A Dissertation Proposal
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Requirements for the Degree of
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by
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Chapter 1

Review of the Literature

Group membership is an inevitable facet of life that manifests in multiple forms. Passive forms of group membership (i.e., membership not determined by choice) can result from demographic features of the individual, such as age or race. Individuals are also active in the selection of their group memberships (e.g., becoming a fan of a sport team). Research suggests that the social connections gained through group memberships can significantly influence one’s psychological and physical well-being (Leung, Cheung, & Liu, 2011; Steptoe, O’Donnell, Marmot, & Wardle, 2008; VanderWeele, Hawkley, Thisted, & Cacioppo, 2011; You, Van Orden, & Conner, 2011). The purpose of the present study is to determine if a specific group membership, that of identifying with a National Football League (NFL) team, influences one’s psychological well-being and whether the relationship is impacted by the team’s success and geographic proximity.

Motivation for Group Memberships and “Belonging”

Multiple theories have attempted to explain the various motivations for pursuing group memberships. In the case of sports team identification, researchers (Clopton & Finch, 2010; Wann, 2006a) typically apply social identity theory (SIT; Tajfel & Turner, 1986) and the belongingness hypothesis (Baumeister & Leary, 1995). According to their SIT, Tajfel and Turner (1986) suggest that individuals are selective in their formulation of group memberships. Group memberships ultimately serve as extensions of the group members’ identities. As such, it is important for individuals to identify with superior groups. Tajfel and Turner believed that individuals evaluate their own group memberships (“ingroups”) in comparison to groups they do not have membership
"outgroups"). Membership in an inferior ingroup represents a threat to an individual’s social identity in the form of threatened self-esteem (i.e., collective self-esteem). If one experiences threats to his/her self-esteem as a result of the inferior membership, then it is highly likely that his/her motivation to continue identifying with the group will deteriorate. It is important for individuals to perceive ingroups as superior to outgroups in order to maintain positive social identities. Individuals’ motivation to retain their group memberships is determined by the state of both their ingroups and outgroups (Tajfel & Turner, 1986). Individuals’ group memberships may therefore fluctuate over time as the statuses of their ingroups and outgroups change.

Although individuals desire superior ingroups, relative to their outgroups, Baumeister and Leary’s (1995) belongingness hypothesis posits that all individuals have a fundamental need to connect and interact with others regardless of concern for group status. Individuals naturally experience the need to generate and maintain meaningful and stable relationships with others (i.e., belong). As a result of the need to belong, Baumeister and Leary (1995) hypothesized that individuals readily and actively attempt to form meaningful social connections with others. Individuals desire to have frequent interactions with their social connections. Group memberships and individuals’ identifications with their groups (e.g., fans of the same sports team) provide a reliable means of obtaining social connections and interpersonal interactions. The social connections gained through such group memberships can function to fulfill the fundamental need to belong.

The belongingness hypothesis (Baumeister & Leary, 1995) and SIT (Tajfel & Turner, 1986) help to explain why individuals identify with groups. Group memberships
offer individuals the opportunity to define themselves, create interpersonal relationships, and experience social connections with others (i.e., belong). A substantial amount of research has focused on the importance of social connectedness with others and its influence on physical and psychological well-being (Aanes, Mittelmark, & Hetland, 2010; Capioppo, Hughes, Waite, Hawkley, & Thisted, 2006; Leung et al., 2011; Steptoe et al., 2008; VanderWeele et al., 2011; You et al., 2011).

**Social Connectedness and Psychological/Physical Well-being**

The quantity and quality of interpersonal relationships in addition to the frequency of social interactions influence the degree to which an individual feels socially connected with others (Aanes et al., 2010). Based on individuals' natural desire to socially connect with others (Baumeister & Leary, 1995), Leung and colleagues (2011) hypothesized that social connectedness would be predictive of one's subjective well-being. Employees from multiple domains of work completed a variety of questionnaires, including Rosenberg's (1965) self-esteem scale, a measure of social connectedness, a measure of perceived career success, a measure of physical well-being, and a measure of psychological well-being. Participants' scores on the social connectedness scale had significant positive relationships with the scores on both the physical and psychological well-being scales in addition to the responses from the self-esteem and career success measures. Although correlational in nature, these findings indicated that it is likely that social connectedness may be a protective factor for individuals' physical and psychological well-being.

Ashida and Heaney (2008) focused their research specifically on the relationship between social connectedness and physical well-being. During a structured interview,
participants between the ages of 65 and 5 reported on the number of individuals present in their social network, the availability and presence of social support in their lives, and information on their general health. As hypothesized, structural equation modeling revealed that social connectedness had a significant positive relationship with self-reported physical health. The results further suggest that social connectedness may be a protective factor for physical well-being.

Research has also demonstrated a positive relationship between positive affect and social connectedness (Lyubomirsky, Ikach, & DiMatteo, 2006). In addition to further exploring Lyubomirsky et al.'s findings, Steptoe and colleagues (2008) also hypothesized that negative affect would be negatively associated with social connectedness. Participants between the ages of 58 and 72 years reported on experiences of positive (e.g., feelings of happiness, content, and excitement) and negative (e.g., feelings of worry and anxiety) affect during four instances throughout one day. Additionally, participants completed a series of questionnaires measuring social connectedness, social support, and experiences of stress and psychological distress, among other measures. Consistent with previous research (Lyubomirsky et al., 2006), regression analyses revealed that positive affect was positively associated with social connectedness. Additionally, negative affect was negatively associated with social connectedness. The direction and causality of the associations, however, were uncertain.

The relationship between social connectedness and affect can also be studied by exploring the absence of social connection (i.e., loneliness) in individuals’ lives. Aanes and colleagues (2010) examined the role of loneliness as a mediating factor in the relationship between interpersonal stress and psychological distress. A total of 6,488
participants between the ages of 65 and 85 reported on the number of individuals present in their social network, the availability and presence of social support in their lives, and information on their general health. As hypothesized, structural equation modeling revealed that social connectedness had a significant positive relationship with self-reported physical health. The results further suggest that social connectedness may be a protective factor for physical well-being.

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participants in Norway between the ages of 40 and 47 years completed the Bergen Social Relationship Scale (BSRS; Mittelmark, Aaro, Henriksen, Siqveland, & Torsheim, 2004), a measure of loneliness, and a measure of anxiety and depression. Structural equation modeling revealed that loneliness mediated nearly 75% of the total effect for depressive symptoms and over 50% of the total effect for symptoms of anxiety. The adverse effects resulting from the lack of social connectedness likely further motivate people to socially connect with others.

Additional research has demonstrated the role of loneliness in the experience of depressive symptoms (Capioppo et al., 2006). VanderWeele and colleagues (2011) examined the effects of loneliness in the progression of depression. Participants completed the UCLA Loneliness Scale (UCLA-LS; Russell, Peplau, & Cutrona, 1980) and the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977) at five different points over five years to measure their experiences of loneliness and depressive symptoms, respectively. In order to examine the effects of loneliness on the progression and development of depressive symptoms, the researchers utilized marginal structural analysis. They created marginal structural models to predict the impact of "hypothetical" interventions that would have targeted loneliness during the first three years of data collection on depressive symptoms at the last point of data collection. According to the models, the proposed hypothetical interventions targeting loneliness at one and two years prior to assessing final depressive symptoms reduced participants' scores on the CES-D by .33 standard deviations. Interventions specifically targeting loneliness, then, could prevent and reduce experiences of depressive symptoms up to two years following the interventions. Alleviating feelings of loneliness can be an important
preventive factor of depressive symptoms as well as an effective means of treating existing symptoms.

The adverse effects of loneliness may extend beyond depression to suicidal ideation and behavior. Because social connectedness with others functions to satisfy Baumeister and Leary’s (1995) hypothesized fundamental need to belong, You and colleagues (2011) hypothesized that social connectedness would be negatively associated with suicidal ideation and behavior. Participants sampled from substance-use treatment programs reported on past suicide attempts and suicidal ideation in addition to completing the Kessler Perceived Social Support scale (KPSS; Kessler, Kendler, Heath, Neale, & Eaves, 1992) and the Interpersonal Needs Questionnaire (Van Orden, Witte, Gordon, Bender, & Joiner, 2008) to measure social support and social connectedness, respectively. Univariate tests revealed that higher levels of social connectedness were associated with less frequent suicidal behaviors and ideation. As hypothesized, social support and social connectedness were negatively associated with suicidal ideation and suicide attempts. Individuals who lacked social connectedness with others were at higher risk of suicidal ideation and behavior. Social connectedness may therefore also serve as a protective factor against suicidal ideation and behaviors.

The positive relationships between social connectedness and psychological and physical well-being (Ashida & Heaney, 2008; Leung et al., 2011; Steptoe et al., 2010) may explain the rationale for individuals’ desire to belong (Baumeister & Leary, 1995). Individuals who lacked social connections with others may experience decreased psychological and physical well-being in comparison with socially connected individuals (Aanes et al., 2010; Ashida & Heaney, 2008; Leung et al., 2011; VanderWeele et al.,
2011; You et al., 2011). It is therefore important for individuals to feel socially connected with others and prevent feelings of loneliness. Group memberships may provide an effective outlet for social connectedness. One such form of group membership that is believed to elicit social connectedness with others is team identification (Wann, 2006a; Wann, Waddill, Polk, & Weaver, 2011).

Team identification is an individual’s psychological connection with a sports team that represents part of his/her own identity (Wann, 2006a). Fans may choose to identify with teams of varying sports and skill levels (e.g., collegiate, professional, etc.). Identification with a team located within a fan’s immediate proximity (i.e., the fan resides in the same city as his/her team) is referred to as local team identification (Wann, 2006a). Identification with a team outside of a fan’s living environment is referred to as distant team identification (Wann, 2006a). Regardless of team sport or location, researchers applying SIT (Tajfel & Turner, 1986) to sport fan behavior consider a fan’s team identification as one of his/her ingroups (Clopton & Finch, 2010; Wann, 2006a). Because identification with a team serves as an ingroup and an extension of one’s identity, team identification can likely influence the behaviors and psychological processes (e.g., affect, self-esteem, etc.) of fans.

**Identification with a Local Team**

Branscombe and Wann (1991) theorized that identification with a sports team fosters a sense of belonging with others that leads to an increase in an individual’s self-esteem and decreases in the frequency of depressive symptoms and feelings of loneliness and hopelessness. In their first study, the researchers hypothesized a positive relationship between team identification with a local sports team (i.e., local team identification) and
self-esteem and a negative relationship between team identification and experiences of depression. Participants completed a measure of self-esteem and a measure assessing their level of sports team identification, categorized as either “low” or “high”. Participants also indicated the frequency that they experienced depressive symptoms on a scale ranging from 1 (never) to 8 (always). Results revealed a significant positive correlation between local identification and self-esteem and a significant negative correlation between local identification and participants’ scores on the measure of depressive symptoms. In a second study, participants completed questionnaires measuring the frequency participants experienced loneliness and hopelessness on a scale from 0 (never) to 4 (always). Local team identification had significant negative relationships with both loneliness and hopelessness. The results of the two studies suggested that the impact of team identification on fans’ psychological processes is more pronounced when fans highly identify with local sports teams than when fans are low in team identification.

Although Branscombe and Wann (1991) included a measure of team identification in their investigation, it lacked psychometric properties to support its use as measure of such a construct. In order to measure team identification in a reliable and valid manner, Wann and Branscombe (1993) developed the Sport Spectator Identification Scale (SSIS). The researchers established the measure’s reliability and validity through two studies utilizing undergraduate students. The results of the studies demonstrated strong internal consistency and predictive validity of the measure in addition to moderate test-retest reliability. The development of the SSIS (Wann & Branscombe, 1993) offered researchers a standardized measure of team identification.
Wann (1994) utilized the SSIS (Wann & Branscombe, 1993) to explore the relationship between local team identification and collective self-esteem. Based on the theory that team identification fostered a sense of belonging with others (Branscombe & Wann, 1991), he hypothesized that there would be a positive relationship between local team identification and collective self-esteem. Participants completed the SSIS (Wann & Branscombe, 1993) and the Collective Self-Esteem Scale (CSES; Crocker & Luhtanen, 1990). The CSES measures an individual's sense of group self-worth based on his/her evaluations of his/her group identification (i.e., collective self-esteem). Consistent with the hypothesis, the results revealed a significant positive correlation between local team identification and collective self-esteem.

