

Summer 2013

Sports Message Boarding: Association with Sports Team Identification and Social Well-Being

Brian D. Carlson

Follow this and additional works at: <https://digitalcommons.georgiasouthern.edu/etd>



Part of the [Psychology Commons](#)

Recommended Citation

Carlson, Brian D., "Sports Message Boarding: Association with Sports Team Identification and Social Well-Being" (2013). *Electronic Theses and Dissertations*. 856.

<https://digitalcommons.georgiasouthern.edu/etd/856>

This dissertation (open access) is brought to you for free and open access by the Graduate Studies, Jack N. Averitt College of at Digital Commons@Georgia Southern. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of Digital Commons@Georgia Southern. For more information, please contact digitalcommons@georgiasouthern.edu.

SPORTS MESSAGE BOARDING: ASSOCIATIONS WITH SPORTS TEAM
IDENTIFICATION AND SOCIAL WELL-BEING

by

BRIAN D. CARLSON

(Under the Direction of Jeff Klibert)

ABSTRACT

Research indicates that participating in or volunteering for sports related activities may increase overall well-being. Additionally, identifying with, or being a fan of a particular sports team may contribute to positive psychological outcomes. However, no study to date has examined whether participation in sports team message boarding is associated with positive psychological outcomes. As a result, the current study sought to determine if positive relationships exist among message board usage, team identification, and positive psychology variables. Three hundred and four members of an online sports message board completed self-report surveys examining message board usage, team identification, and positive psychological traits. Results were inconsistent with existing research suggesting that participation in such forums may not be directly related to well-being. However, one usage variable, lurking, predicted variance in team identification status, suggesting that some message board variables may increase fanhood. Methodological, theoretical, and practical implications are explored.

INDEX WORDS: Message Boards, Sport Team Identification, Social Well-Being

SPORTS MESSAGE BOARDING: ASSOCIATIONS WITH SPORTS TEAM
IDENTIFICATION AND SOCIAL WELL-BEING

by

BRIAN D. CARLSON

B.A., Auburn University, 2004

M.S., Georgia Southern University, 2010

A Dissertation Submitted to the Graduate Faculty of Georgia Southern University in Partial
Fulfillment of the Requirements for the Degree

DOCTOR OF PSYCHOLOGY

STATESBORO, Georgia Southern University

2012

© 2012

BRIAN D. CARLSON

All Rights Reserved

SPORTS MESSAGE BOARDING: ASSOCIATIONS WITH SPORTS TEAM
IDENTIFICATION AND SOCIAL WELL-BEING

by

BRIAN D. CARLSON

Major Professor: Jeff Klibert
Committee: Karen Naufel
James Pugh

Electronic Version Approved:
July 2013

DEDICATION

This dissertation is dedicated to my wife Melissa Carlson, and to our two wonderful daughters, Caraline Lindsey and Camryn Avery. These incredible women are my world and have stood beside me from day one of this journey. They have celebrated my successes, have picked me up when I have fallen, and have supported me unconditionally throughout this process. This dissertation would not exist without my family and I cannot begin to thank them enough. I love you, girls. Additionally, I must dedicate this to my parents, Jim and Sherry Carlson, and my brother and sister-in-law, JimBo and Kilene Carlson for their unwavering support and faith in my abilities and potential.

ACKNOWLEDGEMENTS

I would like to thank the members of my committee for their help on this dissertation. I am fortunate to have professors who believe in me and have been able to help me through this process. Most notably, Dr. Jeff Klibert, my dissertation chair, has been extremely important to both this process and to my overall clinical training. Although I am sure that I pushed the limits of his patience at times, he never let it show, but rather continued to challenge while supporting me throughout. I would also like to thank the faculty and staff at the Georgia Southern Counseling and Career Development Center. This has been my home away from home for over two years now and the people there have helped shape me into the therapist, and the person that I am today. I cannot imagine where I would be if I had not completed the bulk of my practicum training at the Counseling Center. I would also like to thank my classmates. I have felt from the beginning that we were all in this together, and I watched us support each other through good times and bad. I am thankful to be a part of my cohort and know that we are all meant for big things in the future.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	6
LIST OF TABLES.....	9
CHAPTER	
1 INTRODUCTION	10
Purpose.....	12
Significance.....	13
Definition of Terms.....	14
Belongingness.....	14
Prosocial Behavior.....	14
Satisfaction with Social Life.....	15
Sport Team Identification.....	15
Team Based Internet Message Boards.....	15
2 LITERATURE REVIEW	17
Rural versus Urban Differences in Well-Being.....	17
Positive Components of Sport Participation.....	18
Positive Aspects of Sport Volunteerism.....	21
Well-Being and Fandom.....	23
Positive Components of Online Sports Forums	25
Current Study.....	31
3 METHOD	33

Participants	33
Procedure.....	33
Measures.....	35
Interpersonal Needs Questionnaire.....	35
Prosocial Behavior Scale	35
Satisfaction with Social Life Scale	36
Sport Spectator Identification Scale.....	36
Questions Related to Sports Message Boards Usage.....	37
Proposed Analysis	37
4 RESULTS	39
Mean Comparisons.....	39
Pearson Product Correlations	40
Regression Analyses.....	41
5 DISCUSSION	43
Rural versus Urban Differences	43
Relations between Message Board Constructs and Indices of Well-Being	44
Relations between Message Board Constructs and Team Identification	44
Practical Implications	47
Research Method Implications	48
Theoretical Implications.....	49
Mental Health Implications	49
Limitations.....	50
Overall Conclusions	51
REFERENCES	54

LIST OF TABLES

Table 1: Frequency Demographics.....	61
Table 2: Means, Standard Deviations, and Minimum and Maximum.....	62
Table 3: Intercorrelations among Measures of Depression, Anxiety, Perceived Stress, Validation-Seeking, and Growth-Seeking.....	63
Table 4: Block Regression on Anxiety and Depression Scores.....	64

CHAPTER 1

INTRODUCTION

Traditionally, psychotherapeutic theories and techniques have been aimed at reducing debilitating symptoms (Seligman & Csikszentmihaly, 2000). Accordingly, such theories and interventions guide the way professionals interact and foster change within their clients. However, in recent years, psychology has seen a shift in the way therapy is viewed and applied. One specific movement that has influenced the alteration of therapeutic approaches is positive psychology. “Positive psychology is the scientific study of positive experiences and positive individual traits, and the institutions that facilitate their development” (Duckworth, Steen, & Seligman, 2005). In keeping within this line of thinking, mental health professionals have begun to consider the impact of positive emotions, purpose, and quality of life in treating clients, instead of focusing directly on pathology or symptoms (Seligman, Rashid, & Parks, 2006). To date, research has shown that attention to positive psychological factors within therapy is influential in the attainment and maintenance of successful outcomes (Seligman, Rashid, & Parks, 2006). Overall, it seems important that researchers and clinicians work together to continue to investigate factors related to the promotion of positive psychological variables in diverse populations (Duckworth, Steen, & Seligman, 2005).

Positive psychologists posit quality of life as the “central part of everyday functioning and experience” (Frisch et al., 2005, p. 67). Moreover, researchers have suggested that various social components are integral in the development of positive outcomes that promote overall quality of life and life satisfaction (Kimweli & Stilwell, 2002). To date, researchers have identified a wide range of social factors that cultivate increased feelings of quality of life and subjective well-being within individuals and communities (Kimweli & Stilwell, 2002). Among

them, belongingness appears to be a powerful antecedent in the development of a healthy sense of subjective well-being (Kimweli & Stilwell, 2002). Furthermore, research has also illustrated a strong positive link between prosocial behaviors and subjective well-being. Such prosocial behaviors as volunteering, helping others, and donating time or money have been shown to increase happiness, self-esteem, and life satisfaction in adults (Weinstein & Ryan, 2010). Social support has been shown to be an important factor in the overall well-being of adults.

Specifically, connections with others afford individuals additional coping resources in addition to sharpening interpersonal skills that can be used in other areas of life (Fredrickson, Mancuso, Branigan, & Tugade, 2000; Conoley & Conoley, 2010). Overall, it is important that researchers continue to identify variables that foster strong social abilities and dispositions so that we may develop more effective ways of helping individuals create and maintain healthy and meaningful interpersonal relationships.

The examination of sports related constructs has proven beneficial in helping researchers construct a working conceptualization about mechanisms through which an individual can develop social abilities and dispositions. For instance, youth sports programs have been shown to be effective in fostering specific social skills such as teamwork and leadership (Holt, Tink, Mandigo, & Fox, 2008). Even in adults, participation in sports activities have been shown to precipitate more elaborate social networks and increased social support (Coalter, 2005).

Interestingly, being an invested sports fan offers opportunities to promote one's sense of social life satisfaction in adults. Specifically, continued attendance at sporting events and increased levels of team identification (which is defined as the level of psychological connection a person feels for a player or team) can positively impact an individual's social well-being (Wann, 2006; Wann, Martin, Grieve, & Gardner, 2008, Wann & Pierce, 2005). Although researchers have

engendered a basic understanding of how fandom constructs may be related to the development of prosocial behaviors in adulthood, it is unclear what types of fan behaviors may be responsible for this link.

Although some sports constructs such as team identification have been related to positive social attributes and behaviors, it is unknown whether there is a relationship between participation in sports related message boards and social psychological outcomes. Although information gathering seems to be the most popular reason for using online message boards, research has suggested social interaction is an important motivation for forum users (Clavio, 2008). Social interactions online foster positive outcomes such as trust, integrity, and reciprocity (Best & Krueger, 2006). Because theoretical and empirical evidence suggests being a proactive fan may have some mental health benefits, it is important to delineate what types of fan behaviors are associated with positive psychological factors.

Purpose

The current study explored the differences in self-reports of psychological well-being in urban versus rural populations. Moreover, the primary purpose of this study was to investigate the univariate relationships between positive psychology variables (such as belongingness, prosocial behavior and satisfaction with social life) and team-based message board usage as defined by the number of hours, posts, and responses a person makes during a given week. Additionally, this study considered the impact of message board usage on team identification through a multivariate investigation. Finally, this study also attempted to determine whether message board usage predicts a unique amount of variance in belongingness, prosocial behavior, and satisfaction with social life over and above the impact of sports team identification.

