk’s Master of Business dissertation and will be supervised by Associate Professor Geoff Dickson and Dr Mike Naylor.

Key premise
In the modern world, golf is no longer just consumed ‘on the course’ or ‘at the club’. Social networking sites provide additional touch-points for golf consumption. Golfers are less likely to leave the sport if they have strong interpersonal relationships within the sport.

Key Questions:
To what extent does involvement and the use of golf-related social networking sites contribute to:
- more golf participation?
- an individual’s satisfaction with their social life?
- an increase in the value of an individual’s relationships?

Survey
Each concept will have a number of survey items linked to it. Below, we list and define each of the key variables and provide an example an item used to measure the variable.

Involvement: A psychological construct capturing motivation, interest and symbolic value.
e.g., Participating in golf says a lot about who I am

Intensity (frequency) of social networking site use
 e.g., Approximately how many minutes per day have you spent on SNSs you use on golf related activities?

The Social Aspect of Life Satisfaction: The impact of participating in golf on your social life.
e.g., How much does meeting new people influence your decision to golf?

Social Capital: Resources linked to social networks.
e.g., Interacting with people who play golf makes me feel like a part of a larger community

Golf Behaviour
Golf participants will be asked how many rounds of golf they played in the previous (typical) month.
Golfers will indicate the degree to which they agree/disagree with various statements as well as provide other information about their background and golfing behaviours. With your support, we envisage that the invitation to participate will be distributed via email. The survey will be administered online. The study will be conducted to the stringent expectations of the AUT Ethics Committee.

We remain open to NZ Golf (or its various stakeholders) to incorporate additional items on the questionnaire, although overall length should be monitored.

Role of NZ Golf

*We seek the assistance of NZ Golf to recruit participants.* We will need to generate 300-400 responses to allow for rigorous statistical analysis. Given the inevitability that some who are offered the opportunity to participate will never start and others will start but not complete, we probably need to make the initial offer to 1500+ potential participants.

We would seek your guidance on how to distribute the invitation to participate so that we can also ensure that the participants are representative of the NZ Golf community.

We would like to provide participants with an incentive to participate. This might be something as simple as the chance to win NZ Golf Love Golf merchandise.

Benefits

NZ Golf (and its member clubs) will acquire a more-informed understanding of the relationships between sport involvement, the use of social networking sites and life satisfaction/social capital. NZ Golf will acquire a more nuanced view of how golfers use social networking sites. The study will produce an accurate way of to measure golf involvement. This can be used in any research of golf consumers. All of these will create an improved understanding of how to increase participation, as well as increase new club membership and existing member retention.

Proposed 2015 Timeline

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Late Feb</td>
<td>NZ Golf and AUT discuss and agree on basic framework for the project</td>
</tr>
<tr>
<td>By Mid-March</td>
<td>Questionnaire disseminated to NZ golf community</td>
</tr>
<tr>
<td>April/May</td>
<td>Data analysis, writing</td>
</tr>
<tr>
<td>June</td>
<td>Findings shared with NZ Golf, meeting to discuss findings/implications</td>
</tr>
</tbody>
</table>

Please do not hesitate to contact us to discuss any aspect of this project.

Sincerely,

[Names]

Jimmy, Michael and Geoff
Appendix D: Full Questionnaire

Exploring the Role of Online Communities in Golf

Survey Information

1/5

Project Title
Exploring the impact of online communities on golf involvement, golf behaviour, social life satisfaction and social capital.

An Invitation
I would like to invite you to participate in this research project by completing a short survey. Of course, it is your choice to complete it and you may opt out at any stage. My name is Jimmy van der Colk and this research is the final requirement to complete my Masters Degree in Business. I have chosen to team up with NZ Golf in this project because I am very passionate about seeing the sport grow in NZ.

What is the purpose of this research?
This research will definitely result in a dissertation (a research paper submitted towards my University degree). There is also a chance the data you provide will be used in a journal article and/or conference paper.

How was I identified and why am I being invited to participate in this research?
You have come to be filling in this survey either by clicking on a link on golf.co.nz or the Facebook page, or emailed the link through your golf club manager. All golfers (over the age of 15) are welcome to participate in this study to contribute data which NZ Golf can use to improve their online presence and, in turn, their service to you.