Initial research focusing on local team identification suggested positive relationships between team identification and aspects of general well-being (e.g., personal self-esteem and decreased depressive symptoms and hopelessness; Branscombe & Wann, 1991) and social psychological well-being (e.g., collective self-esteem and decreased loneliness; Branscombe & Wann, 1991; Wann, 1994). Wann, Walker, Cygan, Kawase, and Ryan (2005) attempted to replicate the relationship between identification with a local team and social psychological well-being outside of a classroom setting. All participants completed the SSIS (Wann & Branscombe, 1993), the CSES (Luhtanen & Crocker, 1991), and the UCLA-LS (Russell et al., 1980) at either a basketball game or the participants' dormitories. Wann et al. (2005) converted participants' scores on the CSES and UCLA-LS to z scores representing a single measure of "social psychological health" (p. 363). Local team identification was positively related to participants' social psychological health z scores. The results provided further evidence for the positive
relationship between local team identification and social psychological well-being by demonstrating it in settings other than a classroom.

Wann, Rogers, Dooley, and Foley (2011) explored the relationship between local team identification and social psychological well-being with a sample of older adults. Participants ($M = 70.8$ years; $SD = 11.9$ years) completed the SSIS (Wann & Branscombe, 1993), the CSES (Luhtanen & Crocker, 1991), and UCLA-LS (Russell et al., 1980). Local team identification was positively related with collective self-esteem and negatively related with loneliness. Regression analyses including local team identification and other demographic features (e.g., marital status, age, etc.) as predictor variables revealed that team identification significantly accounted for the variance regarding the participants' collective self-esteem ($\beta = .29$) and loneliness ($\beta = .24$) The results suggested the generalizability of the positive relationship between team identification and social psychological well-being with a population of older adults.

Previous research has provided substantial correlational evidence for the positive relationship between team identification with a local sports team and social psychological well-being (Branscombe & Wann, 1991; Wann, 1994; Wann et al., 2005; Wann, Rogers et al., 2011). Wann (2006b) explored the directionality of the relationship through a cross-lagged longitudinal study. Participants completed a number of measures of social and general psychological well-being at a three month interval. Included in the series of measures were the Rosenberg (1979) Personal Self-esteem Scale, the CSES (Luhtanen & Crocker, 1991), the UCLA-LS (Russell et al., 1980), and the Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983). Structural equation modeling analyses supported the notion that the coefficient between local team identification at the first time
of questionnaire administration and psychological well-being at the second point of administration was significant. The opposite path of psychological well-being at Time 1 and team identification at Time 2 was not significant. Results from the study suggested that the uni-directionality of the local team identification and psychological well-being relationship. Furthermore, Wann (2006b) claimed that the results suggested (local) team identification as a causal factor to the improvements in both general and social psychological well-being.

**Identification with a Distant Team**

Although research has focused primarily on the relationship between team identification with a *local* team and psychological well-being (Branscombe & Wann, 1991; Wann, 1994; Wann et al., 2005), many fans identify with teams that are distant in proximity from fans’ living environments (e.g., a fan who lives in Chicago identifying with the St. Louis Cardinals). Wann, Dimmock, and Grove (2003) examined the importance of team location (local or distant) in the relationship between team identification and psychological well-being. Australian participants completed two forms of the SSIS (Wann & Branscombe, 1993) targeting their local Australian Rules football team in addition to their favorite team (local or distant). Participants then completed the CSES (Luhtanen & Crocker, 1991) and UCLA-LS (Russell et al., 1980) to measure social psychological well-being in addition to two measures of general psychological well-being focusing on perceived stress and personal self-esteem. Results revealed a significant negative correlation between local team identification and loneliness. Furthermore, an analysis of variance (ANOVA) revealed that participants identifying with a local team demonstrated significantly higher levels of collective self-esteem and lower levels of
loneliness in comparison to participants identifying with distant teams. There were no relationships between team identification with a distant team and scores on the measures of social psychological (i.e., collective self-esteem and social connectedness) or general psychological well-being.

The lack of a relationship between team identification with a distant team and psychological well-being (Wann, Dimmock et al., 2003) supported Branscombe and Wann's (1991) theorized importance of belongingness as a mediating factor between team identification and psychological well-being. Fans who identify with local teams are more likely than fans of distant teams to connect with other fans in the environment, instilling the feeling of belonging. In order to more fully understand the impact of team location on fans' psychological well-being, Wann and Pierce (2005) further explored local and distant team identification and their relationships with social psychological well-being. Participants completed a measure of sport fandom and two forms of the SSIS (Wann & Branscombe, 1993) targeting a local team and a distant team. Participants then completed the CSES (Luhtanen & Crocker, 1991) and a questionnaire of satisfaction with their social lives to measure their degree of social connectedness. Regression analysis revealed that identification with a local team significantly accounted for the variances of social psychological well-being ($\beta = .26$). Identification with a distant team in addition to general sport fandom alone (i.e., fans of sports who lack a specific team identification) failed to significantly account for the variance of social psychological health.

Branscombe and Wann's (1991) initial theory positing that the feelings of belonging associated with identifying with a team leads to improvement in psychological well-being has been supported through its research. Research has demonstrated local
team identification’s association with general psychological well-being (Branscombe & Wann, 1991; Wann, 2006b). The social nature of Branscombe and Wann’s (1991) theory, however, has led the majority of research on team identification to focus on the positive relationship between local team identification and social psychological well-being. Research has consistently demonstrated the positive relationship between local team identification and social psychological well-being (Wann, 1994; Wann, Dimmock et al., 2003; Wann & Pierce, 2005; Wann et al., 2005). Furthermore, the relationship between local team identification and social psychological well-being appears to be better supported than the relationship between identification and general psychological well-being (Wann, Dimmock et al., 2003). Research had failed, however, to demonstrate any significant relationships between distant team identification and general or social psychological well-being (Wann, Dimmock et al., 2003; Wann & Pierce, 2005). Based on previous research and social nature of team identification, Wann (2006a) developed the Team Identification-Social Psychological Health Model (TISPH).

**Team Identification-Social Psychological Health Model**

According to the TISPH, Wann (2006a) claims that high team identification increases the number of an individual’s social connections in addition to eliciting a “feeling of camaraderie” (p. 276) with other fans of the team. The increase in social connectedness gained through high team identification leads to improved social psychological well-being indicated by improvements to collective self-esteem and decreased experiences of loneliness (Brancombe & Wann, 1991; Wann, 1994, 2006b; Wann, Dimmock et al., 2003; Wann et al., 2005). The emphasis of the TISPH (Wann,
2006a) is the mediational role of social connectedness in the positive relationship between team identification and social psychological well-being.

In his TISPH, Wann (2006a) posits that fans may experience either enduring or temporary social connections. Consistent immersion of the fan with other fans of his/her team is more likely to result in enduring social connections than temporary social connections. The fan experiencing enduring social connections usually resides in the same city as the team (i.e., local team identification), making support for the team salient. Enduring social connections are theorized to be the strongest factors to improved social psychological well-being. Temporary social connections pertain to infrequent encounters with fans of the same identified team. Fans who experience temporary social connections are usually removed from the home location of their teams (i.e., distant team identification), so they are not immersed in salient markers of the team and its fans. These fans, however, encounter other fans of their team and may therefore experience temporary social connections. Although the social connections are only temporary, they may lead to improved state social psychological health (Wann, Polk, & Franz, 2011).

As fans continue to identify with sports teams and experience social connectedness with others, it is theorized that their team identification will continue to sustain its original improvements to their social psychological well-being. Wann (2006a), however, acknowledges and differentiates between the temporary and sustained gains to social psychological health gained through team identification. He theorizes that temporary social connections or contact with other fans leads to improvements in state social psychological health. Because of the temporary nature of the connections or encounter, the impact on social psychological health is unlikely to be long-lasting or
sustained much beyond the actual encounter with other fans. *Enduring* social connections, resulting from consistent contact and immersion of self with other fans, are more likely to lead to sustained improvements to social psychological health. Wann (2006a) theorizes that enduring social connections lead to improved *trait* social psychological health. He clarifies the use of “trait” as “chronic, long-lasting” (p. 286).

The TISPH (Wann, 2006a) has generated substantial research. Wann, Keenan, and Page (2009) examined whether the positive relationship between team identification and social psychological health (i.e., collective self-esteem and social connectedness) persisted in instances when teams are in their off-seasons. Participants completed two forms of the SSIS (Wann & Branscombe, 1993) targeting their university’s football and baseball teams either in the fall semester (in-season for football, off-season for baseball) or spring semester (in-season for baseball, off-season for football). Participants also completed the CSES (Luhtanen & Crocker, 1991) and the UCLA-LS (Russell et al., 1980). Team identification with either team (football or baseball) significantly positively correlated with participants’ scores on the measures of social psychological health. Results failed to reveal significant differences between participants’ social psychological health scores during in-season and off-season measurements. The findings suggested that, based on the persistence of social well-being during the off-season, social connectedness may mediate Wann’s (2006a) TISPH.

Wann, Polk et al. (2011) further explored the importance of social connectedness in the TISPH (Wann, 2006a). Past research failed to demonstrate a positive relationship between identification with a distant team and social well-being (Wann, Dimmock et al., 2003; Wann & Pierce, 2005). Consistent with the TISPH (Wann, 2006a), Wann, Polk et
al. (2011) hypothesized that the presence of fans of a distant team would lead to improvements in the state (i.e., present moment) social psychological health of fans with the shared distant identification. At Time 1, participants completed the SSIS (Wann & Branscombe, 1993) targeting a distant team in addition to the CSES (Luhtanen & Crocker, 1991) and UCLA-LS (Russell et al., 1980). At Time 2, the researchers randomly assigned participants who indicated high team identification with the distant team to watch alone or as a group either a championship highlight video of the targeted distant or a general sports highlight video. After watching the video, participants completed the CSES and UCLA-LS to measure the participants’ state levels of collective self-esteem and loneliness. ANOVAs revealed that participants who watched the championship highlight video of their team in a group setting reported significant decreases in their state level of loneliness (i.e., greater social connectedness) compared to participants in the three other settings. All participants (group and solitary conditions) who watched the championship highlight video reported significant improvements to their state collective self-esteem compared to participants who watched the general highlight video. When in the presence of other fans of the distant team and reminders of team’s success are made salient, team identification with a distant team may lead to improvements in the state social psychological health of fans. The results supported the potential of social connectedness as a mediating or moderating factor in the TISPH (Wann, 2006a).

Wann, Waddill et al. (2011) explored the theoretical basis of the TISPH (Wann, 2006a) that team identification leads to an increase in social connections in a series of two studies. In the first study, participants completed the SSIS (Wann & Branscombe,
1993), questionnaires measuring social connections gained from identifying with a sports team, and questionnaires measuring social well-being (e.g., collective self-esteem, social life satisfaction, and social isolation). Results revealed that local team identification significantly correlated with social connections gained through being a fan of the team. Highly identified sports fans attributed their role as a fan to an increase in their number of friendships and believed that their identification helped establish and maintain friendships. Furthermore, team identification positively correlated with the measures of social well-being. Wann, Waddill et al. (2011) replicated their first study’s results in their second study in addition to demonstrating a positive relationship between team identification and general social connectedness with other university students on campus.

Upon discovering that team identification positively correlated with social connectedness with other fans and university students in general, Wann, Waddill et al. (2011) examined if social connectedness mediated the relationship between team identification and social psychological well-being. Despite the positive correlation between identification and social connectedness, mediational analysis revealed that social connections did not mediate the relationship between identification and social well-being. A follow-up regression analysis examining social connectedness as a moderating factor in the relationship also failed to reach significance. The results suggest that social connectedness neither mediates nor moderates the TISPH (Wann, 2006a). Although the results contradicted the TISPH, Wann, Waddill et al. (2011) suggested future research to replicate the study’s results before ruling social connectedness out as a mediating or moderating variable.
One factor that may mediate or moderate the TISPH (Wann, 2006a) is team performance. Although Wann disregards team performance as such a factor, he acknowledges that team performance can influence a fan’s level of team identification. Specifically, poor team performance may serve as a threat to fans’ team identification. When their teams are unsuccessful, fans must choose an appropriate means of coping with the threats if they are to continue identifying with their teams. Wann (2006a) proposed fans’ ability to cope with threats to team identification as a potential moderating factor to his TISPH. If fans are successful in quelling threats to their team identity, they will continue identifying with that team and continue to experience improved social psychological health. If, on the other hand, fans are unsuccessful in coping with identity threat, they will likely cut ties with the team and no longer identify with that team (i.e., experience decreased social well-being). Based on SIT (Tajfel & Turner, 1986), successful team performance creates association with a successful group for the identified fan, likely promoting and strengthening fans’ team identification. Team performance is therefore likely an influencing factor in TISPH (Wann, 2006a) that may impact fans’ levels of team identification.