Significance

Although sport team identification has been examined with respect to psychological well-being, few studies have examined the impact of sport related message boarding overall on social well-being. It is important that research investigate the influence of sports forums on psychological attitudes, behaviors, and social skills. Such research could initiate and extend theories addressing the influence of sports related interactions in the development of social and communication skills. Furthermore, continued research in this area could clarify the role of message boarding in the development of positive coping mechanisms for clients who suffer from a number of social and adjustment difficulties, especially ones who do not have access to mental health agencies.

Examining rural versus urban differences on psychological well-being is important in order to clarify what specific resources may be lacking in certain environments. Citizens in rural areas often have more difficulties in accessing needed psychological services than those in urban environments. Considering such restrictions, individuals living in rural areas may benefit from online services such as informative websites or online communities that offer social interaction through chat rooms or message boards. These types of social interactions could potentially increase a person's sense of well-being through connecting and sharing experiences with others in online communities.

Examining the relationships between sports related message boarding usage and social well-being could also extend how we cultivate and remodel interventions, particularly programs oriented towards social difficulties. Since message boards serve as online communities, it may be possible for individuals to experiment with and obtain exposure to a wide range of social dynamics that might promote insight, flexibility, and self-efficacy on how individuals approach

interpersonal relationships. Furthermore, due to the anonymous nature embedded within online communities, web chats and message boards may offer individuals a more comfortable environment in creating, reshaping, and maintaining healthy social skills.

Overall, message boarding through sports forums could initiate new opportunities and approaches for individuals to address social skill deficits. For instance, individuals may use online environments to develop more assertiveness in social interactions or strengthen interpersonal relationships with individuals who may have different backgrounds or values. Practice of such skills may enhance the development and maintenance of healthy interpersonal relationships.

Definition of Terms

The following concepts will be measured within the context of the current study. The subsequent section will highlight basic definitional and descriptive features of each concept.

Belongingness. Belongingness refers to a person's sense of connection to others in a meaningful way and the perception that one has stable relationships in his or her life (Anestis, Bryan, Cornette, & Joiner, 2009). The need for such connections to positive relationships or social groups can have profound effects on an individual's social well-being (You, Van Orden, & Conner, 2011). In the current study, belongingness served as one of the positive psychology outcome variables.

Prosocial Behavior. According to Caprara and Steca (2007), "prosocial behavior refers to individuals' tendency to undertake voluntary actions aimed at benefitting others, such as sharing, donating, caring, comforting, and helping" (p. 218). Engaging in prosocial behaviors often leads to a number of positive outcomes for both the individual who acts prosocially, and the recipient of such beneficial actions. To date, engaging in prosocial behaviors has been

positively related to increased involvement in one's community and to increased life satisfaction. In the current study, prosocial behavior acted as the second positive psychology outcome variable.

Satisfaction with Social Life. "Life satisfaction has been identified as a distinct construct representing a cognitive and global evaluation of the quality of one's life as a whole" (Pavot & Diener, 2008, p. 137). In order to evaluate an individual's overall judgment of his or her own social life, Wann and Pierce (2005) adapted the Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffen, 1985). Social life satisfaction refers to an individual's view of his or her own social psychological health, which is associated with social self-esteem and well-being (Wann, Martin, Grieve, & Gardner, 2008). In the current study, social life satisfaction acted as the third positive psychology outcome variable.

Sport Team Identification. According to Wann and Pierce (2005), sport team identification refers to "the extent to which a fan feels a psychological connection to a team or player" (p. 117). Sports team identification offers opportunities to connect with others through group memberships or team-based communities (Wann & Pierce, 2005). Since team identification has been shown to have positive social benefits, it was used as a control variable for this study.

Team Based Internet Message Boards. Message boards provide users with organized forums to discuss specific topics. Users are able to post messages that can be retrieved by other users at later times (Tumarkin & Whitelaw, 2001). This study examined the use of sports team based message boards. Internet message board usage was measured by survey questions aimed at gathering specific data such as a person's own perception of his or her level of activity, the amount of time spent viewing or participating in online discussions, and the quantity of messages

posted or responses given. The different facets of using of team based message boards served as the predictor variables within this study.

CHAPTER 2

LITERATURE REVIEW

Rural Versus Urban Differences in Well-Being

A pervading perception seems to exist within the literature indicating that individuals living in rural environments face more unique obstacles in developing stable levels of emotional and psychological functioning compared to those living in urban area. The research literature has speculated that these challenges may result from unique dynamics underlying rural life. Potential rural hurdles may be related to lower incomes, limited job opportunities, and higher levels of unemployment (Wilson & Peterson, 1988). Individuals from rural areas often report higher levels of stigma regarding psychological well-being and emotional functioning. These self-reported stigmas may be associated with smaller community size, less anonymity, unique cultural values concerning gender roles and masculinity, and less privacy within the community (Jones, Cook, & Wang, 2011). In contrast, individuals from rural communities may be the victim of societal stereotypes that may function as a debilitating force in developing a stable sense of well-being. Specifically, rural individuals may have to manage societal perceptions that undermine their intelligence, family values, and socialization practices (Bramston, Bruggerman, & Pretty, 2002). In sum, there seems to be a significant amount of anecdotal evidence suggesting that individuals from rural areas may have a more difficult time of developing a high sense of life satisfaction. However, empirical evidence regarding these perceived differences has been mixed.

In an empirical examination of the differences between rural and urban areas, Youmans (1971) found that metropolitan areas offered more subjective rewards than rural areas. These differences in subjective rewards appeared to be most associated with deficits in the social

environment (e.g., ability to connect to a group of social networks). However, more recent studies have indicated that rural social environments are a positive aspect of life satisfaction due to the depth of interactions with community members of similar cultural values (Evans, 2009). Additionally, rural living has been shown to have positive effects on psychological well-being as defined by higher levels of life satisfaction and fewer reported depressive symptoms (Evans, 2009). In addition, although rural research participants have expressed frustration over the previously mentioned limited job opportunities and small community sizes, studies have also shown that individuals in rural areas often report increased satisfaction with respect to standards of living, places of residence, and family circumstances as compared to urban residents (Wilson & Peterson, 1988). Finally, in an analysis of worldwide studies, Veenhoven (1994) found equal levels of satisfaction between rural and urban populations in developed countries, especially in richer nations such as Germany or the United States. Although anecdotal evidence suggests that differences in life satisfaction occur between individuals living in a rural vs. urban area, empirical findings are not as conclusive. As a result, it seems apparent that more research is needed to determine if these differences exist in community samples of adults.

Positive Components of Sport Participation

Sport has been defined as “all forms of physical activity which, through casual and organized participation, aim at expressing or improving physical fitness and mental well-being, forming social relationships or obtaining results in competition at all levels” (Coalter, 2005, p. 6). As noted in this definition, sport participation can have a number of positive effects on an individual’s sense of well-being. Benefits may range from physical health improvements to social and psychological advantages for participants, volunteers, and spectators. Furthermore, the identification with specific sports teams may be associated with additional positive

psychological and quality of life outcomes (e.g. increased self-esteem through social connection and reports of more frequent positive emotions) (Wann, Melnick, Russell, & Pease, 2001). To obtain a comprehensive understanding of the benefits of sports within society today, it is important to first examine the overall health advantages of sports participation.

For years, researchers have theorized that active participation in sports activities can have profound physical health benefits. The World Health Organization (2003) lists physical activity as an integral component to a healthy lifestyle. Empirically, various studies have linked physical activity with overall improved physical health. For instance, people who are physically active are less likely to have difficulties with obesity, cardiovascular disease, non-insulin dependent diabetes, colon cancer, and osteoporosis (Coalter, 2005; US Department of Health and Human Services, 1996; European Heart Network, 1999). However, other factors may affect the relationship between sports participation and outcomes. The frequency and intensity of the participation, as well as an individual's degree of dedication over time can all precipitate or hinder positive health outcomes normally associated with athletic activity (Coalter, 2005).

Not only have scientists worked to connect sports participation with increased positive health outcomes, but also with the reduction of potentially negative outcomes such as disease (World Health Organization, 2003). Researchers suggest that the lack of physical activity in an individual's life could be a potential risk factor for a number of illnesses or conditions (Warburton, Nicol, & Bredin, 2006). Specifically, an overall lack of exercise has been linked to heart disease (Wise, 2010) and increased mortality in chronic kidney disease (Barclay, 2009). Regardless, there remains "incontrovertible evidence that regular physical activity contributes to the primary and secondary prevention of several chronic diseases and is associated with a reduced risk of pre-mature death" (Warburton, Nicol, & Bredin, 2006, p. 807).

In addition to physical health advantages, sport participation offers mental health benefits. Researchers contend that physical activity can not only promote positive mental health, but may also help prevent future mental illness (Cutt, James, & Street, 2007). Additionally, these researchers theorize that participation in organized sports may be associated increased resiliency for everyday stress. Others studies suggest that the social nature of sport participation may lead to decreased loneliness, which is just one of the potential social benefits that sport engenders (Page, Frey, Talbert, & Falk, 1992). For instance, researchers postulate that sport participation can help develop social support and self-esteem (Findlay & Coplan, 2008). Moreover, increased social interaction may foster both increased social skill development and potentially decreased social anxiety (Findlay & Coplan, 2008).

Empirically, engaging in athletic activities has been shown to be related to a number of positive outcomes including elevated mood and emotional well-being, self-esteem, lower reports of anxiety, and fewer psychological difficulties (Mutrie & Biddle, 1995). Although the duration of the activity allows for differences in these results, individuals who make small increases to their sporting activity levels generally report increases in positive self-assessments (Roberts & Brodie, 1992). For example, their positive self-statements may be as simple as, “I am a respectable and productive person,” or “Despite losing, I am still a winner,” or something more detailed such as, “although this will be difficult, I am confident I will do well.” In addition to potential short-term gains, long-term participation in exercise or sports programs may result in higher levels of self-efficacy, self-esteem, and perceived competence (King, Taylor, Haskell, & DeBusk, 1989). Even a single episode of physical activity has been shown to reduce anxiety levels and increase feelings of overall well-being for as long as three hours following the exercise or sport participation (Raglin, 1990; Steptoe, 1992).