What will happen in this research?
All that is required from you in this project is the completion of this survey. Once we have finished data collection the results will be analysed and a summary will be given to NZ Golf. Once NZ Golf has the results they can choose how to best utilise them.

What are the benefits?
The benefits of participating in this research include a chance to provide data which has the potential to improve how NZ Golf uses its social networking sites. As well as this you may enter a draw to win one of five petrol vouchers, one of five LOVE Golf t-shirts, one of three LOVE Golf hoodies and some golf balls upon completion of the survey.

How will my privacy be protected?
The researcher will not be able to identify any individual to a set of responses. As well as this, the researcher will not be in possession of your contact details (unless you choose to provide these for the prize draw). The survey you complete will be stored in a secure location in a locked cupboard, as per the requirements of the Auckland University of Technology Ethics Committee.

What are the costs of participating in this research?
This survey will take roughly ten minutes to complete.
What opportunity do I have to consider this invitation?
You have until the 20.05.2015 to complete this survey before it closes.

How do I agree to participate in this research?
By completing the survey you are agreeing to participate.

Will I receive feedback on the results of this research?
Not automatically, but please feel free to contact either myself or the Project supervisor for a copy of
the results via the email addresses provided at the end of this information page.

What do I do if I have concerns about this research?
Any concerns regarding the nature of this project should be notified in the first instance to the Project
Supervisor, Michael Naylor, michael.naylor@aut.ac.nz, +64 9 921 9999 Ext 6627.

Concerns regarding the conduct of the research should be notified to the Executive Secretary of
AUTC, Kate O’Connor, ethics@aut.ac.nz, 921 9999 ext 6038.

Whom do I contact for further information about this research?
Researcher Contact Details:
Jimmy van der Colk is the researcher of this project. For any queries or concerns contact him via email:
jimmyvdc@gmail.com

Exploring the Role of Online Communities in Golf

About You - The results of this survey will be anonymous.

1. Gender:
   - Male
   - Female

2. In what year were you born? (enter 4-digit birth year; for example, 1976)

3. Relationship status:
   - Married (not separated)
   - Civil union (not separated)
   - Separated
   - Divorced or dissolved
   - Widowed or surviving civil union partner
   - Never married and never in a civil union

Next
4. What is the highest level of education you have achieved?

- No qualification
- Level 1 Certificate (equivalent of Form 5)
- Level 2 Certificate (equivalent of Form 6)
- Level 3 Certificate (equivalent of Form 7)
- Level 4 Certificate
- Level 5 Diploma
- Level 6 Diploma
- Bachelor Degree
- Postgraduate and Honours Degrees
- Masters Degree
- Doctorate Degree
- Overseas secondary school qualification

5. Please select your region from the provided list:

- Northland
- Auckland
- Waikato
- Bay of Plenty
- Gisborne
- Hawkes Bay
- Taranaki
- Manawatu-Wanganui
- Wellington
- Tasman
- Nelson
- Marlborough
- West Coast
- Canterbury
- Otago
- Southland

6. What type of golfer are you?

- A NZ Golf Member
- A registered Casual Golfer
- A Casual Golfer
7. Please select all of the online communities you use for golf-related activities (i.e., reading, clicking, commenting, engaging golf posts/content/material):

- Facebook
- Twitter
- LinkedIn
- Google+
- Eduibi
- Golf WRX
- The Sand Trap
- Swing Profile
- Free Golf Info
- Shot Talk

Other (please specify)

8. Approximately how many minutes per day do you spend on golf-related activities across all of your online communities?

9. Approximately, what percentage of your total time in online communities is spent on golf-related activities?

10. How often do you contribute (either initially or in response to others) in your online golf communities?

- About once per day
- About once per week
- About once a month or less
- Never
11. If there was a New Zealand based online community for golfers how likely would you be to join it?