**Impact of Team Performance on Fans’ Team Identification**

Wann, Tucker, and Schrader (1996) explored fans’ motivation and rationale in their decisions whether or not to identify with sports teams. The researchers asked participants to indicate a sports team with which they identified and, in response to open-ended items, provide reasons for currently and originally identifying with that team. Additionally, participants indicated a team with which they formerly identified and report reasons for discontinuing their identification with that team. Participants reported that
team success rate was the most common reason for currently identifying with teams, appearing in 16.1% of all responses. The success of teams was also among the top five most common reasons for originally identifying with the teams. Poor team performance (i.e., the team is unsuccessful) was the most common reason for fans to discontinue their identification with teams.

Based on individuals’ preference to associate with superior, highly-esteemed groups (Tajfel & Turner, 1986), End, Dietz-Uhler, Harrick, and Jacquemotte (2002) also hypothesized that fans would prefer to identify with successful rather unsuccessful teams. Participants listed up to eight teams with which they identified and rated their level of identification with each team on a scale from 1 (not very identified) to 9 (highly identified). End and colleagues defined team success in a number of ways, including a winning percentage above .500, qualification for postseason play, and top-three finish in the team’s conference, among other criteria. A total of 71% of all teams listed by participants met at least one criterion of success, and 49% of listed teams met all criteria for success. The listed teams’ winning percentages were significantly higher than the .500 winning percentage criterion. Although it failed to reach the traditional level of statistical significance, the relationship between fans’ team preferences and team winning percentage was positive. Furthermore, there was a significant positive relationship between participants’ level of team identification and their preference of teams.

End and colleagues (2002) theorized that identification with successful teams provides fans with a higher likelihood of having the opportunity to bask in reflected glory (BIRG; Cialdini et al., 1976). Fans BIRG by publicly demonstrating their identification with their team. Based on individuals’ desire to identify with superior groups, as posited
in SIT (Tajfel & Turner, 1986), BIRGing allows individuals the opportunity to reveal their identification with a highly esteemed, superior group despite their lack of direct contribution to the group’s superiority. Identification with successful teams offers more opportunities to BIRG, making fans more prone to identify with successful teams (End et al., 2002).

Cialdini et al. (1976) were the first researchers to empirically explore the phenomenon of BIRGing through three field experiments. In the first experiment, the experimenters observed university students’ tendencies to wear university-related apparel to class on the Monday following their football team’s games. The students observed in the experiment were significantly more likely to wear their university’s apparel following their football team’s victories than their defeats, demonstrating fans’ tendency to make their team identities salient to others following victories.

In a second study, Cialdini and colleagues’ (1976) utilized an experimental design to better understand the process of BIRGing. The experimenters randomly assigned participants to either a positive or negative feedback condition informing them of their performance on a phone survey. The survey included questions about their university footballs team’s performance in games that either resulted in victory or defeat. Participants used the first-person pronoun “we” (i.e., “we won that game”) significantly more often when describing their teams’ victories compared to their descriptions of losses (i.e., “they lost that game”). Furthermore, participants were significantly more likely to use “we” to describe their team after they received negative feedback on their performance in the survey in comparison to participants who received positive feedback. Based on the higher usage of “we” after receiving negative feedback, Cialdini and
colleagues (1976) theorized that people BIRG (i.e., display their connection with a successful team) to boost others’ evaluations of them. Participants who received negative feedback may have experienced threats to their personal identity. In an attempt to ameliorate their threatened personal identities, these participants BIRGed by displaying their connections with their successful football teams significantly more often than participants who received positive feedback and thus lacked threats to their identities.

In their third study, Cialdini and colleagues (1976) examined the impact of a threatened social identity on fans’ tendencies to BIRG. The researchers asked participants to describe their football team’s performance in two games resulting in victory and defeat. In order to examine whether participants are more likely to BIRG in response to threatened social identities, the researchers randomly assigned participants to either describe the defeat prior to describing the victory or vice versa. Participants used “we” significantly more often when describing victories after being asked to describe the team’s loss first in comparison to questioning in the opposite order (i.e., describe the victory prior to the defeat). Consistent with fans’ BIRGing behaviors in the second study to improve their personal identities, the results of the third study suggested that fans may BIRG to improve others’ evaluations and perceptions of their social identities (e.g., their team identification).

Fans only BIRG (Cialdini et al., 1976), however, when their teams are successful. When teams become unsuccessful, fans may cut off reflected failure (CORF; Snyder, Higgens, & Stucky, 1983) with their team in an attempt to distance themselves and the negative association of identifying with their team. Snyder, Lassegard, and Ford (1986) explored individuals’ use of BIRGing and CORFing as image maintaining processes.
Participants worked together on problem solving tasks in small groups. Upon completion of the tasks, the experimenters either gave the groups no feedback or informed them that they did either very poorly (failure group) or very well (success group) on the tasks. Participants in the failure groups were significantly less willing to participate with their group members in a hypothetical group presentation to judges than participants in the success and no feedback groups. Participants in the failure groups also declined to wear group badges after receiving feedback on their performance significantly more often than participants in the other two groups. Although the success group reported a greater willingness to present with their group in addition to wear group badges in comparison to the no feedback group, the differences between the two groups were insignificant. The results supported the process of CORFing (Snyder et al., 1983) as an image-protecting process and BIRGing (Cialdini et al., 1976) as an image-enhancing process. Participants’ use of BIRGing, however, appeared to be used to a lesser degree than CORFing as an image maintaining process.

Fans’ use of BIRGing (Cialdini et al., 1976) and CORFing (Snyder et al., 1983) is evident in multiple settings. End (2001) explored fans’ BIRGing and CORFing behaviors on the Internet related to their links to NFL home pages and their usage and postings on the team message boards. The researcher collected data from an Internet search engine and from on-line team message boards. Although the differences between home page links to successful (i.e., qualified for the postseason) and unsuccessful (i.e., failed to qualify for postseason) teams were insignificant, fans posted significantly more messages on successful teams’ message boards than unsuccessful teams’ message boards. Furthermore, fans posted significantly more message on their teams’ boards on the weeks
following a victory compared to the weeks following a loss. Fans' postings on the message boards were significantly more likely to emphasize their associations with winning teams (i.e., BIRG) than with losing teams.

Boen, Vanbeselaere, and Feys (2002) explored European soccer fans' online BIRGing (Cialdini et al., 1976) and CORFing (Snyder et al., 1983) behaviors. The researchers examined the number of visitors on the team websites of Belgian and Dutch first-division soccer teams. As expected, the number of website visitors was significantly higher for teams following a victory compared to a defeat. Furthermore, website visitors of Belgian teams were significantly higher following wins compared to following both defeats and draws. The results suggest that fans privately BIRG (i.e., associate and seek contact with successful teams without publicly announcing their identifications) and CORF (i.e., shut off contact with unsuccessful teams).

Previous research supports the impact of team performance on fans' motivations to identify with a sports team as well as their demonstration of their identification. Team performance influences fans' initial and current motivations to identify their teams (End et al., 2002; Wann et al., 1996). Furthermore, fans are more likely to express their team identification when their teams are successful than unsuccessful (Boen et al., 2002; Cialdini et al., 1976; End, 2001; Snyder et al., 1986). Because of the clear impact of team performance on fans' maintenance and expression of their team identification, team performance likely also has impact on fans' psychological processes (e.g., affect, self-esteem, etc.). Specifically, because team identification represent a social identity and ingroup of the fan (Tajfel & Turner, 1986; Wann, 2006a), fans likely experience changes in their self-evaluation and affect as a result of their teams' performances.
Impact of Team Performance on Fans' Psychological Processes

The impact of team performance on fans is immediately evident through fans' BIRGing (Boen et al., 2002; Cialdini et al., 1976; End, 2001) and CORFing (Snyder et al., 1986) behaviors. Despite fans' lack of direct contribution to their teams' performances, fans still demonstrate their associations with teams when their teams are successful and deflect associations when their teams are unsuccessful. Because team identification represents an extension of an individual's identity (Schaefer, 1969; Wann, 2006a), Hirt, Zillmann, Erickson, and Kennedy (1992) theorized that team success and failure represent personal success and failure, respectively. Based on this belief, the researchers hypothesized that game outcome of fans' identified teams would influence fans in the same manner as their own personal performance (i.e., success or failure). Specifically, Hirt and colleagues believed that game outcome would influence fans' affect and self-efficacy (i.e., personal evaluation of skills and abilities).

In order to test their hypotheses, Hirt and colleagues (1992) conducted two studies. In the first study, participants indicated their degree of fandom toward their university's men's basketball team before watching a basketball game. The researchers randomly assigned participants to either view a live Division I game featuring their university team (experimental condition) or a taped game between two Division II teams (control condition). Upon completion of the games, participants reported their affect on a 10-point scale from 0 (extremely depressed) to 10 (extremely elated). The experimenters then informed participants that they would take part in an unrelated experiment examining their ability to estimate their performance on a variety of tasks (e.g., motor, mental skills, etc.) before taking part in the tasks. Participants who viewed their
university's team win reported significantly greater positive affect than participants who viewed the team lose and participants in the control condition. Participants who viewed their team lose reported significantly lower positive affect than participants in the control condition. Furthermore, participants who viewed their team win and participants in the control condition estimated significantly better performance on the mental skills task than participants who viewed their team lose. As hypothesized, game outcome appeared to significantly influence participants' affect and self-efficacy.

Hirt and colleagues (1992) conducted a second study to further examine their theory that team performance represented personal performance. Additionally, the researchers examined the impact of game outcome on identified fans' self-esteem. Participants completed the same measures in the first study with the addition of the Rosenberg (1965) Self-esteem Scale and a more comprehensive measure of positive and negative affect. Participants in the team success condition viewed their university team win; participants in the team loss condition viewed their university team lose. Furthermore, the study included two new experimental conditions asking participants to complete an analogies task. Participants in the personal success condition received positive feedback about their performance on the task whereas participants in the personal failure condition received negative feedback. Participants in both conditions then estimated their performance on mental, motor, and other tasks before taking part in them. In comparison with the control and loss conditions, participants in the personal and team success conditions reported significantly greater positive affect and significantly lower negative affect. Participants in the personal and team success conditions did not significantly differ in positive affect. Participants in the personal and team failure
conditions reported significantly greater negative affect than all other conditions. In comparison with personal failure participants, participants in the team failure condition reported significantly greater negative affect. Self-esteem scores were significantly higher for participants in both the personal and team success conditions compared to scores of participants in the failure conditions. Lastly, participants in both success conditions predicted significantly better performance on the experimental tasks than participants in the failure conditions.

Wann, Dolan, McGeorge, and Allison (1994) further examined the impact of game outcome on fans’ experiences of affect through pre- and postgame measurements of affect. Participants attended one of three university men’s basketball games, two of which resulted in wins and one that resulted in a loss. Participants completed a 14-item mood scale assessing positive and negative affect prior to the start of the game and immediately following it. Participants also completed the SSIS (Wann & Branscombe, 1993) prior to the game. In comparison to pregame measurements, participants reported significant increases in positive affect and significant decreases in negative affect following their attendance in games that resulted in wins. Participants who attended the game resulting in a loss reported significant increases in negative affect and decreases in positive affect in postgame measurement when compared to pregame measurement. Participants who were highly identified with their university’s basketball team experienced stronger changes in affect as a result of game outcome than participants low in team identification.

Wann, Friedman, McHale, and Jaffe (2003) conducted an online survey (Norelco Sports Fanatics Survey) to explore fans’ affective responses prior to and following team
competitions. Participants \((n = 1442)\) first reported on their level of sport fandom. Participants who reported watching the majority of their teams’ games in addition to following up on scores and sporting news daily completed questionnaires assessing their changes in affect before and after games. Participants reported on the amount of time it took for them to “recover from a major loss” and “come down from game excitement” after a victory. The majority (56%) of participants reported needing less than a day to “recover” from a loss. Approximately 44% of participants, however, needed at least one day to recover with 20% requiring at least two days. Similarly, the majority (54%) of participants “came down” from game excitement after team victory within one day. Over 45% of participants experienced “game excitement” for at least one day. The results of the survey suggest that the impact of game outcome on fans’ affective responses may extend beyond the immediate conclusion of competitions.