Further benefits of physical activity exist with respect to social components underlying sports. Since most sporting events or activities consist of more than one participant, social aspects and interactions are likely to be affected as a result of engaging in such activities. Coalter (2005) postulated that social aspects of sports can foster encouragement and support within individuals and groups. Moreover, wider social networks tend to form and social cohesion can be solidified through active engagement and investment in team sports. Holt et al. (2008) describe a variety of life skills that have been associated with participation on sports teams. Specifically, constructs like initiative, respect, teamwork, leadership, communication, and social connections can develop through sport participation. Initiative refers to people's ability to set realistic goals, manage time, and take responsibility for his or her actions. Respect for societal and cultural rules and norms may also result from being an active member of a team. Furthermore, teamwork, leadership, and communication skills learned through active sport participation are suggested to be highly transferable to other areas of one's life (Holt et al., 2008). Moreover, Danish and Nellen (1997) contend that abilities to handle success and failure and receive constructive feedback are also advantages gained through sports that can transfer to other areas of life. It has been theorized that individuals who develop reliable and stable social networks, through group activities such as sports, tend to live longer, are less depressed, and have a reduced risk of heart disease (Health Education Authority, 1999). Overall, participating in sports across the life span appears to cultivate numerous physical and psychological benefits that are likely to increase one's quality of life.

Positive Aspects of Sport Volunteerism

Although engaging and participating in sports related activities has been shown to have positive effects for physical and mental health, actual participation in the physical sport activities

may not be necessary for these benefits to occur. Specifically, volunteers are extremely important to the sustained success of sport organizations and events (Hoye, Cuskelly, Taylor, & Darcy, 2008). Researchers describe the motivation to volunteer as a strong desire and investment in helping others. Such altruistic motivations may foster personal and social benefits specific to the volunteer (Hoye et al., 2008). Although theories vary on the specific motivations of volunteers, Wang (2004) suggests five possible motives that include: personal development, ego enhancement, social adjustment, community concern, and altruistic value. Personal development involves gaining experience, being challenged, and being around people who have similar interests (Hoye et al., 2008; Wang, 2004). People may become involved with sport volunteering for fun, the need to feel important, or the opportunity to be a part of a unique set of people, events, and/or experiences. Combinations of these ideas make up Wang's (2004) motive of ego enhancement. Enjoyment and involvement are also suggested to be a part of the altruistic value of volunteers. Additionally, people may want to volunteer because others within their social network find this type of work important (Wang, 2004). As a result, volunteering for sporting events maybe an important means of creating and maintaining social connections with individuals from various cultures and backgrounds.

Empirically, volunteering has been shown to offer positive mental health outcomes through non-physical participation in sports. For instance, volunteering “has the potential to assist in the development of self-esteem, transferable social and organizational skills, and greater community coherence” (Coalter, 2005, p. 21). Evidence supports Wang's (2004) multidimensional motivation theory of volunteering. Specifically, Hoye and colleagues' (2008) research indicates that altruism, personal development, community concern, and social development are all integral components in one's desire to volunteer their time to a personally

invested cause. Moreover, volunteering often offers social rewards, particularly ones related to being able to give back to society and corresponding feelings of joy and productivity (Coalter, 2005). In a study of adolescent attitudes towards volunteering for sporting events, Eley and Kirk (2002) found that individuals with more positive attitudes towards volunteering reported increases in leadership skills, altruistic attitudes, and overall improved feelings about themselves. Additionally, sport volunteering has been shown to encourage citizenship and pro-social behavior (Coalter, 2005). Based on these findings, researchers suggest that volunteering may appeal to individuals as a way of achieving one's social needs. Moreover, such skills and attitudes appear important in the creation and maintenance of deeply connected interpersonal relationships (Eley & Kirk, 2002).

Well-Being and Fandom

Although participating in and volunteering for sporting events offer social advantages, some theorists believe that being an active fan may also facilitate a wide range of social skills. Specifically, Reysen and Branscombe (2010) describe two constructs underlying an investment in a favorite team or club: fanship and fandom. Fanship is defined as having a connection to a sport team whereas fandom involves a connection to other fans of a particular sport team. Fandom is similar to social identity where a portion of one's self-concept may be derived from being a member of a social group. Such membership offers emotional support and interpersonal connectedness (Reysen & Branscombe, 2010). Other research suggests that positive social identity is something that fans actively seek (Boen, Vanbeselaere, & Feys, 2002) while also avoiding negative identities (Bizman & Yinon, 2002). Sports fans have a tendency to gravitate toward other fans who share the same team interests in an attempt to gain such positive social identity (Reysen & Branscombe, 2010). Sandvoss (2005) theorized that although individual fans

may not be formally connected with a sports team or organized fan club, they still believe that they are part of a group. This line of thinking has been supported by multiple studies (Reysen & Branscombe, 2010; Sandvoss, 2005) and suggests that other forms of social connection may develop from initiating conversations and group activities with other people who are equally invested in a specific sports team or club. Additional data from Reysen and Branscombe (2010) illustrates that “merely thinking that one is part of an entitative fan group is associated with a positive emotional state” (p. 188).

In looking at sport fan groups more closely, researchers have postulated that greater well-being by way of social connections can be achieved through higher levels of identification with a particular sports team (Wann, 2006). Sport team identification is defined as the amount of psychological connection that an individual feels towards a specific sports team (Wann & Branscombe, 1993). There are many possible factors that may lead a person to identify with a particular team (e.g., team location, success, or facilities, the influence of one’s family or friends, or internal personal factors such as a need for belonging or affiliation) (Wann, 2006).

Researchers have linked high levels of sport team identification to such positive psychological benefits as increased personal self-esteem, social life satisfaction, and increased positive emotions, among others (Wann, Keenan, & Page, 2009). However, most theories expand this idea to include social connectedness and a sense of belongingness as potential catalysts for these positive outcomes. “Only when the role of team follower leads to a sense of belongingness to and camaraderie with others would one expect to find psychological benefits related to the identification” (Wann, 2006, p. 275).

Wann (2006) developed the Team Identification – Social Psychological Health Model as a way of testing the effects of team identification on a person’s social and psychological well-

being. The model theorizes that social well-being is positively related to one's level of identification with a local sports team (Wann & Pierce, 2005). Support for the model illustrates that the correlations between team identification and social well-being are generated through connectedness with others who highly identify with the same local team. Although most of the support for this theory revolves around college-aged participants, research with other diverse populations reflects these same trends (Wann, Rogers, Dooley, & Foley, 2011). In fact, older participants have been found to report a greater number of positive evaluations of team specific groups to which they belong (Wann, Rogers, Dooley, & Foley, 2011). Overall, considering theory and relevant empirical findings, it is expected that sport team identification will be positively related to measures of belongingness, social life satisfaction, and prosocial behavior in the current study.

Positive Components of Online Sports Forums

It has been suggested that well-being does not come from team identification alone, but rather through the social connectedness of the person to other highly identified fans of the same team. Although fans can connect with other fans at games and organized team-related activities, it is possible that fans can develop and maintain meaningful connections with each other through a non-face-to-face method. Dino, Reysen, and Branscombe (2009) suggest that online fan communities offer a unique type of social vehicle for fans to connect. Moreover, research examining social media outlets has been shown to engender a variety of social benefits based on the types of motivations and the amount and types of usage.

Researchers have suggested that individuals are driven to use the internet through both extrinsic and intrinsic motivations (Teo, Lin, & Lai, 1999). External motivations for internet usage theoretically involve such constructs as perceived usefulness and perceived ease of use. In

other words, how much will a person gain by using the internet and how knowledgeable must one be in order to use the internet effectively are important questions that predict one's investment in and frequency of internet use. Intrinsic motivations involve a person's perceived enjoyment in using the internet (Teo, Lin, & Lai, 1999). If perceived enjoyment is high, it would stand to reason that the person's internet usage would increase.

It is also important to discover what aspects of the internet may allow for individual enjoyment. Discovering what particular areas may increase perceived enjoyment, or even more completely defining the psychological aspects of such enjoyment, could facilitate a better understanding of the psychosocial benefits that are related to internet usage.

Broadly, the internet engenders a variety of benefits such as providing information about finances, employment, politics, and interpersonal communication (Hacker & Steiner, 2001). Additionally, researchers suggest that those who exhibit higher levels of internet usage are more likely to report benefits from such usage (Hacker & Steiner, 2001). Socially, the internet offers opportunity for individuals to make personal connections with other people and develop a sense of collective identity (Best & Krueger, 2006). Potential benefits such as positive social interactions, psychological support, recreation, and personal companionship are all theoretically connected to internet usage (Best & Krueger, 2006). Researchers also suggest that the internet aids individuals in connecting to people with whom they would not otherwise have the opportunity to interact; suggesting the internet may be a unique forum where one can extend their abilities to connect with diverse groups of people.

Best and Krueger (2006) noted that online social interactions tend to occur with people who share specific interests. As more people connect, online communities begin to form which allow users to find other individuals who share a common passion. Granovetter (1973) theorized

that as social networks form and grow, so does an individual's trust in others. Social elements such as trust, integrity, and reciprocity are believed to be gained through online interactions (Best & Krueger, 2006).

To date, little research has investigated the link between positive psychological outcomes and how one uses the internet. Moreover, it is unknown which purposes or types of motivations for using the internet are specific to developing positive psychological benefits. However, Katz and Aspden (1997) theorize that intrinsic motivations for internet use, including personal and social development (defined as increasing the ability to communicate with others), may facilitate greater social awareness and skills.

One important tool that online communities use is that of the message board. A message board is defined as "a static web page where users can read and post messages to one another, and respond to messages created by other users" (Clavio, 2008, p. 13). Message boards are typically associated within a website that is dedicated to providing other services such as news organizations, political causes, support groups, or product reviews. Clavio (2008) found that information gathering seems to be the most popular reason individuals frequent message boards, but social interaction has been shown to be a strong motivation as well. For a message board to succeed, "its content must have depth and variety" (Morris & Ogan, 1996, p. 45).

Studies have garnered evidence suggesting potential benefits of participating in online community message boards. For instance, a study of a breast cancer bulletin board suggested that message boarding was related to numerous psychosocial benefits including: receiving/giving information, improved mood, receiving/giving social support, optimism, increased ability to cope, decreased psychological distress, and strategies for managing stress (Rodgers & Chen, 2005). Additionally, the researchers found a positive link between the amount of participation

by an individual and that individual's psychosocial well-being. Rodham, McCabe, and Blake (2009) examined the benefits of message boards for individuals with Complex Regional Pain Syndrome (CRPS). The researchers concluded that message boards offered opportunities to give and receive social support, as well opportunities to enhance one's sense of belongingness. Furthermore, the researchers noted that the act of writing about feelings served as a valuable emotional outlet and coping resource in managing pain and stress associated with the syndrome (Rodham, McCabe, and Blake, 2009).