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<tr>
<th>0 - No chance</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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<th>9</th>
<th>10 - Practically certain</th>
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**Involvement**

12. Indicate your level of agreement to the following statements:

<table>
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<tr>
<th>Disagree</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Agree</th>
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</thead>
<tbody>
<tr>
<td><strong>Golf has a central role in my life</strong></td>
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<tr>
<td><strong>Participating in golf is one of the most satisfying things I do</strong></td>
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<td><strong>You can tell a lot about a person by seeing them participate in golf</strong></td>
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<td><strong>I really enjoy golf</strong></td>
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<tr>
<td><strong>I enjoy discussing golf with my friends</strong></td>
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<tr>
<td><strong>When I participate in golf I can really be myself</strong></td>
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<tr>
<td><strong>I find a lot of my life is organised around golf activities</strong></td>
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<tr>
<td><strong>When I participate in golf others can see me the way they want to see me</strong></td>
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<tr>
<td><strong>Participating in golf says a lot about who I am</strong></td>
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<tr>
<td><strong>I find a lot of my life is organised around golf</strong></td>
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<td><strong>Golf is very important to me</strong></td>
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<td><strong>Golf offers me relaxation when pressures build up</strong></td>
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</table>
Golf Behaviour

13. In a typical month during the golf season how many rounds of golf do you play?

14. If you have one, what is your handicap?

15. If you are a casual golfer and have one, what is your Average Score Index?

16. Please only answer this question if you are currently a member of a golf club. Taking everything into account, how likely are you to renew your golf club membership?

<table>
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<tr>
<th>0 - No chance</th>
<th>1</th>
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<th>4</th>
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<th>8</th>
<th>9</th>
<th>10 - Practically certain</th>
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Social Capital

17. Indicate your level of agreement to the following statements:

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<tr>
<th>1 - Strongly Disagree</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7 - Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interacting with golfers makes me feel like a part of a larger community</td>
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<td>I am willing to spend time to support general golf activities</td>
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<td>There is a golfer I can turn to for advice about making very important decisions</td>
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<td>Interacting with golfers reminds me that everyone is connected</td>
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<td>There are several golfers I can trust</td>
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<td>I feel comfortable discussing intimate personal problems with some golfers I know</td>
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[Next Page]
Interacting with golfers makes me want to try new things

I know golfers well enough to get them to do anything important

Because of golf I come into contact with new people all the time

Golfers I interact with would put their reputation on the line for me

Social Life Satisfaction

18. How would you rate your overall social life satisfaction? (i.e., how I feel about friends, people I meet, people I socialise and party with)

<table>
<thead>
<tr>
<th>1 - Very Dissatisfied</th>
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<th>5</th>
<th>6</th>
<th>7 - Very Satisfied</th>
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19. Please indicate to what extent your golfing activities (i.e., participation in the sport and golf-related activities) influence your satisfaction with your social life?

<table>
<thead>
<tr>
<th>1 - Decreased Satisfaction</th>
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<th>4</th>
<th>5</th>
<th>6</th>
<th>7 - Increased Satisfaction</th>
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</tbody>
</table>
Enter the Prize Draw

Thank you for taking the time to complete this survey. If you would like to enter the prize draw click on the link below:

https://www.surveymonkey.com/r/66NNF3R

While we’re on the topic of online communities check out these links:
Like "Love Golf" on Facebook
Follow "Love Golf" on Twitter

Prize Draw

Please enter your contact details below

Be advised, the information you provide on this page can't be linked to your survey responses.

It is necessary to provide a phone number or email address or both. Once the survey is closed the winners will be contacted to arrange delivery of prizes.

Again, thank you for taking part in the survey and good luck.

1. Contact details:
   Name
   Email Address
   Phone Number

Know any others who may be interested in sharing their thoughts? Please email them the survey link below:

https://www.surveymonkey.com/r/V7NF7CP

For everything you want to know about Golf in New Zealand, including upcoming tournaments and general golf info, check out the NZ Golf website: http://www.golf.co.nz/
Appendix E: Research Participant Recruitment

AUT are carrying out some research around the impact of online communities on golf involvement, golf behaviour and social life satisfaction.

Take 4.5 minutes from your day to complete the survey and share with any contacts you have that may be interested in providing their thoughts.

https://www.surveymonkey.com/r/VTNF7CP