It is evident that game outcome influences fans’ affective responses (Hirt et al., 1992; Wann et al., 1994; Wann, Friedman et al., 2003). End, Worthman, Foster, and Vandemark (2009) examined fans’ romantic partners’ perceptions of the impact of game outcome on fans’ affect and interpersonal interactions. All participants in the study were in an unmarried (i.e., dating) romantic relationship at the time of data collection. Participants completed the Post-Game Mood Scale (created by the researchers) in addition to irrelevant distracter items. The Post-Game Mood Scale is a 10-item measure of romantic partners’ perceptions of game outcome on their partners’ affect and interpersonal interactions together. In comparison to victories, participants indicated that their partners appeared to experience significantly greater negative affect and irritability and significantly lower positive affect following losses. Furthermore, participants
indicated enjoying their partners’ company significantly greater following their partners’
teams’ victories than defeats. Game outcome’s influence on fans’ affect and behaviors
are apparent to individuals who are romantically involved with fans.

In addition to further exploring game outcome’s impact on fans’ affect, Bizman
and Yinon (2002) explored the effects of team performance on fans’ self-esteem and
willingness to associate with the team (WTA). Consistent with previous research (End et
al., 2009; Hirt et al., 1992; Wann et al., 1994; Wann, Friedman et al., 2003), the
researchers hypothesized higher reported positive affect and higher self-esteem in
addition to greater WTA following wins than losses. Based on fans’ use of BIRGing
(Cialdini et al., 1976) and CORFing (Snyder et al., 1986) as distancing tactics, the
researchers also hypothesized greater positive emotions and higher self-esteem of fans
who reported on WTA prior to their affect and self-esteem. Spectators were approached
outside of their team’s basketball arena following either a team victory or defeat.
Participants reported on their level of fandom and completed questionnaires measuring
their WTA, affect, and self-esteem. The researchers randomly assigned participants to
either report on WTA prior to affect and self-esteem (WTA-SE condition) or vice versa
(SE-WTA condition). Consistent with their hypotheses, participants reported greater
positive and lower negative affect in addition to higher self-esteem following wins than
losses. Participants also reported higher WTA following wins than losses. Furthermore,
participants in the WTA-SE condition reported greater positive and lower negative affect
and higher self-esteem than participants in the SE-WTA condition following both wins
and losses.
In addition to providing further evidence for the influence of game outcome on fans’ affect and self-esteem, the results of Bizman and Yinon’s (2002) study suggest that team performance influences fans’ WTA. This finding is consistent with research on BIRGing (Cialdini et al., 1976) and CORFing (Snyder et al., 1986). The study also has implications, however, for the effectiveness of BIRGing and CORFing as distancing tactics. Rejection of association with the team following losses and WTA following wins positively influenced participants’ experience of positive affect and self-esteem.

The present study seeks to explore the role of team performance in Wann’s (2006a) TISPH. Specifically, the study will examine how team performance influences fans’ social psychological well-being in addition to their affect and level of team identification. Wann’s (2006a) TISPH theorizes that social connectedness with others mediates the positive relationship between fans’ team identification and their social psychological well-being. Wann discounts team performance as a relevant factor to his model. SIT (Tajfel & Turner, 1986), however, suggests that group status (i.e., level of success or superiority to other groups) is a crucial factor in individuals’ motivation to identify with groups. Furthermore, previous research suggests that team performance is a significant factor in fans’ motivation to identify with teams (End et al., 2002; Wann et al., 1996), express their identification (Boen et al., 2002; Cialdini et al., 1976; End, 2001; Snyder et al., 1986), and associate with their teams (Bizman & Yinon, 2002). Team performance also impacts fans’ self-esteem (Bizman & Yinon, 2002; Hirt et al., 1992), affect (Bizman & Yinon, 2002; Hirt et al., 1992; Wann et al., 1994), and self-efficacy (Hirt et al., 1992). The present study aims to explore the importance of team performance in comparison to team location (i.e., availability of social connections) on
fans' social psychological well-being. The secondary aim of study is to examine the influence of team identification, in addition to its interaction with team performance, on fans' affect. Lastly, the study aims to examine the impact of team performance on fans' level of team identification.
Chapter II

Rationale and Hypotheses

Team identification refers to fans’ psychological associations and connections with sports teams that represent part of their identities (Wann, 2006a). Fans may vary in their degree of team identification such that some fans value their team identification as a significant part of their identity. Fans who strongly value their team identification are classified as highly identified fans (Wann & Branscombe, 1993). Team identification is more likely to impact highly identified fans than fans who are low in team identification or lacking in team identification. Specifically, fans who are high in team identification are more likely to demonstrate higher levels of general (Branscombe & Wann, 1991; Wann, 2006b) and social (Wann, 1994; Wann, Dimmock et al., 2003; Wann & Pierce, 2005; Wann, Polk et al., 2011; Wann, Waddill et al., 2011; Wann et al., 2005) psychological well-being than fans who are low in team identification.

Team identification appears to be more strongly associated with social than general psychological well-being (Wann, Dimmock et al., 2003). Based on the vast support for team identification’s positive relationship with social well-being, Wann (2006a) developed his Team Identification-Social Psychological Health Model (TISPH) that posits team identification leads to improvements in social psychological health. Wann theorized that social connectedness with others mediates the relationship between team identification and social psychological well-being. Previous research supported the notion that team identification leads to an increase in fans’ quantity of social connections and a feeling of general social connectedness with others (Wann, Waddill et al., 2011). Social connectedness, however, failed to demonstrate significance as a mediating or
moderating variable in the relationship between team identification and social psychological well-being (Wann, Waddill et al., 2011). Despite this evidence, Wann, Waddill et al. suggested further investigation aimed at examining social connectedness as a mediating or moderating variable in the team identification-social psychological well-being relationship prior to ruling it out as such.

Wann (2006a) discounts team performance as a potential mediating or moderating variable in his TISPH. Research, however, suggests that team performance impacts fans’ levels and expression of team identification. Team performance significantly influences fans’ original and current motivations to identify with their teams (End et al., 2002; Wann et al., 1996). Team performance also influences fans’ expression and willingness to associate with their teams (Boen et al., 2002; Bizman & Yinon, 2002; Cialidini et al., 1996; End, 2001; Snyder et al., 1986). Furthermore, research has also demonstrated the impact of team performance on fans’ affect (Bizman & Yinon, 2002; Hirt et al., 1992; Wann et al., 1994), self-esteem (Bizman & Yinon, 2002; Hirt et al., 1992), and self-efficacy (Hirt et al., 1992). Although Wann (2006a) discounts the importance of team performance in his TISPH, he acknowledges fans’ ability to cope with poor team performance (i.e., threats to team identification) as a potential moderating variable.

The present study aims to explore the role of team performance in the TISPH (Wann, 2006a). Specifically, the study will examine the social psychological well-being of fans identifying with successful and unsuccessful teams. In order to fully examine the TISPH, the study will include fans identified with a local sports team and fans identified with distant sports teams. Furthermore, the study will include a measure of affect to examine the impact of team identification on positive and negative affect. The impact of
team performance on fans' affect will also be observed. Lastly, the study will examine the impact of team performance on fans' level of team identification. Data collection will occur at three points: prior to the start of the 2013 NFL season (preseason), at the end of the fall semester (end of semester), and at the conclusion of the 2013 NFL regular season (postseason).

There appears to be a main effect of team identification on social psychological well-being. Substantial research has supported the positive association between team identification and social psychological well-being (Wann, 1994; Wann, Dimmock et al., 2003; Wann & Pierce, 2005; Wann, Polk et al., 2011; Wann, Waddill et al., 2011; Wann et al., 2005). Fans who are high in team identification experience greater social psychological well-being than fans who are low in team identification. As a result, a main effect of team identification is predicted for social psychological well-being. Hypothesis 1 aims to reaffirm the importance of team identification on fans' social psychological well-being. Additionally, hypothesis 1 examines the impact of team identification on affect at preseason.

*Hypothesis 1a:* Fans who are *high* in team identification, as measured by the SSIS (Wann & Branscombe, 1993), will report significantly higher levels of collective self-esteem, as measured by the CSES (Luhtanen & Crocker, 1992), than fans who are *low* in team identification at preseason, end of semester, and postseason.

*Hypothesis 1b:* Fans who are *high* in team identification, as measured by the SSIS (Wann & Branscombe, 1993), will report significantly lower levels of loneliness, as measured by the UCLA-LS (Russell et al., 1980), than fans who are *low* in team identification at preseason, end of semester, and postseason.
Hypothesis 1c: Because team identification is positively associated with social connectedness with others and individuals who are socially connected with others report experiencing significantly greater positive affect and lower negative affect than individuals who lack social connectedness (Aanes et al., 2010; Lyubomirsky et al., 2006; Steptoe et al., 2008; VanderWeele et al., 2011), fans who report high levels of team identification will report significantly greater positive affect, as measured by the PANAS (Watson, Clark, & Tellegen, 1988), than fans who report low levels of team identification at preseason.

Hypothesis 1d: Fans who report high levels of team identification will report experiencing significantly lower negative affect, as measured by the PANAS (Watson et al., 1988), than fans who report low levels of team identification at preseason.

Whereas hypotheses 1a – 1d focus on the main effect of team identification, it is also predicted that team identification will interact with team performance. Fans report experiencing significantly greater positive affect and lower negative affect when their teams are successful compared to when their teams are unsuccessful (Bizman & Yinon, 2002; Hirt et al., 1992; Wann et al., 1994). Fans changes in affect are observable to and reported on by their romantic partners (End et al., 2009). Fans who highly identify with teams experience stronger changes in affect than fans who are low in team identification (Wann et al., 1994). Because of the impact of team performance on fans’ affect, hypothesis 2 aims to explore the interaction between team identification and team performance on fans’ affect. Hypothesis 2 predicts the importance of team performance on fans’ experiences of positive and negative affect.
Hypothesis 2a: High identifying fans of successful teams (those eligible or who have qualified for the playoffs) will report significantly greater positive affect than high identifying fans of unsuccessful teams at end of semester and postseason.

Hypothesis 2b: High identifying fans of successful teams will report significantly lower negative affect than high identifying fans of unsuccessful teams at end of semester and postseason.

Hypothesis 2c: Because fans who are high in team identification experience greater changes in affect following game outcome than fans who are low in team identification (Wann et al., 1994), fans of unsuccessful teams who are low in team identification will report significantly greater positive affect than high identifying fans of unsuccessful teams at end of semester and postseason.

Hypothesis 2d: Fans of unsuccessful teams who are low in team identification will report significantly lower negative affect than high identifying fans of unsuccessful teams at end of semester and postseason.

Whereas hypotheses 2a – 2d focused on between-group differences, hypothesis 3 focuses on the within-group effects of team performance (i.e., changes over time). Team success is one of the most influential factors determining fans’ original and current motivation to identify with a team; poor team performance is a significant deterrent to team identification (Wann et al., 1996). Team performance influences fans’ reported level of team identification (Boen et al., 2002; Cialdini et al., 1976; End, 2001; Snyder et al., 1986). Fans report increased willingness to associate (WTA) with their teams following victories; fans of losing teams report decreased WTA (Bisman & Yinon, 2002). Hypothesis 3 aims to explore the interaction between team performance and time
on fans' team identification. Hypothesis 3 predicts changes in fans' level of team identification as a result of changes in their teams' performance.

_Hypothesis 3a:_ Fans who identify with teams who are unsuccessful at preseason and successful at end of semester and/or postseason will report significant increases in their level of team identification at follow-up measurements compared to measurement at preseason.

_Hypothesis 3b:_ Fans who identify with teams who are successful at preseason and unsuccessful at end of semester and/or postseason will report significant decreases in their level of team identification at follow-up measurements compared to measurement at preseason.

_Hypothesis 3c:_ Fans who identify with teams that do not change in their level of success from preseason to end of semester and postseason will not report significant changes in their level of team identification.