Moreover, Hadert and Rodham (2008) qualitatively examined message boards with respect to arthritis patients. Their results suggested aspects of message boarding such as the added benefits of 24-hour access to support, as well as decreased importance of an individual's geographic location were unique and valuable resources for this population. Hadert and Rodham also noted that their research offered important implications within rural communities where support groups and other resources may prove more difficult to access than in urban environments. Overall, it appears that message boards have the potential to provide individuals with a useful coping device that offers validation and a sense of belonging (Hadert & Rodham, 2008).

Other studies suggest that the positive benefits of message boards help alleviate stress embedded within psychological difficulties. Specifically, Johnson, Zastawny, and Kulpa (2010) found that individuals who engage in self-injurious behaviors reported decreases in the frequency of self-injurious behaviors over the course of their participation in message boards. This finding suggests that positive psychological benefits may be obtained through the supportive nature of online communities (Johnson, Zastawny, & Kulpa, 2010). After considering their findings, Johnson, Zastawny, and Kulpa concluded that message boards could be an important supplement

to intervention at reducing self-harm thoughts and behaviors. Consistent with research in other areas, the connection to emotional support and a sense of community appear to be important unique and valuable benefits of message boarding.

Culturally, message boards have been shown to be a useful tool in bringing people from different backgrounds together. Poggi and Di Blas (2008) questioned whether forums had the ability to encourage discussion, collaboration, and positive cultural exchanges among people in various countries. The study examined students from 17 different countries over the course of two years. Although the nature of the research was complex, ultimately, the investigators concluded that online forums offered a variety of cultural benefits (Poggi & Di Blas, 2008). Specifically, message boarding promoted reflection and discussion of cultural issues and supported intercultural exchanges (Poggi & Di Blas, 2008). Additionally, participants appeared motivated to participate due to the social bonds that were created through this process. These reported benefits add to the growing body of evidence that suggests message boards offer positive outcomes for those who participate in them.

Given the positive nature of these findings, the potential link between message boards and positive psychology appears plausible. However, few researchers have studied the relationship between message boarding and positive psychological outcomes in non-clinical populations. However, some studies suggest that social media outlets, of which message boards play a large role, may be related to a number of psychosocial benefits, especially for adolescents and young adults. For instance, some suggest that teenagers and young adults are developing socially and emotionally through their time spent on the internet (McBride, 2011). Specifically, social media can foster improved communication skills and expanded social connections that may precipitate more growth within abstract and self-aware thinking processes. Rogers and Lea

(2005) theorized that social presence and group identity can increase through online forums, primarily through enhanced communication. Moreover, although research has indicated that adolescents and young adults may be motivated to participate in social media outlets to develop a sense of community (Rafaeli, 1986), interact with others through different forms of self-expression (Garramone, Harris, & Anderson, 1986), socialize with diverse people (James, Wotring, & Forrest, 1995), and seek social support and friendship through different approaches (Ridings & Gefen, 2004). Overall, message boards allow users to take an active role in their social or interactive interests and development (Rafaeli, 1986).

Message boarding may also have unique benefits for fans who are looking for more unique ways of connecting to one another and one's favorite team or club. Although some view message boards as old and irrelevant due to the advent of other social media outlets such as Facebook and Twitter (Hawkins, 2010), research has demonstrated the relevant nature of this medium, especially within the realm of sports and sports fans (Ruihley & Hardin, 2011; Clavio, 2008). Similar to the aforementioned online support groups, sports related message boards and online fan pages can offer a level of positive support and interpersonal interactions for fans (Shaw & Gant, 2002). End (2001) suggests that "message boards may afford sports fans with additional options for enhancing their self-esteem that may not be available in face-to-face interactions" (p.167). Specifically, Joinson (1998) describes decreased levels of self-consciousness, worries about public evaluation, and anxiety in social situations through disinhibition. This refers to the absence or reversal of factors or behaviors while using the internet. Disinhibition may allow an individual to speak and act more freely on message boards, potentially enhancing his or her self-esteem in ways unavailable elsewhere.

Researchers also contend that there are varying types or dimensions of gratification that exist with respect to sports message boards. Specifically, Clavio (2008) identified dimensions that include interactivity, information gathering, diversion, argumentation, and community. Interactivity refers to the interactive nature of message boards, which includes participating in discussions, communicating with fellow fans, offering input and opinions, and generally sharing information with other members of the online community. The information gathering aspect of sports message boarding relates to team or group-specific content such as news or analysis offered by the board's members. Diversion speaks to elements of message boards that may not be related to sports. For instance, sports related forums may still engage in discussions involving politics or religion, as well as offering opportunities to keep in touch with old friends or classmates. The sense of community aspect focuses on the quality of the interactions with other users (Clavio, 2008). Ruihley and Hardin (2011) add themes such as logistical conversation, increased social involvement, and the giving or receiving of advice as important factors for sports message board users. Researchers frequently point to the interactive and community aspects of sports message boards as vehicles for psychological benefits (e.g., optimism, motivation, and increased social and community connections) (Clavio, 2011; Woo, An, & Cho, 2008). However, research has yet to determine whether message boards related to sports teams or clubs can enhance team identification and lead to specific social and psychological benefits.

Current Study

The underlying aim of the current study was to achieve a better understanding of the relationships between sport message board usage and measures of social and psychological well-being. Considering developed theory and relevant empirical findings, it was hypothesized that (a) positive relationships would exist between team-based message board usage and the positive

psychology variables (belongingness, prosocial behavior, and satisfaction with social life); (b) message board usage would predict a significant amount of variance in team identification ; and (c) message board usage would predict a significant amount of variance in our selected positive psychology variables over and above that of team identification.

CHAPTER 3

METHOD

Participants

Participants were recruited through an online sports form. The sample consisted of 304 members of an online sports message board. Of the participants 292 (97%) were men and 9 (3%) were women. Participants age ranged anywhere between 18 and 78 years, with a mean age of 37.80 years. In terms of marital status, 85 participants (28.1%) reported that they were single, 206 (68.2%) reported that they were married, 9 (3.0%) were separated/divorced, and 2 (0.7%) reported that they were widowed. In terms of highest level of education completed, 1 participant (0.3%) reported having some high school, 4 (1.3%) reported having a high school degree, 79 (26.0%) reported having some college experience, 121 (39.8%) reported having a college degree, and 99 (32.6%) reported having a graduate degree. With respect to location, 240 participants (78.9%) reported living in a metropolitan/urban area, while 64 (21.1%) reported living in a rural area. In terms of race, the majority of sample identified as European American (97%, n = 295). Three participants (1.0%) identified as African American and 4 (1.3%) reported identified as Other.

Procedure

This study targeted sports message board users from a large collegiate based sports forum, which is a part of a larger network of collegiate sports team websites. The moderators of the chosen forums were contacted and granted permission to conduct the study within the site's primary message board forum. In order to recruit participants for this study, a post was placed on the site and locked by the moderators in order to keep it visible for an extended period of time. Within the post, interested message board users were asked to follow a link that directed

them to SurveyMonkey.com, an approved data collecting site supported by the researcher's dissertation committee. The link took participants directly to the informed consent portion of the online survey. Interested individuals were asked to thoroughly read through the informed consent procedures. If interested individuals decided to volunteer for the study, they were asked to electronically sign the informed consent page. After giving their consent to participate in this study as a volunteer, they were directed to the survey which consisted of a demographic questionnaire, a questionnaire regarding the extent of their message board usage, and four instruments that measure for belongingness, prosocial behavior, satisfaction with social life, and sports team identification. Participants were notified that they could skip any question they liked and discontinue taking the survey at any time without penalty. After completing these questionnaires, participants were directed towards a debriefing page that further explained the goals of the research and provided information regarding free to low cost mental health services that they could access using a toll free phone number or through the internet. The final page of the survey provided incentive information regarding the gift card raffle. Interested participants were asked to e-mail their contact information to the primary investigator in order to be registered for the raffle. Having interested participants contact the primary researcher after completing the survey through e-mail was a secure means of ensuring anonymity and an easy way of sending the winners of the raffles their electronic gift cards.

Data Storage

SurveyMonkey.com stored all entered data onto an excel spreadsheet. The primary researcher retrieved the data from SurveyMonkey.com once the survey was closed. Data were then transferred from an excel spreadsheet to an SPSS data file. Once all data were loaded onto an SPSS file, the primary researcher deleted all data responses from SurveyMonkey.com. Data

within the SPSS file is password protected and will continue to be stored on a secure hard drive for five years.

Measures

Interpersonal Needs Questionnaire (INQ; Van Orden, Witte, Gordon, Bender, & Joiner, 2008a). The INQ is a 12-item instrument designed to assess for an individual's perceived levels of burdensomeness and belongingness as they relate to negative outcomes (Freedenthal, Lamis, Osman, Kahlo, & Gutierrez, 2011). The INQ can be broken down into two subset scores: belongingness, the amount of meaningful connection a person feels to other individuals or groups (Anestis, Bryan, Cornette, & Joiner, 2005) and burdensomeness which describes an individual's sense of utility in helping promote or advance the goals of a group (Freedenthal et al., 2011). For the purposes of this study, only the belongingness subscale will be used. The belongingness scale consists of 5-items that are measured on a seven point Likert scale. Total scores range from 5-35 with higher scores reflecting stronger levels of perceived belongingness. The INQ belongingness subscale score has been found to be a psychometrically sound instrument. Specifically, the belongingness subscale score has been shown to have high internal consistency ($\alpha = .92$; Freedenthal et al., 2011). Additionally, the belongingness subscale has demonstrated excellent construct validity as evidenced by significant associations with measures of social support, reasons for living, and depression (Freedenthal, et al., 2011). In the current study, the INQ belongingness subscale demonstrated solid internal consistency ($\alpha = .82$).

Prosocial Behavior Scale (PBS; Caprara, Steca, Zelli, & Capanna, 2005). The PBS is a 16-item instrument designed to assess for the degree to which individuals voluntarily help, comfort, or take care of other people (Caprara et al., 2005). The items of the scale are measured on a five point Likert scale. Total scores range from 16-80 with higher scores reflecting stronger

levels of prosocial behavior. The PBS has been found to be psychometrically sound. Specifically, the PBS has been shown to have high internal consistency ($\alpha = .91$; Caprara et al., 2005). Additionally, the scale has been shown to have high construct validity as indicated by moderate relationships with agreeableness and empathic self-efficacy (Caprara, Alessandri, Di Giunta, Panerai, & Eisenberg, 2010). In the current study, the PBS demonstrated solid internal consistency ($\alpha = .88$).