Contrary to Wann's (2006a) TISPH that proposes a two-way interaction between team identification and team location on collective self-esteem and loneliness, it is predicted that there will be a two-way interaction between team identification and team performance on collective self-esteem and a three-way interaction among team identification, team location, and team performance on loneliness. According to the TISPH, local team identification is more likely to elicit improvements to fans' social well-being than distant team identification (Wann, Dimmock et al., 2003; Wann & Pierce, 2005). Fans who identify with distant teams, however, experience improved collective self-esteem when viewing highlights of their teams' success and decreased loneliness when in a group with other fans of their team (Wann, Polk et al., 2011). Wann
(2006a) theorizes that social connectedness mediates the improvements to fans’ social well-being. Social connectedness, however, has failed to demonstrate a mediating or moderating role in the TISPH (Wann, Waddill et al., 2011). Furthermore, Wann (2006a) posits that high team identification results in improved social psychological well-being regardless of team performance. The results of Wann, Polk et al.’s study (2011) suggesting that reminders of team success results in improved collective self-esteem contradicts Wann’s (2006a) dismissal of team performance in the TISPH. Additionally, team performance presents as an important factor in the original formulation and maintenance of team identification (Bizman & Yinon, 2002; End et al., 2002; Wann et al., 1996) in addition to its public expression (Boen et al., 2002; Cialidini et al., 1976; End, 2001; Snyder et al., 1986). Team performance also influences fans’ affect (Bizman & Yinon, 2002; Hirt et al., 1992; Wann et al., 1994), self-esteem (Bizman & Yinon, 2002; Hirt et al., 1992), and self-efficacy (Hirt et al., 1992). Hypothesis 4 predicts an interaction among team identification, team location, and team performance. Contrary to Wann’s (2006a) TISPH, hypothesis 4a predicts that team performance is the factor that influences fans’ collective self-esteem and renders null the effect of team location. Hypotheses 4b and 4c predict that team performance impacts the relationship between team identification and fans’ experience of loneliness. Hypothesis 4 predicts these specific between-groups interactions:

Hypothesis 4a: High identifying fans of successful teams will report significantly higher collective self-esteem, as measured by the CSES (Luhtanen & Crocker, 1992), than fans (high and low in team identification) of unsuccessful teams regardless of team location at preseason, end of semester, and postseason.
**Hypothesis 4b:** High identifying fans of a local successful team will report significantly lower levels of loneliness, as measured by the UCLA-LS (Russell et al., 1980), than fans (high and low in team identification) of distant teams (successful and unsuccessful) at preseason, end of semester, and postseason.

**Hypothesis 4c:** Due to the quasi-experimental nature of the study, it is uncertain if there will be a local unsuccessful team at end of semester and/or postseason. If there is a such a team, it is hypothesized that high identifying fans of an unsuccessful local team will not differ in their report of loneliness, as measured by the UCLA-LS (Russell et al., 1980), in comparison to high identifying fans of distant successful teams at end of semester and/or postseason.

Although it is uncertain if the local team will change from successful to unsuccessful over the course of the study, such a change would lead to predictions of within-group differences among high identifying fans of the local team in regards to their levels of collective self-esteem and loneliness. Specifically, hypothesis 5 predicts that a lack of team success will result in decreases in social psychological well-being despite fans’ proximity to their local team. Hypothesis 5 suggests the importance of team performance over team location (i.e., social connectedness) in the TISPH’s (Wann, 2006a) posited relationship between team identification and social psychological well-being. Whereas the fourth hypothesis predicts between-groups differences on social outcomes, the fifth hypothesis focuses on these specific within-groups differences:

**Hypothesis 5a:** If the local team used in the study is unsuccessful at end of semester and/or postseason, it is hypothesized that high identifying fans of the local team will
significantly decrease in their collective self-esteem, as measured by the CSES (Luhtanen & Crocker, 1992), in comparison to preseason (i.e., when the team was successful).

**Hypothesis 5b:** If the local team used in the study is unsuccessful at end of semester and/or postseason, it is hypothesized that high identifying fans of the local team will significantly increase in their levels of loneliness, as measured by the UCLA-LS (Russell et al., 1980), in comparison to preseason (i.e., when the team was successful).

**Hypothesis 5c:** If the local team is successful at end of semester and/or postseason, high identifying fans of the local team will not differ in their collective self-esteem, as measured by the CSES (Luhtanen & Crocker, 1992), in comparison to preseason.

**Hypothesis 5d:** If the local team is successful at end of semester and/or postseason, high identifying fans of the local team will not differ in their levels of loneliness, as measured by the UCLA-LS (Russell et al., 1980), in comparison to preseason.
Chapter III

Method

Overview

The present study aims to examine the role of team performance in the TISPH (Wann, 2006a). Participants will be undergraduate students selected from the Xavier University psychology department's participant pool who identify as being fans of a team that competes in the National Football League (NFL). Students who agree to take part in the study will complete measures by means of an on-line survey (via Survey Monkey) at both the beginning and end of the fall semester. Participants will be given the option to complete the same measures a third time prior to the start of the spring semester. The measures included in the study assess team identification (Wann & Branscombe, 1993), loneliness (Russell et al., 1980), collective self-esteem (Luhtanen & Crocker, 1992), and affect (Watson et al., 1988).

Participants

Participants will be male and female undergraduate students recruited from the psychology department's participant pool. All participants will receive research participation credit in exchange for their participation in the study. Participants who agree to take part in an optional wave of data collection will be entered into a raffle for the chance to win a $50 Visa gift card. Mean age is expected to be around 20 years, and the sample is expected to be predominantly White/non-Hispanic given the demographic make-up of Xavier University. A power analysis utilizing the G*Power 3.1 method (Faul, Erdfelder, Lang, & Bucher, 2009) for a MANOVA with eight groups revealed that 224 participants will be needed in the study to have a .80 power with an alpha of .05.
Measures

**Sport Spectator Identification Scale (SSIS).** Team identification will be measured using the Sport Spectator Identification Scale (SSIS; Wann & Branscombe, 1993). The SSIS contains seven items scored on an 8-point scale. Participants in the study will complete the scale with their favorite National Football League (NFL) team as the focus (see Appendix A; note: all appendices will be slightly modified when formatted to Survey Monkey). For example, a participant who reports identifying with the Cincinnati Bengals will respond to items that have been modified to reflect this association (e.g., “How strongly do you see yourself as a fan of the Cincinnati Bengals?”). Consistent with other studies measuring team identification (Wann & Branscombe, 1993; Wann et al., 2009; Wann, Rogers et al., 2011), a composite team identification score will be calculated by summing all of the responses together with scores ranging from 7 to 56. A median split will be conducted to determine fans’ levels of team identification (high or low).

Wann and Branscombe (1993) conducted several studies to establish the validity and reliability of the SSIS. The SSIS demonstrated strong internal consistency with a Cronbach’s standardized reliability coefficient of .91 and moderate test-retest reliability, \( r (49) = .60, p < .001 \). The SSIS also demonstrated strong predictive validity of spectator involvement with a team, attributions about the team’s accomplishments, amount of time and money invested in the team, and the extent that bonds or relationships result from identifying with the team.

**UCLA Loneliness Scale (UCLA-LS).** Loneliness will be measured in this study using the UCLA Loneliness Scale-Revised (UCLA-LS; Russell et al., 1980). The
UCLA-LS contains a total of 20 items relating to satisfaction and dissatisfaction with social relationships (see Appendix B). The original UCLA Loneliness Scale (Russell, Peplau, & Ferguson, 1978) was revised so that items could be reverse-scored. The items are presented as statements (e.g., “I feel isolated from others”), and people indicate the frequency they experience the feeling described in each statement on a 4-point scale ranging from 1 (never) to 4 (often). The test items are split so that 10 of the items relate to satisfaction with social relationships and 10 items relate to dissatisfaction with social relationships. Test items relating to satisfaction with social relationships are reversed score. A composite loneliness score, which will be used in the study, is created by summing responses from every item on the scale. Loneliness scores range from 20 to 80, with higher scores indicating higher feelings of loneliness.

The UCLA-LS (Russell et al., 1980) has demonstrated strong reliability and validity. The scale demonstrated a high internal consistency of .94. Concurrent validity was evident through significant positive correlations with the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) and the Costello-Comrey Depression scale (Costello & Comrey, 1967). Significant positive correlations were demonstrated between scores on the UCLA-LS and participants’ report of the amount of time they spent alone each day in the past two weeks, the number of times they ate dinner alone in the past two weeks, and the number of times they spend a weekend night alone in the past two weeks (Russell et al., 1980). Furthermore, results revealed a significant negative correlation between having fewer friends and scores on the UCLA-LS.

**Collective Self-Esteem Scale (CSES).** The Collective Self-Esteem Scale (CSES; Luhtanen & Crocker, 1992) will be used to measure participants' collective self-esteem.
(i.e., appraisal of their identified groups). Luhtanen and Crocker used the premise of SIT (Tajfel & Turner, 1986) to measure people's beliefs and evaluations of their group memberships. The CSES contains 16 items divided into four subscales: membership esteem; private collective self-esteem; public collective self-esteem; and importance of identity (see Appendix C). Each item is presented as a statement (e.g., "In general, others respect the social groups I am a member of."). Participants will indicate their level of agreement with each item on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). Responses are summed to create a composite score, which will be used in the study, with higher scores reflecting higher collective self-esteem. Prior to summing all 16 responses, six test items reflecting negative sentiments of collective self-esteem (e.g., "I often regret I belong to some of the social groups I do") are reverse scored.

The CSES (Luhtanen & Crocker, 1992) has demonstrated strong reliability and validity. Luhtanen and Crocker standardized the scale with three studies using undergraduate students as participants. The CSES demonstrated high internal consistency (Cronbach's coefficient alpha of .83) and strong test-retest reliability (r = .68). The CSES also demonstrated strong external validity. Participants' scores on the CSES had significant positive correlations with their scores on the Rosenberg (1965) Self-Esteem Scale and the Self-Esteem Inventory (SEI; Coopersmith, 1967). Participants' scores on the membership subscale positively correlated the strongest with measures of individual self-esteem (e.g., the Rosenberg Self-Esteem Scale). Scores of African- and Asian-American participants on the public subscale demonstrated significantly lower public self-esteem when compared to scores of Caucasian participants.
on the public subscale. Furthermore, participants’ public collective self-esteem scores had a significant negative correlation with a measure of belief in discrimination. Based on the results of Luhtanen and Crocker’s standardizing studies, the CSES appears to be a valid and reliable measure of various aspects of collective self-esteem.

**Positive Affect Negative Affect Schedule (PANAS).** In order to obtain a measure of affect, participants will complete the Positive Affect Negative Affect Schedule (PANAS; Watson et al., 1988). The PANAS is a 20 item questionnaire that measures aspects of both positive affect and negative affect (see Appendix D). Positive affect relates to levels of attentiveness, enthusiasm, and pleasurable experiences. The PANAS measures 10 specific dimensions of positive affect: *attentive, interested, alert, excited, enthusiastic, inspired, proud, determined, strong* and *active* (Watson et al., 1988). Negative affect, on the other hand, pertains to dimensions related to agitation, guilt, and distress. The 10 items of negative affect included in the PANAS are: *distressed, upset, hostile, irritable, scared, afraid, ashamed, guilty* and *nervous*, and *jittery* (Watson et al., 1988). Participants who complete the PANAS indicate their experiences with each emotion in a given point in time (e.g., *during the past few weeks*) on a 5-point scale including 1 (*slightly or not at all*) to 5 (*extremely*). A composite score is created for both positive and negative affect by summing all of the items under each category (positive or negative). The study will use a separate composite score for both positive and negative affect.

The PANAS has demonstrated strong reliability and validity (Watson et al., 1988). The PANAS demonstrated strong internal consistency for both positive affect (Cronbach’s coefficient alpha ranging from .86 to .90) and negative affect (Cronbach’s
coefficient alpha ranging from .84 to .87) and moderate to strong test-retest reliability ranging from .39 to .71 across time intervals. Varimax rotation confirmed strong loadings (above .50) for each of the 20 items on their respective affect factor (positive or negative) with low loadings on the opposite factor (Watson et al., 1988). Furthermore, the PANAS demonstrated well-established external validity. Participants' scores in the normative sample for negative affect had significant positive correlations with scores on the Hopkins Symptom Checklist (HSCL; Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974), the Beck Depression Inventory (BDI; Beck et al., 1961), and the State-Trait Anxiety Inventory State Anxiety Scale (A-State; Spielberger, Gorsuch, & Lushene, 1970). Scores on positive affect also had significant negative correlations with scores on the BDI and significant positive correlations with reversed item scores on the A-State (Watson et al., 1988).

**Postseason Qualification Question.** In order to explore participants' familiarity with their teams' postseason status, participants will be asked at preseason to indicate whether or not their team qualified for the postseason in 2012 (see Appendix E). Participants will be asked at end of semester whether or not their team is eligible for the postseason. Participants will be asked to indicate at postseason whether or not their team qualified for the postseason during the 2013 season.

**Perceived Success.** In order to measure participants' personal evaluations of their teams' success, each participant will be asked to rate his/her perception of his/her NFL team's success on a 10-point scale ranging from 1 (very unsuccessful) to 10 (very successful). At preseason, participants will indicate how successful their teams were during the previous season (see Appendix F). At end of semester and postseason,
participants will indicate how successful they perceive their team to be during the 2013 season (see Appendix G).

**Demographics Form.** All participants will indicate their gender, age, year in school, and ethnicity (see Appendix II). Participants will also indicate the last four digits of their social security in order to track their responses. Participants will be informed that they must use the same identifying number throughout the study in order to receive research credit for their participation.

**Procedure**

Data collection for the study will occur by means of an Internet survey provider (Survey Monkey). Participants will be recruited through the psychology department’s participant pool Blackboard page in addition to sign-up sheets posted on the participant pool bulletin board. The sign-up sheets located both on the bulletin board, in addition to the study’s description on the Blackboard page, will contain information about the purpose of the study and its longitudinal nature (see Appendix I). Additionally, the sign-up sheets will include the link to study’s website and the requirement that all students interested in participating in the study must be a fan of at least one NFL team.

The study will consist of two mandatory waves of data collection with an optional third wave of data collection. Participants must take part in the study at preseason and end of semester in order to be compensated with course credit for their participation. Prior to taking part in the study, participants will be informed of a third opportunity (postseason) to take part in the study for a chance to win a $50 Visa gift card. Participants will be reminded that they will receive course credit for their participation.
during the first two waves of data collection regardless of their participation or lack thereof in the third phase of data collection.

**Preseason (Time 1).** The first wave of data collection will take place early in the fall semester prior to the start of the 2013 NFL regular season. Upon accessing the study’s website, participants will give their informed consent to participate in the study (see Appendix J). In order to have a means of contacting participants to complete data collection at the end of semester, participants will then provide their names and an e-mail address (see Appendix K). Participants will be informed that their responses to questions in the study will remain confidential despite their disclosure of their e-mail address (“although you must provide this information in order to receive credit for your participation in the study, your identifying information will NOT be matched with your responses”). Upon providing their e-mail address and informed consent, participants will complete the four questionnaires described above: the SSIS (Wann & Branscombe, 1993), the UCLA-LS (Russell et al., 1980), the CSES (Luhtanen & Crocker, 1992), and the PANAS (Watson, et al., 1988). Upon completion of the questionnaires, participants will indicate whether or not their teams qualified for postseason play. Participants will also indicate how successful they perceived their team to be the previous year. Participants will then complete the demographics form. Upon completion of the demographics form, participants will be informed that they will receive an e-mail during the final week of classes of the semester with a link to the study (see Appendix L). Participants will be notified that they will have one week to complete the survey in order to receive course credit for their participation.
End of semester (Time 2). The second wave of data collection will take place during the final week of classes of the fall semester. On December 9, 2013, participants will receive an e-mail with a link to the study’s website in addition to the reminder that they must complete the Internet survey by December 14, 2013 in order to receive credit for their participation (see Appendix M). Participants will complete the same questionnaires at end of semester as preseason, including questions regarding their e-mail address and psychology class, in addition to the demographics form, for tracking purposes. Upon completion of the questionnaires, participants will indicate whether or not their teams are eligible for the postseason. Participants will then report on their perceived success of their team at that point in time during the current season. Participants will then complete the demographics form. Upon completion of the demographics form, participants will be thanked for their participation and reminded of the third opportunity to take part in the study (see Appendix N). Participants will be informed that they will receive an e-mail debriefing them on the study (see Appendix O) regardless of their decision to participate in data collection at postseason during the first week of the spring semester.

Postseason (Time 3). On December 30, 2013, participants will receive an e-mail with the link to the survey and a reminder that they will have five days to complete the survey in order to be considered for the raffle (see Appendix P). Because the criterion for success is qualification for postseason play, the researcher will send participants the study’s link on the Monday following the end of the regular season (December 30, 2013) when all playoffs will have been determined. Participants will complete the same questionnaires as end of semester. Participants will then indicate whether or not their
team qualified for the postseason. Participants will then indicate their perceived success of their team during the 2013 regular season before completing the demographics form. Upon completion of the demographics form, participants will be thanked for their participation and informed that they will receive an e-mail debriefing them on the purpose of the study during the first week of the spring semester (see Appendix Q). Participants will also be informed that the winner of the raffle will be notified at that time. The debriefing form will be sent to all participants who took part in the study regardless of their participation or lack thereof at postseason.

**Coding for Success**

**Preseason.** The criteria for success at preseason are based off of the NFL teams’ performance the previous season. Consistent with End et al. (2002), the success criteria is qualification for the postseason during the 2012 season. Participants own perception of team success from the previous season will also be measured at this time.

**End of semester.** Because qualification for postseason play may be uncertain at end of semester, teams who are still eligible for postseason play will be coded as successful at this time. Participants will also indicate their perception of their teams’ degrees of successfulness during the current (2013) season at end of semester.

**Postseason.** Data collection at postseason will take place between the final week of the regular season and the first week of the postseason. As a result, the success criterion at postseason will be teams who qualify for postseason play. Participants will also indicate their perception of their teams’ degrees of successfulness during the 2013 regular season.
Chapter IV

Proposed Analyses

Due to concerns with sample size and a lack of a hypothesized four-way interaction, three three-way MANOVAS and one two-way ANOVA will be used to test the various hypotheses (and sub-hypotheses). If, however, the study fails to achieve an adequate sample size, the proposed MANOVAs and ANOVA will be replaced with regression analyses.

Impact of Identification on Affect and Social Outcomes

The first two hypotheses (and sub-hypotheses) will be tested with a 2 (team identification: high vs. low) X 2 (team performance: successful vs. unsuccessful) X 3 (time: preseason vs. end of semester vs. postseason) MANOVA. The dependent variables are collective self-esteem, loneliness, and affect. Hypotheses 1a and 1b, stating that high identifying fans will report higher collective self-esteem and lower loneliness, respectively, than fans low in team identification predict a main effect of team identification on collective self-esteem and loneliness. Ad hoc analyses (t-tests) will be used to test hypotheses 1c and 1d which state that high identifying fans will report experiencing significantly greater positive affect and significantly lower negative affect, respectively, than fans who report low levels of team identification at preseason.

Impact of Team Identification and Team Performance on Affect

The second hypothesis predicts a two-way interaction among team identification and team performance on affect. The hypothesized interaction is a between-groups interaction. Specifically, ad hoc analyses (t-tests) will be used to test hypothesis 2 with 2a and 2b stating that high identifying fans of successful teams will report significantly
greater positive affect and significantly lower negative affect, respectively, than high identifying fans of unsuccessful teams at end of semester and postseason. Hypotheses 2c and 2d predict that fans of unsuccessful teams who are low in team identification will report significantly greater positive affect and significantly lower negative affect, respectively, than high identifying fans of unsuccessful teams at end of semester and postseason.

Impact of Team Performance and Time on Team Identification

The third hypothesis will be tested with a 2 (team performance: successful vs. unsuccessful) X 3 (time: preseason vs. end of semester vs. postseason) between-within (mixed) design ANOVA. Hypotheses 3a, 3b, and 3c predict a two-interaction between team performance and time on team identification. The predicted interaction is a within-groups interaction. Hypothesis 3a states that fans of unsuccessful teams at preseason and successful at end of semester and/or postseason will increase in their level of team identification in comparison to their level at preseason. Hypothesis 3b predicts that fans of successful teams at preseason and unsuccessful at end of semester and/or postseason will report decreased team identification compared to their level at preseason. Hypothesis 3c predicts no change in team identification for fans of teams of unchanging levels of success. As with hypotheses 1 and 2, ad hoc analyses (t-tests) will be used to identify specific differences within the interactions.

Impact of Team Identification, Team Performance, and Team Location on Social Outcomes (Between-Groups)

A 2 (team identification: high vs. low) X 2 (team performance: successful vs. unsuccessful) X 2 (team location: local vs. distant) MANOVA will test hypothesis 4
predicting a between-groups interaction limited to social outcomes. Specifically, the
dependent variables are collective self-esteem and loneliness. Hypothesis 4a, stating high
identifying fans of successful teams will report higher collective self-esteem than fans
(high and low in team identification) of unsuccessful teams regardless of team location,
predicts a two-way interaction between team identification and team performance at
preseason, end of semester, and postseason. Hypotheses 4b and 4c predict a three-way
interaction among team identification, team performance, and team location. Hypothesis
4b states that high identifying fans of local successful teams will report significantly
lower levels of loneliness than fans (high and low in team identification) of distant teams
(successful and unsuccessful) at preseason, end of semester, and postseason. Hypothesis
4c predicts no differences in loneliness among high identifying fans of local unsuccessful
teams and high identifying fans of distant successful teams at end of semester and
postseason. As with hypotheses 1, 2, and 3, ad hoc analyses (t-tests) will be used to
identify specific differences within the interactions.

Impact of Team Identification, Team Performance, and Time on Social Outcomes
(Within-Groups)

The same 2 (team identification: high vs. low) X 2 (team performance: successful
vs. unsuccessful) X 3 (time: preseason vs. end of semester vs. postseason) MANOVA
used for hypotheses 1 and 2 will test hypothesis 5 predicting a within-groups interaction
limited to social outcomes. As with hypothesis 4, the dependent variables are collective
self-esteem and loneliness. Hypotheses 5a and 5b state that, if the local team is
unsuccessful at end of semester and/or postseason, high identifying fans of the local team
will report decreases in collective self-esteem and increases in loneliness, respectively, in
comparison to preseason (i.e., when the local team was successful). Hypotheses 5a and 5b predict a three-way interaction between team identification, team performance, and time. Hypothesis 5c and 5d state that, if the local team is successful at end of semester and/or postseason, there will be no changes in fans’ reports of collective self-esteem and loneliness, respectively, in comparison to preseason (i.e., when the local team was successful). Hypotheses 5e and 5d predict a three-way interaction between team identification, team performance, and time.

The researcher will use an alpha level of .05 to determine statistical significance for the MANOVAs, ANOVA, and t-tests. If the MANOVAs are significant, multiple ANOVAs and t-tests will be conducted to determine where the significant differences among independent variables exist.
References


Appendix A

Sport Spectator Identification Scale

Due to copyright protection, the Sport Spectator Identification Scale (SSIS) is unable to be presented here. To access it, please refer to the citation listed in the references section (Wann & Branscombe, 1993).
Appendix B

UCLA Loneliness Scale-Revised

Due to copyright protection, the UCLA Loneliness Scale-Revised (UCLA-LS) is unable to be presented here. To access it, please refer to the citation listed in the references section (Russell, Peplau, & Cutrona, 1980).
Appendix C

Collective Self-Esteem Scale

Due to copyright protection, the Collective Self-Esteem Scale (CSES) is unable to be presented here. To access it, please refer to the citation listed in the references section (Luhtanen & Crocker, 1992).
Appendix D

Positive and Negative Affect Schedule

Due to copyright protection, the Positive and Negative Affect Schedule (PANAS) is unable to be presented here. To access it, please refer to the citation listed in the references section (Watson, Clark, & Tellegen, 1988).
Appendix E

Postseason Qualification Question

Please respond to the following questions:

Please list your favorite NFL team that you selected as the focus of the first questionnaire: ______________________

Did your team qualify for the postseason last season (2012 season)?

YES  NO
Appendix F

Perception of Team Success during 2012 Season

*Overall, how successful did you believe your favorite NFL team was last season (2012 season)?*

*Very Unsuccessful* 1 2 3 4 5 6 7 8 9 10 *Very Successful*
Appendix G

Perception of Team Success during 2013 Season

Please respond to the following question:

Overall, how successful do you believe your favorite NFL team, as indicated on the first questionnaire, is to this point in the present (2013) season?