Satisfaction with Social Life Scale (SWLS; Wann & Pierce, 2005; Diener et al., 1985). The SWLS is a modified version of the Satisfaction with Life Scale (Diener et al., 1985). The current measure was designed to focus on the level of satisfaction an individual perceives in his or her social life (Wann & Pierce, 2005). The SWLS consists of 5 items that are measured on a seven point Likert scale. Total scores range from 5-35 with higher scores reflecting higher levels of social life satisfaction. The SWLS has been found to be psychometrically sound. Specifically, the scale has been shown to have high internal consistency ($\alpha = .88$; Wann & Pierce, 2005). Additionally, the SWLS has demonstrated strong concurrent validity as evidenced by a significant positive correlation with a measure of collective self-esteem (Wann & Pierce, 2005). In the current study, the SWLS demonstrated excellent internal consistency ($\alpha = .92$).

Sports Spectator Identification Scale (SSIS; Wann & Branscombe, 1993). The SSIS is a 7 item instrument designed to assess for the degree to which fans identify with a specific sports team. The items of the scale are measured on an eight point Likert scale. Total scores range from 8-56 with higher scores reflecting stronger levels of team identification. The SSIS has been found to be psychometrically sound. Specifically, the scale has been shown to have a high internal consistency ($\alpha = .91$; Wann & Branscombe, 1993). Additionally, the SSIS has

demonstrated excellent construct validity as evidenced by significant associations with spectator investment in their teams, involvement with their teams, and attributions about their teams (Wann & Branscombe, 1993). In the current study, the SSIS demonstrated adequate internal consistency ($\alpha = .71$).

Questions Related to Sports Message Board Usage. This section consisted of 9 questions related to an individual's interest and involvement in sports team message boards. Specifically, the individual was asked for the number of sports forums he or she participates in, as well as the specific teams he or she follows through online discussion forums. Additionally, the participant was asked to select what aspects attract him or her to a specific team and the perceived benefits of engaging in online discussions through sports forums. This section also sought to address the person's level of activity on sports related message boards. Specifically, the individual was asked about the weekly amount of time spent monitoring sports forums, and actively engaged in online discussions through such forums. Finally, the participant was asked how many "threads" he or she initiates per week on sports forums, as well as the number of "posts" he or she responds to per week.

Proposed Analysis

Reliability coefficients for each measure were examined to determine internal consistency. A Multivariate Analysis of Variance (MANOVA) was conducted to determine if there were differences for individuals residing in urban versus rural communities in the reporting of belongingness, prosocial behavior, and social life satisfaction. Pearson product correlations were used to analyze the relationships among belongingness, prosocial behavior, social life satisfaction, team message board usage, and sport team identification. One enter method regression was examined to determine if message board usage predicts a significant variance on

team identification. Block regression models were conducted to determine if message board usage predicts any significant variance in belongingness, prosocial behavior, and social life satisfaction over and above the influence of sport team identification.

CHAPTER 4

RESULTS

Mean scores for the study's main variables were examined. In regards to sports-related message board activities, participants reported spending 11.02 hours lurking on web-based sports forums and 2.35 hours engaging online discussions with other users through sports forums per week. In addition, sports message board users reported posting 2.15 original threads and posing responses to 8.50 developed threads per week. Participants also reported moderate scores for prosocial behavior ($M = 60.10$, $SD = 8.54$) and high scores for belongingness ($M = 31.81$, $SD = 4.49$), social life satisfaction ($M = 25.59$, $SD = 6.24$), and team identification ($M = 50.61$, $SD = 4.65$). Means, standard deviations, and minimum/maximum scores are displayed in Table 1.

In addition, data were checked for violations of normality in the study's main variables. There were numerous violations of normality within the data set. Specifically, belongingness ($D(241) = .24$, $p < .01$), social life satisfaction ($D(241) = .12$, $p < .01$), and team identification ($D(241) = .16$, $p < .01$) were negatively skewed. Only prosocial behavior ($D(241) = .05$, $p > .01$) was normally distributed throughout the sample.

Mean Comparisons

A Multiple Analysis of Variance (MANOVA) was conducted to examine differences in location (urban vs. rural) on the three social well-being measures (belongingness, prosocial behaviors, and social life satisfaction). The MANOVA revealed no significant overall effect for urban versus rural differences (Wilks' Lambda, $(1, 290) = .988$, $p > .05$, $\eta^2 = .012$) across the three social well-being measures. Follow-up ANOVA's also revealed no significant main effects in urban versus rural differences in belongingness, $F(1, 292) = .03$, $p > .05$, $\eta^2 = .00$, prosocial

behavior, $F(1, 292) = 2.95, p > .05, \eta^2 = .01$, and social life satisfaction, $F(1, 292) = .01, p > .01, \eta^2 = .00$.

A second MANOVA was analyzed to examine the differences in the participant's childhood home location (rural vs. urban) on the three social well-being measures. The MANOVA revealed no significant overall effect for urban versus rural childhood home differences (Wilks' Lambda, $(1, 290) = .074, p > .05, \eta^2 = .024$) across the three social well-being measures. Follow-up ANOVA's indicated no significant main effects in urban versus rural childhood home differences in belongingness, $F(1, 292) = .015, p > .05, \eta^2 = .00$, prosocial behavior, $F(1, 292) = 6.30, p > .05, \eta^2 = .02$, and social life satisfaction, $F(1, 292) = .069, p > .05, \eta^2 = .00$. Taken as a whole, these findings were inconsistent with the expectations of the current study and suggest that individuals from rural and urban areas report similar amount of belongingness, prosocial behaviors, and social life satisfaction.

Pearson Product Correlations

Bivariate correlations were conducted to determine the relationships among the four dependent variables (belongingness, prosocial behavior, social life satisfaction, and team identification) and the four web-based variables (hours lurking, hours engaged in online discussion, threads initiated and responses to current posts). The results are presented in Table 2. Unexpectedly, belongingness was not significantly correlated with the four web-based variables. These results suggest that participants' message board activity is not related to their sense of belongingness. Prosocial behavior was negatively correlated with the number of threads a participant initiates within a given week ($r = -.13$). This suggests that the more threads a person reportedly initiates, the less likely he or she is to report engaging in prosocial behavior. Contrary to stated hypotheses, social life satisfaction was also not significantly correlated with the four

web-based variables. These results suggest that a person's social life satisfaction is not related to his or her involvement in an online sports message board. Finally, team identification was positively correlated with the number of hours a participant reportedly spends lurking on an online message board ($r = .18$). This suggests that message board members who more highly identify with a given sports team are more likely to spend time reading message board material, but not necessarily actively engaging in forum discussions.

Regression Analyses

Initially, block regressions were expected to be analyzed to determine if message board variables could predict unique variance in positive psychological constructs over and above the influence of team identification. However, the majority of the criterion variables were non-normally distributed; suggesting that logistic regression analysis would be more suitable option in examining the hypotheses. In order to analyze logistic regression models, the criterion variables must be transformed from continuous variables to categorical variables. As a result, percentile splits were conducted to determine high, medium, and low levels of each criterion variable. To ensure maximum differences between levels of each criterion variables, respondents who scored in the medium level for each criterion were removed from the analysis. Only low and high scores were examined in each logistic regression model.

In total, four logistic regressions were analyzed. Status (high vs. low) on team identification, belongingness, prosocial behaviors, and social life satisfaction were the criterion variables, whereas hours lurking, hours engaged in online discussion, thread initiated, and threads responded to were the predictor variables. Only one of the four models revealed significant findings. Message board variables did not predict a significant amount of variance in belongingness status, prosocial behavior status, or social life satisfaction status. Interestingly,

hours spent lurking on sport message board websites significantly predicted whether an individual was in the low or high category status on team identification, $b = .06$, Wald $\chi^2(1) = 5.71$, $p > .05$. This result indicates that individuals who spend more time lurking on sports message boards are likely to report higher rates of team identification.

CHAPTER 5

DISCUSSION

In review, the purposes of the current study were to: 1) determine whether significant differences exist between the reported psychological well-being measures from urban versus rural adults, 2) examine potential relationships between sports message board usage constructs and various measures of social and psychological well-being, 3) to determine if team message board usage constructs could predict a significant amount of variance in sport team identification, and 4) to determine if sports message board usage constructs could predict a unique amount of variance in belongingness, prosocial behavior, and satisfaction with social life over and above the impact of sports team identification.

Rural versus Urban Differences

A MANOVA was run to examine the differences between urban and rural residents on the three social well-being measures (belongingness, prosocial behavior, and social life satisfaction). The results revealed no significant differences between the two groups on the three well-being measures. These findings are inconsistent with the proposed hypotheses and fail to support research indicating that challenges to rural life precipitate lower levels of positive psychological growth and well-being when compared to individuals living in urban areas. Specifically, despite deficits in available social and financial resources and an increased risk of being stereotyped or stigmatized (Jones, Cook, & Wang, 2011; Wilson & Peterson, 1988), my results suggest that individuals from rural areas report similar levels of well-being compared to individuals living in urban areas.

Alternatively, this finding is in keeping with the position that individuals in rural areas find culturally unique ways of developing comparable degrees of well-being to individuals living

in urban areas. Most notably, Evans (2009) indicated that rural residents often rely on a strong sense of community to develop positive psychological traits known to promote overall life satisfaction. However, the current study was only designed to examine differences in the frequency of reported positive well-being attributes. In the future, it is important that researchers examine unique pathways by which urban residents and rural residents develop a sense of positive well-being. Notably, it may be fruitful for researchers to examine how individuals invest themselves in and draw support from their community to elucidate if and how urban versus rural residents differentially develop a stable sense of well-being.

Relations between Message Board Constructs and Indices of Well-Being

The current study examined potential relationships between message board usage constructs (hours lurking, hours invested in online discussion, the number of threads initiated, and the number of posts responded to) and measures of well-being (belongingness, prosocial behavior, and social life satisfaction). Based on previous research, it was expected that most, if not all, of the message board usage variables would be positively associated with the three indices of well-being. Surprisingly, not one message board usage variable was significantly related to any of the three well-being variables in the expected direction. There was a significant inverse relationship between the frequency of threads initiated and prosocial behaviors ($r = -.13$, $p < .05$); however the relationship is small suggesting little to no practical value.

Overall, these findings are inconsistent with a substantial amount of research indicating that the interactive and community aspects of online sports forums are related to psychological and interpersonal benefits (Clavio, 2011; Woo, Ann, & Cho, 2008). However, there are multiple explanations that may illuminate the disconnect between my findings and the findings of previous investigations. Most notably, my findings may have been negatively influenced by the

restricted range of the participants demographic make-up. Secondly, it is possible that the relationships under examination are best understood through indirect (e.g., mediated and moderated) pathways.