Very Unsuccessful 1 2 3 4 5 6 7 8 9 10 Very Successful
Appendix H

Demographic Form

Please respond to the following demographic questions:

Age: __________

Gender: Male       Female

Year in school:      Freshmen
                    Sophomore
                    Junior
                    Senior
                    5th Year Senior or Higher

Race/Ethnicity: White, Non-Hispanic
                    Black, Non-Hispanic
                    Hispanic
                    Asian/Pacific Islander
                    Native American/Alaskan Native
                    Other: _______________________

Please list the last four digits of your social security number (you must use the same number at
the end of the semester in order to receive research participation credit): ______________
Appendix I

Information on Study on Blackboard and Participant Pool Bulletin Board

This study aims to examine the interest and involvement of college students with NFL teams across the course of an NFL regular season. Participants interested in taking part in the study must be a fan of at least one NFL team. The study aims to explore fans' psychological experiences (e.g., mood) to see how they relate to involvement with the NFL. Participation in the study consists of completion of a series of questionnaires at two times over the course of the fall semester in exchange for 45 minutes of research participation toward your total research participation requirement. You must complete the questionnaires at both the beginning and end of the fall semester in order to receive the 45 minutes of research participation. The study includes an additional optional opportunity to complete questionnaires between the fall and spring semesters in exchange for a chance to win a $50 Visa gift card.

Time 1 of the study (i.e., first time of questionnaire completion) will take place between August 26, 2013 and September 5, 2013. Completion of the questionnaires at Time 1 will take approximately 20 minutes. Time 2 of the study (i.e., second completion of questionnaires) will take place between December 9, 2013 and December 14, 2013. You must complete the study’s questionnaires during this time to receive credit for your participation in the study. Completion of the questionnaires at Time 2 of the study will take approximately 20 minutes. The optional opportunity to take part in the study will take place between December 30, 2013 and January 4, 2014 (Time 3) in exchange for the chance to win a $50 Visa gift card. Your decision to participate at this time will in no way affect the research participation hours you would receive through completion of Time 1 and Time 2 of the study. Time 3 of the study will consist of additional questionnaires and take approximately 20 minutes to complete.

Participation in the study will be confidential. There are minimal risks believed to be associated with taking part in the study. If you have questions or concerns in regards to the study, please feel free to contact David Kelly (513-745-3469 or kellyd@xavier.edu), his faculty advisor, Dr. Christian End (513-745-3249 or end@xavier.edu). The link to the study can be found below:
Appendix J

Informed Consent

You are being asked to take part in a study that examines the interest and involvement of college students with NFL teams across the course of an NFL regular season. The study includes additional measures of the NFL fans' psychological experiences (e.g., mood) to see how they relate to involvement with the NFL. You will be asked to complete a series of questionnaires at two times over the course of the fall semester in exchange for 45 minutes of research participation toward your total research participation requirement. You must complete the questionnaires at the beginning and end of the fall semester to receive research credit. You will be given an additional optional opportunity to complete questionnaires between the fall and spring semesters in exchange for a chance to win a $50 Visa gift card.

In order to compensate your research participation, you will be asked to provide your name, e-mail address, psychology class, and professor's name. Although you must provide this information in order to receive credit for your participation in the study, your identifying information will not be matched with your responses. You will be asked at the end of each time of data collection to provide the last four digits of your social security number to track your responses across the different points of data collection. Your responses, therefore, will remain confidential.

Time 1 of the study (i.e., first time of questionnaire completion) will take place between August 26, 2013 and September 5, 2013. Completion of the questionnaires at Time 1 will take approximately 20 minutes. Time 2 of the study (i.e., second completion of questionnaires) will take place between December 9, 2013 and December 14, 2013. You MUST complete the study's questionnaires during this time to receive credit for your participation in the study. Completion of the questionnaires at Time 2 of the study will take approximately 20 minutes. You will be given an OPTIONAL opportunity to take part in the study between December 29, 2013 and January 4, 2014 (Time 3) in exchange for the chance to win a $50 Visa gift card. Your decision to participate at this time will in no way affect the research participation hours you will receive through completion of Time 1 and Time 2 of the study. Time 3 of the study will consist of additional questionnaires and take approximately 20 minutes to complete.

Although the risks associated with your involvement in the study are minimal, you are free to withdraw from the study at any time with no penalty against your research participation hours. If you have questions at any time during the course of the study, please feel free to contact David Kelly (513-745-3469 or kellyd@xavier.edu), his faculty advisor, Dr. Christian End (513-745-3249 or end@xavier.edu), or the Chair of Xavier University's Institutional Review Board (513-745-2870).

By pressing the "next" button, you give your informed consent for participation.
Appendix K

Identifying Information for Compensatory Purposes

Please respond to the following questions. These questions are for the purpose of compensating your research participation and sending you the study’s link at the end of the fall semester. Your name will NOT be matched with your responses to the study’s questionnaires. Your responses, therefore, will be confidential.

Name (first and last): ____________________________

Preferred e-mail address: ____________________________

Psychology class (i.e., class you will receive research credit towards): ____________________________

Professor’s name: ____________________________
Appendix K

Identifying Information for Compensatory Purposes

*Please respond to the following questions. These questions are for the purpose of compensating your research participation and sending you the study’s link at the end of the fall semester. Your name will NOT be matched with your responses to the study’s questionnaires. Your responses, therefore, will be confidential.*

Name (first and last): __________________________

Preferred e-mail address: __________________________

Psychology class (i.e., class you will receive research credit towards): __________________________

Professor’s name: __________________________
Appendix L

Session Closing Statement at Preseason

Thank for your participation at Time 1 of the study! As a reminder, you must take part in the study at Time 2 between December 9, 2013 and December 14, 2013 in order to receive research participation hours. You will be sent an e-mail with the study’s link on December 9, 2013. You will have until December 14, 2013 to take part in Time 2 of the study. If you have any questions or concerns, please feel free contact David Kelly (513-745-3469 or kellyd@xavier.edu), his faculty advisor, Dr. Christian End (513-745-3249 or end@xavier.edu), or the Chair of Xavier University’s Institutional Review Board (513-745-2870).
Appendix M

E-mail at End of Semester with Study’s Link

Hello!

During the beginning of the fall semester, you took part in the initial stage of a study examining the involvement of college students with the NFL. You were informed that participation in the study consisted of two stages at the beginning and end of the fall semester. Below you will find the link to the second stage of the study. As with the first stage, participation consists of the completion of questionnaires that will take approximately 20 minutes to complete. Remember, you must take part in the study at this time in order to receive 45 minutes of research credit toward your research participation hours. You will have from now until December 14, 2013 to take part in the study’s second stage. If you have any questions or concerns, please feel free contact David Kelly (513-745-3469 or kellyd@xavier.edu) or his faculty advisor, Dr. Christian End (513-745-3249 or end@xavier.edu). Thank you for your participation!

Link to the study:
Appendix N

Session Closing Statement at End of Semester

Thanks you for your participation in the study! Your psychology professor will be notified that you have received **45 minutes** of research participation credit. Although you have completed all necessary requirements for research participation credit, you have the **option** of participating in the study an additional time to have the chance to win a **$50 Visa gift card**. The optional stage of the study will take place between December 30, 2013 and January 4, 2014 and will consist of the completion of questionnaires. You will be sent the link to the study on December 30, 2013. **Your decision to take part in the optional stage of the study will in NO way affect your research participation credit.** If you choose to participate in the optional stage, your name will be entered in a raffle to win a **$50 Visa gift card**. Regardless of your decision to participate, you will be sent an e-mail on January 13, 2014 to debrief you on the purpose of the study. If you have any questions or concerns, please feel free contact David Kelly (513-745-3469 or kellyd@xavier.edu) or his faculty advisor, Dr. Christian End (513-745-3249 or end@xavier.edu).
Appendix O

Debriefing E-mail

Hello!

Over the course of the past several months, you took part in a multiple-stage study examining your interests and involvement with an NFL team in addition to aspects of your psychological well-being. Past research has suggested that individuals who strongly identify with sports teams experience improvements to their psychological well-being. Specifically, fans who strongly identify with sports teams report higher self-esteem and greater social connectedness with others in comparison to fans who do not strongly identify with their teams or individuals who do not identify with any teams. In order to experience improvements to psychological well-being, research has suggested that it is important for fans to live in the same city of their teams. The purpose of the study you took part in was to examine the impact of team location and team performance on fans’ psychological well-being. Everyone who took part in the study completed the same questionnaires on two or three occasions, depending on participation during the optional stage.

Your participation in the study over the past several months has been greatly appreciated. If you have any questions, concerns, or interests in the results of the study, please feel free to contact David Kelly (513-745-3469 or kellyd@xavier.edu), his faculty advisor, Dr. Christian End (513-745-3249 or end@xavier.edu). Thanks you again for your participation!
Appendix P

E-mail at Postseason with Link to Study

Hello!

During the beginning and end of the fall semester, you took part in a study examining the involvement of college students with the NFL for research participation credit. You were informed that you would have an optional opportunity to participate in the study a third time after the fall semester. Although your participation will in no way affect your research participation hours, you now have a great opportunity to win a $50 Visa gift card! Below you will find the link to the study. You will have from now until January 4 to take part in the study and have the opportunity to win the Visa gift card. Consistent with the previous stages of the study, participation consists of the completion of questionnaires that will take approximately 20 minutes. If you have any questions or concerns, please feel free contact David Kelly (513-745-3469 or kellyd@xavier.edu) or his faculty advisor, Dr. Christian End (513-745-3249 or end@xavier.edu). Thank you for your consideration to participate!

Link to the study:
Appendix Q

Session Closing Statement at Postseason

Thank you for your participation! As a result of your participation, you have now been entered into a raffle to win a $50 Visa gift card. The winner of the raffle will be informed on January 13, 2014. Everyone will receive an e-mail on January 13 with information about the purpose and nature of this study. If you have any questions or concerns before then, please feel free to contact David Kelly (513-745-3469 or kellyd@xavier.edu) or his faculty advisor, Dr. Christian End (513-745-3249 or end@xavier.edu).
Chapter V: Dissertation

Abstract

Research supports that identification with a sports team and team proximity are related to social psychological well-being. Team performance also influences fans’ self-esteem and affect. The current study explored the impact of team performance in addition to team proximity and team identification on fans’ social psychological well-being and affect. A total of 160 undergraduate participants completed measures of team identification, social psychological well-being, and affect prior to the start of the 2013 NFL regular season. Seventy-eight participants completed the measures again at the conclusion of the season. Contrary to previous research, fans of distant and local teams scored similarly on the measures of social psychological well-being regardless of degree of team identification. Team performance interacted with team identification on fans’ affect but not social psychological well-being. Findings warrant replication and potential reconsideration of the theorized ubiquity of the relationship between team identification and social psychological well-being.
Redefining the Role of Team Performance in the Team Identification-Social Psychological Health Model

Sports fans often develop affiliations with specific teams, a process known as team identification. Team identification refers to an individual’s psychological connection with a sports team that represents part of his/her own identity (Wann, 2006a). Fans may vary in their degree of team identification such that some fans more strongly value their identification as part of their identity than others. Fans’ degrees of team identification are often measured with the standardized Sport Spectator Identification Scale (SSIS; Wann & Branscombe, 1993).

Previous research (Clopton & Finch, 2010; Wann, 2006a) has applied social identity theory (SIT; Tajfel & Turner, 1986) and the belongingness hypothesis (Baumeister & Leary, 1995) to explain the process and motivations for team identification. Following SIT, the state of fans’ teams (e.g., reputation and performance) impacts fans’ motivations for identifying with their teams. Fans’ perceptions of the superiority of their teams over other teams maintain their motivation for team identification. The belongingness hypothesis (Baumeister & Leary, 1995) posits that individuals’ fundamental need to connect and interact with others motivates identification with groups such as a sports team regardless of the team’s success.

The benefits of social connectedness with others support the belongingness hypothesis (Baumeister & Leary, 1995) and its application to team identification. Social connectedness is positively associated with physical well-being (Ashida & Heaney, 2008; Leung, Cheung, & Liu, 2011) and psychological well-being (Leung et al., 2011). Additionally, research has demonstrated social connectedness is positively related to
positive affect (Lyubomirsky, Tkach, & DiMatteo, 2006) and is negatively related to negative affect (Steptoe, O’Donnell, Marmot, & Wardle, 2008).