In examining the demographic characteristics of the sample, it is important to consider the impact of marital status and education level on the obtain findings. Interestingly, 68% of the participants identified as being married. Previous research has indicated that being married is an important interpersonal resource in the development of well-being in adulthood (Kiecolt-Glass & Newton, 2001). For instance, Marks (1996) compared well-being scores between married and unmarried community participants and found that married people reported a higher frequency of well-being compared to unmarried people. In addition, 98% of the participants in the current study reported having at least some college level education and 72% of the participants reported having an undergraduate degree or higher. Similar to the findings on marital status, education level appears to be a prominent feature of life satisfaction in adulthood as it generates more opportunities for financial, interpersonal, social, and familial growth (Rentfrow, Mellander, & Florida, 2009) In sum, given the demographic characteristics of the sample, it is possible that well-being (as measured by a sense of belongingness, prosocial behaviors, and social life satisfaction) is relatively homogeneous, diminishing the possibility of detecting significant relationships. Future research may benefit from re-examining these relationships with a more diverse sample of online sports forum members.

Secondly, a basic assumption underlying the proposed questions and hypotheses of the current study is that the relationships between message board usage variables and indices of well-being are direct. The obtained findings suggest that these relationships are more complex, facilitated through mediating and moderating mechanisms. Namely, the relationships between

message board usage variables and indices of well-being may operate through specific motivations for visiting and investing time into sports forums. As Clavio (2011) reported, people frequent online forums for different reasons. Additionally, people may have decidedly different motivations for participating in message board discussions. For instance, some individuals may be seeking the community and support offered by online message boards, whereas others may be driven by other motivations such as participation for the sake of antagonizing the other participants or to exclusively collect information. Considering the motivations behind sports forum use may offer an indirect means of understanding the potential relationships between message board usage variables and well-being. Unfortunately, the current study did not consider the motivations underling message board usage; however, this may be a fruitful means of evaluating the impact of sports forum investment on a number of positive and negative behavioral outcomes.

Relations between Message Board Constructs and Team Identification

This study examined the relationships between team identification and online message board usage. However, team identification was negatively skewed to a significant degree, making it difficult to assess the existence or nonexistence of such relationships. In response, I altered the nature of the variable by placing individuals into high versus low team identification groups. To accomplish this I examined the frequencies of team identification mean scores. The low team identification group (n = 102) was comprised of individuals who fell in the lower one-third of the team identification frequency distribution. Alternatively, individuals who fell in the upper one-third of the frequency team identification distribution made up the high team identification group (n = 127). Given the categorical nature of the team identification variable, it was not possible to examine the relationships between team identification and message board

usage variables. Thus, the current study examined the relationships between team identification status and message board usage variables through a logistic regression.

In the logistic regression model, only the lurking behaviors were retained as a significant predictor of team identification status. This finding suggests that those who proactively search for and invest their time in obtaining relevant information and perspectives about their favorite team are likely to report higher levels of team identification. Moreover, this result is consistent with previous research suggesting that team identification is associated with increased involvement with team related activities (Wann & Branscombe, 1993) and the consumption of team associated information and media (Volkov, Johnson, & Summers, 2008). However, it is important that future research explore this connection further.

Lurking behavior may be associated with increased levels of team investment/commitment in any number of ways; however social components seem important in conceptualizing this connection. Notably, lurking on message boards may offer the casual fan a unique opportunity that fosters more robust fan experiences through shared information resources, community support, and united emotional occurrences. In turn, these experiences may promote a sense of competence when discussing sports related issues and an enthusiasm about the prospect of getting more involved in an athletic team's day-to-day transactions or affairs. Ultimately, lurking behaviors may be one of the first steps to integrating one's personal identity with one's affection for a specific sports team. Examining the social and personal gains from lurking behavior may be a fruitful means of understanding how individuals develop a strong sense of fanhood and commitment to a sports franchise.

Practical Implications

The current study highlights a variety of practical implications that are worth noting. The implications may serve researchers who wish to conduct empirical investigations with sport-oriented population, theorists who are trying to understand the process of developing well-being, and mental health practitioners who are looking for you unique ways to use sports based behaviors as a means of promoting a sense of commitment and investment in their clients.

Research Method Implications. Given the degree to which sports message board users invest their emotional and social resources into their favorite sports team, it is important to examine the potential drawbacks of using such a sample in team identification research. In addition, it is important to identify potential avenues for reaching a more diverse sports-oriented population to survey. Obtaining access to a sample of sports fans with more diversity may be an important step for sports psychologists who are interested in examining the impact and/or influence of team identification on emotional and behavioral outcomes. As identified in this sample, individuals who spend time and effort observing and participating in team based internet forums are characterized by a rather restrictive demographic description and high levels of team identification. The current sample included overwhelming percentages of Caucasian, married, well-educated men who reported extremely high rates of team identification. As a result, we must consider different approaches to acquiring a diverse sample of sports fans, as well as different methods of collecting data that will engender more statistical power for empirical study. For instance, rather than conducting an online survey using message board participants, researchers may find it beneficial to solicit participation from sports fans by standing outside of a sports venue prior to a specific event. Considering that sports games are inclusive family and social events, it is possible that surveying sports attendees may generate greater variability in terms of demographic characteristics and investment toward a specific athletic team. Overall, it

seems important that researchers find creative means of surveying a diverse sports population to generate more accurate and powerful means of assessing sports phenomena related to fanhood.

Theoretical Implications. Although the current research was inconclusive with respect to the prediction of social and psychological well-being, the results may offer some important insights into the construct of social well-being. The current study proposed that singular behaviors (e.g., lurking, posting threads, etc.) may be predictive of certain aspects of social well-being. Based on the results of the current study, it seems that social well-being is a more complex construct. Namely, it seems, as though, variation in social well-being scores may be related to more complex sets or sequences of sport fan behaviors. For instance, it is possible that the combination of proactively engaging others in discussions, responding positively to other's perspectives, and providing support for other's opinions and feelings may be a behavioral sequence that may engender higher levels of social well-being in oneself. Ironically, all of the previous behaviors can and often are observed on sports message board forums (Clavio, 2011). As a result, it may be important for future researchers to measure for consistent behavioral patterns instead of singular behaviors to obtain a better understanding of how aspects of fanhood promote or inhibit social well-being.

Mental Health Implications. Finally, the implications of the current study may offer some useful perspectives on how to help individuals connect to other people. Currently, social skills deficits associated with forming and maintaining relationships are quite common for individuals suffering with a specific mood or anxiety related disorder (Perez, Riggio, & Kopelowicz, 2007). Finding unique and less threatening ways for clients to explore and share their interests with others is an important initial step in developing more effective social skills. Sports message boards may offer unique opportunities for some of these people. For instance,

individuals who tend to be more socially apprehensive or withdrawn may benefit from being introduced to online communities as a way of exploring their interests and interacting with people who share those interests. Therapists may be able to encourage their clients to lurk on a given message board as a non-threatening means of exposing their clients to a socially interactive environment. It is possible that such actions may instill a greater sense of commitment to and investment in an athletic club, which in turn might spur clients to take more risks to engage others with similar interests in conversations. Overall, lurking behaviors may serve as the initial step in an exposure based hierarchy that will facilitate more lasting and positive social skill development.

Limitations

A number of limitations to the current study warrant discussion. First, the lack of variability within the measures was a concern as the majority of the outcomes variables were negatively skewed. Non-normal distributions, like the ones found with the study's variables, may have negative effects on power; ultimately reducing the likelihood of detecting significant findings (Stevens, 2002). Additionally, the sample demographics revealed a lack of diversity in terms of participant demographics. Specifically, the overwhelming majority of participants reported were men (96%), Caucasian (97%), married (68%), and having at least some college experience or higher (98.6%). As a result, the demographics of the current sample limit the generalizability of the results to Caucasian, married, educated men. Moreover, these demographic characteristics may explain why a number of the variables measured for within the current study were negatively skewed. For example, research has suggested that being married and having higher levels of education are psychological resources that increase the likelihood that an individual will experience greater levels of well-being (Kiecolt-Glass, & Newton, 2001;

Marks, 1996; Rentfrow, Mellander, & Florida, 2009). Future studies may need to re-examine these research questions using samples that are more diverse and variable in terms of sports team identification.

Another limitation to the current study was the exclusive use of self-report measures. Social desirability and demand characteristics are some of the drawbacks when using self-report measures. Future research in this area may benefit from using more behavioral based measures to determine whether relationships exist between message board constructs and measures of well-being. If behavioral measures are not possible, future researchers should at least control for the effects of social desirability and demand characteristics in future studies examining these relationships. Furthermore, the use of one-item measures for examining message board usage may have hindered the study since we were attempting to measure a complex construct with a single item. The development of scales specific to online message board usage may help researchers more thoroughly examine and better understand the impact of message boarding on well-being measures. Lastly, the current study used a cross-sectional design; limiting the nature and amount of implications that can be inferred from the results. For instance, the use of cross-sectional designs severely limits the amount of implications that can be made about the stability within the relationships between message board constructs and well-being variables. Longitudinal and experimental designs may engender more robust and accurate interpretations concerning the relationships between message board constructs and well-being variables.

Overall Conclusions

The current findings offer some insight into the relationships, or lack thereof, among online sports message board usage, sports team identification, and positive psychology variables such as belongingness, prosocial behavior, and satisfaction with social life. Most notably,

message board behaviors do not appear to be related to positive psychology variables and team identification. However, it is important to consider these results within the context of the study's limitations. Particularly, non-normality, a lack of diversity within the sample's demographic characteristics, and problems related to the design and measures selected may have negatively affected the power of the study to detect significant relationships among the study's variables. As a result, it is recommended that researchers re-examine these questions using a more robust research design and more diverse sample of adults. One exception that is worth noting is the significant relationship between message board lurking and team identification. This positive association indicates that highly identified fans are more likely to visit sports message boards as a means of staying connected with the day-to-day news of their favorite sports team. While active participation in message board discussions does not seem to be related to team identification, the relatively simple act of lurking on a sports message board seems to be a valuable resource in one's ability to identify with a given sports team.

In terms of practical application, this finding could generalize to other aspects of identification. The act of searching and reviewing information related to a personally invested topic through online forums or within online communities could engender a closer connection with an idea, position, or group. Just as participants in the current study seemed to identify with a given sports team through information seeking behaviors, others may be able to connect with different aspects of mental health groups such as child advocacy, cancer support, and LGBT rights movement. Going a step further, therapists may be able to encourage clients to engage in information seeking behaviors, especially if their clients exhibit social anxiety regarding the prospect of connecting with groups of people face-to-face. Instead, information seeking behaviors through on-line forums and communities may help clients generate a more developed

sense of competency regarding a personally important value or position that may eventually facilitate the desire and ability to reach out to others who hold similar positions through social, face-to-face interactions.

References

- Alessandri, G., Caprara, G. V., Eisenberg, N., & Steca, P. (2009). Reciprocal relations among self-efficacy beliefs and prosociality across time. *Journal of Personality, 77*(4), 1229-1259
- Anestis, M. D., Bryan, C. J., Cornette, M. M., & Joiner, T. E. (2009). Understanding suicidal behavior in the military: An evaluation of Joiner's Interpersonal-Psychological Theory of Suicidal Behavior in two case studies of active duty post-deployers. *Journal of Mental Health Counseling, 31*(1), 60-75
- Barclay, L. (2009). Lack of exercise linked to increased mortality in Chronic Kidney Disease. *Medscape News*. Retrieved from: www.medscape.com/viewarticle/710810
- Best, S. J., & Krueger, B. S. (2006). Online interactions and social capital. *Social Science Computer Review, 24*(4), 162-181
- Bizman, A., & Yinon, Y. (2002). Engaging in distancing tactics among sport fans; Effects on self-esteem and emotional responses. *Journal of Social Psychology, 142*, 381-392
- Boen, F., Vanbeselaere, N., & Feys, J. (2002). Behavioral consequences of fluctuating group success: An internet study on soccer teams. *Journal of Social Psychology, 142*, 769-781
- Bramston, P., Bruggerman, K., & Pretty, G. (2002). Community perspectives and subjective quality of life. *International Journal of Disability, Development, & Education, 49*(4), 385-397
- Caprara, G. V., & Pastorelli, C. (1993). Early emotional instability, prosocial behavior, and aggression: Some methodological aspects. *European Journal of Personality, 7*, 19-36

- Caprara, G., & Steca, P. (2007). Prosocial agency: The contribution of values and self-efficacy beliefs to prosocial behavior across ages. *Journal of Social and Clinical Psychology*, 26(2), 218-239
- Caprara, G., Alessandri, G., Di Giunta, L., Panerai, L., & Eisenberg, N. (2010). The contribution of agreeableness and self-efficacy beliefs to prosociality. *European Journal of Personality*, 24(1), 36-55. doi:10.1002/per.739
- Caprara, G., Steca, P., Zelli, A., & Capanna, C. (2005). A new scale for measuring adults' prosocialness. *European Journal of Psychological Assessment*, 21(2), 77-89
- Clavio, G. (2008). *Uses and gratifications of internet collegiate sport message board users*. (Doctoral Dissertation). Retrieved from gradworks.umi.com/3319833.pdf
- Clavio, G. (2011). Social media and the college football audience. *Journal of Issues in Intercollegiate Athletics*, 4, 309-325
- Coalter, F. (2005). *The social benefits of sport: An overview to inform the community planning process*. Research report no. 98. Retrieved on June 6, 2011 from:
<http://www.sportscotland.org.uk/>
- Conoley, C. W., & Conoley, J. C. (2010). *Positive psychology and family therapy: Creative techniques and practice tools for guiding change and enhancing growth*. San Francisco: John Wiley & Sons
- Crossley, A., & Langdrige, D. (2005). Perceived Sources of Happiness: A Network Analysis. *Journal of Happiness Studies*, 6(2), 107-135.
- Cutt, H., James, R., & Street, G. (2007). The relationship between organized physical recreation and mental health. *Health Promotion Journal of Australia: Official Journal of Australian Association of Health Promotion Professionals*, 18(3), 236-239.

- Danish, S. J., & Nellen, V. C. (1997). New roles for sport psychologists: Teaching life skills through sport to at risk youth. *Quest, 49*, 100-113
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment, 49*, 71-75
- Dino, A., Reysen, S., & Branscombe, N. R. (2009). Online interactions between group members who differ in status. *Journal of Language and Social Psychology, 28*, 85-93
- Duckworth, A. L., Steen, T. A., & Seligman, M. E. P. (2005). Positive psychology in clinical practice. *Annual Review of Clinical Psychology, 1(1)*, 629-651.
- Eley, D., & Kirk, D. (2002). Developing citizenship through sport: The impact of a sport-based volunteer program on young sport leaders. *Sport, Education, and Society, 7(2)*, 151-166
- End, C. M. (2001). An examination of NFL fans' computer mediated BIRGing. *Journal of Sport Behavior, 24(2)*, 162-181
- European Heart Network (1999). *Physical activity and cardiovascular diseases prevention in the European Union*. Brussels, European Heart Network.
- Evans, R. J. (2009). A Comparison of rural and urban older adults in Iowa on specific markers of successful aging. *Journal of Gerontological Social Work, 52* 423-438
- Findlay, L. C., & Coplan, R. J. (2008). Come out and play: Shyness in childhood and the benefits of organized sports participation. *Canadian Journal of Behavioural Science, 40*, 153-161
- Fredrickson, B. L., Mancuso, R. A., Branigan, C., & Tugade, M. M. (2000). The undoing effect of positive emotions. *Motivation and Emotion, 24(4)*, 237-258
- Freedenthal, S., Lamis, D. A., Osman, A., Kahlo, D., & Gutierrez, P. M. (2011). Evaluation of the psychometric properties of the interpersonal needs questionnaire-12 in samples of men and women. *Journal of Clinical Psychology, 67(6)*, 609-623

- Frisch, M. B., Clark, M. P., Rouse, S. V., Rudd, M., Paweleck, J. K., Greenstone, A., & Kopplin, D. A. (2005). Predictive and Treatment Validity of Life Satisfaction and the Quality of Life Inventory. *Assessment*, 12(1), 66-78.
- Garramone, G., Harris, A. C., & Anderson, R. (1986). Uses of political computer bulletin boards. *Journal of Broadcasting & Electronic Media*, 30(3), 325-339
- Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology*, 78, 1360-1380
- Hacker, K. L., & Steiner, R. (2001). Hurdles of access and benefits of usage for internet communication. *Communication Research Reports*, 18(4), 399-407
- Hadert, A., & Rodham, K. (2008). The invisible reality of arthritis: A qualitative analysis of an online message board. *Musculoskeletal Care*, 6(3), 181-196
- Hawkins, D. (2010). Message boards: The overlooked piece of social media real estate. *Socialmediatoday*. Retrieved on October 6, 2011, from:
<http://socialmediatoday.com/drewhawkins/115715/message-boards-overlooked-piece-social-media-real-estate>
- Health Education Authority (1999). Physical activity and inequalities: A briefing paper. London, Health Education Authority
- Holt, N. L., Tink, L. N., Mandigo, J. L., & Fox, K. R. (2008). Do youth learn life skills through their involvement in high school sport? A case study. *Canadian Journal of Education*, 31(2), 281-304. Retrieved from EBSCOhost.
- Hoye, R., Cuskelly, G., Taylor, T., & Darcy, S. (2008). Volunteer motives and retention in community sport; A study of Australian rugby clubs. *Australian Journal on Volunteering*, 13(2), 40-48

- James, M. L., Wotring, C. E., & Forrest, E. J. (1995). An exploratory study of the perceived benefits of electronic bulletin board uses and their impact on other communication activities. *Journal of Broadcasting & Electronic Media*, 39(1), 30-50
- Johnson, G. M., Zastawny, & Kulpa, A. (2010). E-message boards for those who self-injure: Implications for E-health. *International Journal of Mental Health and Addiction*, 8(4), 566-569
- Joinson, A. N. (1998). Causes and implications of disinhibited behavior on the internet. In J. Gackenbach (Ed.), *Psychology and the Internet: Intrapersonal, Interpersonal, and Transpersonal Implications* (pp. 43-60). San Diego: Academic Press.
- Jones, A. R., Cook, T. M., & Wang, J. (2011). Rural-urban differences in stigma against depression and agreement with health professionals about treatment. *Journal of Affective Disorders*, 134, 145-150
- Katz, J., & Aspden, P. (1997). Motivations for and barriers to internet usage: Results of a national public opinion survey. *Internet Research*, 7, 170-188
- Kiecolt-Glass, J. K., & Newton, T. L. (2001). Marriage & health: His and hers. *Psychological Bulletin*, 127, 472-503
- Kimweli, D. S., & Stilwell, W. E. (2002). Community subjective well-being, personality traits and quality of life therapy. *Social Indicators Research*, 60(1-3), 193-225.
- King, A. C., Taylor, C. B., Haskell, W. L., & DeBusk, R. F. (1989). The influence of regular aerobic exercise on psychological health. *Health Psychology*, 8, 305-324
- Marks, N. F. (1996). Flying solo at midlife: Gender, marital status, and psychological well-being. *Journal of Marriage and the Family*, 58(4), 917-932

- McBride, D. L. (2011). Risks and benefits of social media for children and adolescents. *Journal of Pediatric Nursing, 26*, 498-499
- Morris, M., & Ogan, C. (1996). The Internet as mass medium. *Journal of Communication, 46*(1), 39-50
- Mutrie, N., & Biddle, S. (1995). The effects of exercise on mental health in non-clinical populations. Biddle, S. (ed). *European Perspectives in Exercise and Sport Psychology*, Champaign, Illinois, Human Kinetics.
- Page, R. M., Frey, J., Talbert, R., & Falk, C. (1992). Children's feelings of loneliness and social dissatisfaction: Relationship and measures of physical fitness and activity. *Journal of Teaching in Physical Education, 11*, 211-219
- Pavot, W., & Diener, E. (2008). The Satisfaction With Life Scale and the emerging construct of life satisfaction. *The Journal of Positive Psychology, 3*, 137-152
- Perez, J. E., Riggio, R. E., & Kopelowicz, A. (2007). Social skill imbalances in mood disorders and schizophrenia. *Personality and Individual Differences, 42*(1), 27-36
- Poggi, C., & Di Blas, N. (2008). Evaluating asynchronous message boards to support cross-cultural communities of high-school students. *Advances in Web Based Learning ICWL 2007, 4823*, 484-495
- Rafaeli, S. (1986). The electronic bulletin board: A computer-driven mass medium. *Computers and the Social Sciences, 2*, 123-136
- Raglin, J.S. (1990). Exercise and mental health; Beneficial and detrimental effects. *Sports Medicine, 9*(6), 323-329

- Rentfrow, P. J., Mellander, C., & Florida, R. (2009). Happy states of America: A State level analysis of psychological, economic and social well-being. *Journal of Research in Psychology, 43*, 1073-1082
- Reysen, S. & Branscombe, N. R. (2010). Fanship and fandom: Comparisons between sport and non-sport fans. *Journal of Sport Behavior, 33*(2), 176-193
- Ridings, C. M., & Gefen, D. (2004). Virtual community attraction: Why people hang out online. *Journal of Computer-Mediated Communication, 10*(1), Article 4
- Roberts, K., & Brodie, D. A. (1992). *Inner-City Sport: Who Plays, and Whate Are the Benefits?*
Culembourg, Giordano Bruno
- Rodgers, S., & Chen, Q. (2005). Internet community group participation: Psychosocial benefits for women with breast cancer. *Journal of Computer-Mediated Communication, 10*(4), article 5
- Rodham, K., McCabe, C., & Blake, D. (2009). Seeking support: An interpretative phenomenological analysis of an internet message board for people with Complex Regional Pain Syndrome. *Psychology and Health, 24*(6), 619-634
- Rogers, P., & Lea, M. (2005). Social presence in distributed group environments: The role of social identity. *Behaviour and Information Technology, 24*, 151-158
- Ruihley, B.J., & Hardin, R.L. (2011). Message boards and the fantasy sport experience. *International Journal of Sport Communication, 3*(4), 438-453
- Sandvoss, C. (2005).. *Fans: The mirror of consumption*. Cambridge, UK: Polity Press
- Seligman, M. E., & Csikszentmihaly, M. (2000). Positive psychology: An introduction. *American Psychologist, 55*(1), 5-14

- Seligman, M.E. P., Rashid, T., & Parks, A. C. (2006). Positive psychotherapy. *American Psychologist*, 61(8), 774-788
- Seligman, M.E.P., Steen, T. A., Park, N., & Peterson, C. (2005). Positive psychology progress: Empirical validation of interventions. *American Psychologist*, 60(5), 410-421
- Shaw, L. H., & Gant, L. M. (2002). In defense of the internet: The relationship between internet communication and depression, loneliness, self-esteem, and perceived social support. *Cyberpsychology & Behavior*, 5, 157-171
- Simonton, D. (2007). Don't worry, be high in subjective well-being!. *PsycCRITIQUES*, 52(25)
- Stephens, A. (1992). Physical activity and well-being, In: Norgan, N.G. *Physical Activity and Health*. Cambridge, University Press
- Surgeon General (1996). *Physical activity and health: A report to the Surgeon General*. US Department of Health and Human Services
- Teo, T. S. H., Lim, V. K. G., & Lai, R. Y. C. (1999). Intrinsic and extrinsic motivation in internet usage. *Omega, International Journal of Management Science*, 27, 25-37
- Tumarkin, R. & Whitelaw, R. (2001). News or noise? Internet postings and stock prices. *Journal of Financial Analysts*, 57(3), 41-51
- University of Pennsylvania (2007). Positive psychology center. Retrieved on May 15, 2011 from: www.ppc.sas.upenn.edu/
- Van Orden, K. A., Witte, T. K., Gordon, K. H., Bender, T. W., & Joiner, Jr., T. E. (2008a). Suicidal desire and the capability for suicide: Tests of the interpersonal-psychological theory of suicidal behavior among adults. *Journal of Consulting and Clinical Psychology*, 76, 72-83

- Veenhoven, R. (1994). How satisfying is rural life? Fact and Value. Published in: Cecora, J. (ed) *Changing Values and Attitudes in Family Households. Implications for Institutional Transition in East and West*. FAA report nr 296, Society for Agricultural Policy Research in Rural Society, 1994, Bonn, Germany, p. 41-51
- Volkov, M., Johnson, M. M., & Summers, J. (2008). The Role of nostalgia in determining consumer's sport team identification. In SMA 2008: *Bridging the Gap: Bringing the World Down Under*, July 17-19, 2008, Gold Coast, Australia.
- Wang, P.Z. (2004). Assessing motivations for sports volunteerism. *Advances in Consumer Research*, 31, 420-425
- Wann, D. L. (2006). Understanding the positive social psychological benefits of sport team identification: The Team Identification-Social Psychological Health Model. *Group Dynamics: Theory, Research, and Practice*, 10, 272-296
- Wann, D. L., & Branscombe, N. R. (1993). Sports fans: Measuring degree of identification with their team. *International Journal of Sport Psychology*, 24(1), 1-17
- Wann, D. L., & Pierce, S. (2005). The relationship between sport team identification and social well-being: Additional evidence supporting the Team Identification--Social Psychological Health Model. *North American Journal of Psychology*, 7, 117-124
- Wann, D. L., Keenan, B., & Page, L. (2009). Testing the Team Identification-Social Psychological Health Model: Examining non-marquee sports, seasonal differences, and multiple teams. *Journal of Sport Behavior*, 32(1), 112-124
- Wann, D. L., Martin, J., Grieve, F. G., & Gardner, L. (2008). Social connections at sporting events: Attendance and its positive relationship with state social psychological well-

- being. *North American Journal of Psychology*, 10(2), 229-238. Retrieved from EBSCOhost.
- Wann, D. L., Melnick, M. J., Russell, G. W., & Pease, D. G. (2001). *Sport Fans: The Psychology and Social Impact of Spectators*. New York: Routledge
- Wann, D. L., Rogers, K., Dooley, K., & Foley, M. (2011). Applying the Team Identification-Social Psychological Health Model to Older Sport Fans. *International Journal of Aging and Human Development*, 72(4), 303-315
- Wann, D. L., Waddill, P. J., Polk, J., & Weaver, S. (2011). The Team Identification-Social Psychological Health Model: Sport fans gaining connections to others via sport team identification. *Group Dynamics: Theory, Research, and Practice*, 15(1), 75-89
- Warburton, D. E. R., Nicol, C. W., Bredin, S. S. D. (2006). Health benefits of physical activity: The evidence. *CMAJ*, 174(6), 801-809
- Weinstein, N., & Ryan, R. M. (2010). When helping helps: Autonomous motivation for prosocial behavior and its influence on well-being for the helper and recipient. *Journal of Personality and Social Psychology*, 98(2), 222-244
- Wise, F. M. (2010). Coronary heart disease: The benefits of exercise. *Australian Family Physician*, 39(3), 129-133
- Wilson, S. M. & Peterson, G. W. (1988). Life satisfaction among young adults from rural families. *Family Relations*, 37, 84-91
- Woo, C. W., An, S. K., & Cho, S. H. (2008). Sports PR in message boards on Major League Baseball websites. *Public Relations Review*, 34, 169-175

World Health Organization (2003). *Health and development through physical activity and sport*.

Retrieved August 21, 2011 from:

<http://www.sportanddev.org/en/learnmore/?uNewsID=82>

You, S., Van Orden, K. A., & Conner, K. R. (2011). Social connections and suicidal thoughts and behavior. *Psychology of Addictive Behaviors Journal of the Society of Psychologists in Addictive Behaviors*, 25(1), 180-184

Youmans, E. Grant. & Kentucky Univ., Lexington. Agricultural Experiment

Station. (1971). *Poverty and Life Satisfaction A Rural-Urban*

Comparison. [Washington, D.C.] : Distributed by ERIC

Clearinghouse, <http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED0>

[73889](http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED073889)

Table 1

Means, Standard Deviations, and Minimum and Maximum Scores for Social Factors Examined and Message Board Usage

Variables	Mean (SD)	Min-Max Scores
Belongingness	31.80 (4.49)	10.00 – 35.00
Prosocial Behavior	60.10 (8.54)	37.00 – 80.00
Satisfaction with Social Life	25.59 (6.23)	5.00 – 35.00
Team Identification	50.61 (4.65)	3.00 – 20.00
Hours Lurking	11.02 (10.75)	1.00 – 105.00
Hours Engaged in Discussion	2.34 (6.51)	0.00 – 70.00
Frequency of Threads Initiated	2.15 (5.52)	0.00 – 50.00
Frequency of Responses to Posts	8.50 (16.42)	0.00 – 100.00

Table 2

Correlation Matrix, Means, and Standard Deviations of Study Measures

Variable	1	2	3	4	5	6	7	8
1. Belongingness	--							
2. Prosocial Behavior	.35**	--						
3. Social Life Satisfaction	.56**	.36**	--					
4. Team Identification	.03	.05	.03	--				
5. Hours Lurking	-.09	-.05	-.09	.18**	--			
6. Hours Engaged in Discussion	-.10	-.09	-.01	.05	.65**	--		
7. Threads Initiated Frequency	-.02	-.13*	-.02	-.01	.23**	.50**	--	
8. Responses to Posts Frequency	-.08	-.07	-.07	-.02	.43**	.53**	.49**	--

Note. $N = 413$. Tabled values are zero-order correlations.

* Significant at the .05 level.

** Significant at the .01 level

Table 3

Logistic Regression on Criterion Status Measures

Variables	B (S.E.)	95% CI for Odds Ratio		
		Odds Ratio	Lower	Upper
Team Identification Status				
Hours Lurking	.059 (.025)	1.061*	1.011	1.114
Hours Engaged	.000 (.051)	1.000	.905	1.105
Threads Initiated	-.017 (.051)	.983	.890	1.086
Posts Responded To	-.015 (.015)	.985	.957	1.013
Belongingness Status				
Hours Lurking	-.002 (.017)	.998	.965	1.033
Hours Engaged	-.037 (.038)	.963	.895	1.037
Threads Initiated	.008 (.030)	1.008	.951	1.069
Posts Responded To	-.006 (.010)	.994	.974	1.014
Prosocial Behavior Status				
Hours Lurking	-.022 (.020)	.978	.940	1.017
Hours Engaged	.035 (.043)	1.036	.951	1.128
Threads Initiated	-.119 (.067)	.888	.778	1.013
Posts Responded To	.006 (.017)	1.006	.973	1.041
Social Life Satisfaction Status				
Hours Lurking	-.017 (.021)	.983	.944	1.023
Hours Engaged	-.007 (.052)	.993	.897	1.099
Threads Initiated	.008 (.035)	.983	.890	1.008
Posts Responded To	-.016 (.014)	.985	.958	1.012

* Significant at the .05 level.