Team Identification and Psychological Well-Being

Research on team identification has primarily focused on its relationship with social connectedness. Branscombe and Wann (1991) theorized that identification with a sports team leads to social connectedness with others that results in boosted self-esteem and a lower likelihood of experiencing depressive symptoms and loneliness. In a series of two studies, participants completed measures of self-esteem, sports team identification, depressive symptoms, and loneliness. Results revealed a significant positive correlation between team identification and self-esteem and significant negative correlations between team identification and participants’ scores on the measures of depressive symptoms and loneliness. The results of the study prompted further investigations on team identification and its relationship with psychological well-being.

Wann (2006b) studied the relationship between team identification and psychological well-being by means of a cross-lagged longitudinal study to explore the directionality of the relationship. Participants completed the SSIS (Wann & Branscombe, 1993) and various measures of psychological well-being (e.g., self-esteem, perceived stress, etc.) at a three month interval. Structural equation modeling analyses supported the notion that the coefficient between team identification at the first time of questionnaire administration and psychological well-being at the second point of administration was significant, providing evidence for a uni-directional relationship between team identification and psychological well-being.
Team identification’s positive association with psychological well-being is supported (Branscombe & Wann, 1991; Wann, 2006b). The social nature of Branscombe and Wann’s (1991) original theory has led the majority of research on team identification to focus specifically on its positive relationship with measures of social psychological well-being. Wann (2006a) defines social psychological well-being in his research as social connectedness with others and collective self-esteem (i.e., an individual’s sense of group self-worth based on his/her evaluations of his/her group identification; Crocker & Luhtanen, 1990). Research using the SSIS (Wann & Branscombe, 1993) and standardized measures of collective self-esteem (Collective Self-Esteem Scale; Luhtanen & Crocker, 1992) and loneliness (UCLA Loneliness Scale; Russell, Peplau, & Cutrona, 1980) has demonstrated team identification’s positive relationship with collective self-esteem and negative relationship with loneliness (Wann, 2006b; Wann, Dimmock, & Grove 2003; Wann & Pierce, 2005; Wann, Rogers, Dooley, & Foley, 2011; Wann, Walker, Cygan, Kawase, & Ryan, 2005). Additionally, the relationship between team identification and social psychological well-being appears to be better supported than the relationship between identification and measures of general (e.g., individual self-esteem, life satisfaction, etc.) psychological well-being (Wann, Dimmock et al., 2003). Based on the support for the relationship between team identification and social psychological well-being, Wann (2006a) developed the Team Identification-Social Psychological Health Model (TISPH).

**Team Identification-Social Psychological Health Model**

According to the TISPH, Wann (2006a) claims that high team identification increases the number of an individual’s social connections in addition to eliciting a
"feeling of camaraderie" (p. 276) with other fans of the team. Increased social connectedness gained through high team identification leads to improved social psychological well-being indicated by improvements to collective self-esteem and decreased experiences of loneliness (Brancombe & Wann, 1991; Wann, 1994, 2006b; Wann, Dimmock et al., 2003; Wann, Rogers et al., 2011; Wann et al., 2005). The emphasis of the TISPH (Wann, 2006a) is the mediational role of social connectedness in the positive relationship between team identification and social psychological well-being. Although research supports a positive relationship between team identification and social connections gained through being a fan of a team (Wann, Waddill, Polk, & Weaver, 2011), research has failed to demonstrate social connectedness as the mediating factor in TISPH (Wann, Waddill et al., 2011).

An important distinction in the TISPH (Wann, 2006a) exists between local and distant team identification. Local team identification refers to identification with a team that is in the same city or region of the fan. As a result of the proximity, fans of local sports team should experience more frequent and consistent social connections with other fans of the team, referred to in the TISPH as enduring social connections (Wann, 2006a). Distant team identification (i.e., identification with a team outside of a fan’s immediate living area) is less likely to result in consistent social connections with other fans than local team identification. Fans of distant teams may encounter other fans of their teams, referred to as temporary social connections (Wann, 2006a). Despite temporary social connections gained through distant team identification, research has failed to demonstrate a positive relationship between distant team identification and social psychological well-being (Wann, Dimmock et al., 2003; Wann & Pierce, 2005). Local team identification
has demonstrated a consistent positive relationship with social psychological well-being (Wann, Dimmock et al., 2003; Wann & Pierce, 2005; Wann, Rogers et al., 2011; Wann et al., 2005).

Despite the theoretical importance of social connectedness in the TISPH (Wann, 2006a), past research has failed to support its role as either a mediating or moderating factor (Wann, Waddill et al., 2011). One factor that may mediate or moderate the TISPH (Wann, 2006a) is team performance. Although Wann disregards team performance as such a factor, he acknowledges that team performance can influence a fan’s motivation to identify with their team. Wann (2006a) proposed fans’ ability to cope with threats to team identification (e.g., poor team performance) as a potential moderating factor to his TISPH. Following SIT (Tajfel & Turner, 1986), successful team performance creates an association with a successful group for the identified fan, likely promoting and strengthening the fan’s team identification. Conversely, poor team performance would represent identification with an inferior group, thus decreasing motivation to identify with the team. It is therefore likely that team performance is an influencing factor in the TISPH (Wann, 2006a) that may impact fans’ levels of team identification.

**Team Performance: Impact on Sports Fans**

Previous research has explored the role of team performance in fans’ current and original motivation for team identification (Wann, Tucker, & Schrader, 1996). In response to open-ended items, participants reported that team success rate was the most common reason for *currently* identifying with teams and among the top five most common reasons for *originally* identifying with the teams. Poor team performance (i.e.,
the team is unsuccessful) was the most common reason for fans to discontinue their identification with teams.

End, Dietz-Uhler, Harrick, and Jacquemotte (2002) replicated the findings of Wann et al. (1996) in their exploration of fans' identifications with teams of varying performance. Utilizing a variety of criteria for success (e.g., winning percentage above .500, qualification for postseason play, etc.), participants indicated identifications with teams of which over 70% met at least one criterion of success, with 49% of listed teams meeting all criteria for success. End and colleagues theorized that identification with successful teams provides fans with a higher likelihood of having the opportunity to bask in reflected glory (BIRG; Cialdini et al., 1976). Fans BIRG by publicly demonstrating their identification with their team. Based on individuals' desire to identify with superior groups, as posited in SIT (Tajfel & Turner, 1986), BIRGing allows individuals the opportunity to reveal their identification with a highly esteemed, superior group despite their lack of direct contribution to the group's superiority. Identification with successful teams offers more opportunities to BIRG, making fans more prone to identify with successful teams (End et al., 2002).

Fans BIRG in a variety of ways. Cialdini et al. (1976) were the first researchers to empirically explore the phenomenon of BIRGing through three field experiments. Their experiments revealed that fans were significantly more likely to wear their university's apparel following their football team's victories than their defeats in addition to using the first-person pronoun "we" (i.e., "we won that game") when describing their teams' victories compared to their descriptions of losses (i.e., "they lost that game"). Research has also demonstrated BIRGing on the Internet. Fans are more likely to visit
their teams' websites (Boen, Vanbeselaere, & Feys, 2002) and post on their on-line message boards (End, 2001) following victories compared to defeats.

In addition to impacting fans' motivation for team identification (End et al., 2002; Wann et al., 1996) and their behaviors (Boen et al., 2002; Cialdini et al., 1976; End, 2001), team performance influences fans' psychological processes. Research has explored the impact of team performance on fans' experiences of affect in addition to their self-esteem and self-efficacy. Following team victories, fans experience increased positive affect (Bizman & Yinon, 2002; Hirt, Zillmann, Erickson, & Kennedy, 1992; Wann, Dolan, McGeorge, & Allison, 1994), decreased negative affect (Bizman & Yinon, 2002; Hirt et al., 1992; Wann et al., 1994), improved self-esteem (Bizman & Yinon, 2002), and improved self-efficacy (Hirt et al., 1992). Following team defeats, fans experience decreased positive affect (Bizman & Yinon, 2002; Hirt et al., 1992; Wann et al., 1994), increased negative affect (Bizman & Yinon, 2002; Hirt et al., 1992; Wann et al., 1994) and decreased self-efficacy (Hirt et al., 1992). Fans who are high in team identification demonstrate significantly greater changes in affect as a result of game outcome than participants low in team identification (Wann et al., 1994). Poor team performance also appears to more significantly impact fans' affect than successful performance (Hirt et al., 1992; Wann et al., 1994). Furthermore, fans' changes in affect, especially in response to defeats, are noticeable to and reported on by their romantic partners (End, Worthman, Foster, & Vandemark, 2009).

It is clear that team performance influences fans' behaviors and psychological processes. As a result of performance's impact on fans, the present study primarily sought to explore the role of team performance in relation to Wann's (2006a) TISPH.
Specifically, this longitudinal study examined how team performance and team location influence fans’ social psychological well-being over the course of an entire regular season. In order to fully explore team performance and its fit in TISPH, the study included fans identified with local and distant sports teams to allow for comparison between the impact of team location (i.e., availability of social connections) with team performance on fans’ social psychological well-being.

**Hypotheses (Part I): Social Psychological Well-Being Outcomes**

Consistent with the TISPH (Wann, 2006a), a main effect of team identification was predicted such that fans who are high in team identification would report significantly higher levels of collective self-esteem and lower levels of loneliness than fans who are low in team identification prior to the start of the season (preseason) and at the conclusion of the season (postseason). An interaction between high team identification and successful team performance, however, was predicted such that high identifying fans of successful teams would report higher levels of collective self-esteem than high and low identifying fans of unsuccessful teams at both preseason and postseason. When considering team location to this interaction (successful performance and high team identification), it was hypothesized that high identifying fans of the local successful team would report lower levels of loneliness than all other fans at both preseason and postseason. Lastly, it was predicted that high identifying fans of the local team would report similar levels of collective self-esteem and loneliness at postseason as preseason when their team’s performance remained constant (e.g., successful).
Hypotheses (Part II): Positive and Negative Affect Outcomes

A secondary aim of study was to examine the influence of team identification, in addition to its interaction with team performance, on fans’ affect. Because team identification is positively associated with social connectedness with others and individuals who are socially connected with others report experiencing significantly greater positive affect and lower negative affect than individuals who lack social connectedness (Lyubomirsky et al., 2006; Steptoe et al., 2008), an interaction between team identification and time was predicted such that high identifying fans would report greater positive affect and lower negative affect than low identifying fans at preseason. Additionally, because of the impact of team performance on fans’ affect (Hirt et al., 1992; Wann et al., 1994), a three-way interaction among team identification, team performance, and time on affect was hypothesized. Specifically, high identifying fans of successful teams would report greater positive affect and lower negative affect than high identifying fans of unsuccessful fans at postseason. Low identifying fans of unsuccessful teams were predicted to report lower negative affect and greater positive affect than high identifying fans of unsuccessful teams.

Hypotheses (Part III): Influence of Team Performance on Team Identification

Lastly, the study aimed to examine the impact of team performance on fans’ level of team identification. It was hypothesized that, as a result of team performance’s impact on fans’ expression of their team identification (Boen et al., 2002; Cialdini et al., 1976; End, 2001), fans’ level of team identification would change in conjunction with their team performance from preseason to postseason. Specifically, fans of teams who were unsuccessful at preseason and successful at postseason would increase in their degree of
team identification with the opposite effect predicted for fans of teams that transitioned from successful to unsuccessful during that time. No change in team identification was predicted for fans of teams whose success level remained constant from preseason to postseason.

Method

Participants

The study consisted of two waves of data collection\(^1\) prior to the start of the 2013 NFL regular season (preseason) and at the conclusion of the season (postseason). At preseason, 162 undergraduate students recruited from the Xavier University psychology department’s participant pool participated in the study in exchange for research participation hours. Because two students failed to identify with an NFL team (“don’t have one” and “Ohio State”), they were excluded from data analysis, resulting in a sample of 160 participants at preseason. Forty-four participants (27.5%) identified with the local NFL team, and 116 participants (72.5%) identified with a distant NFL team.

At postseason, 81 of the original 162 participants successfully completed all measures in exchange for eligibility in a raffle for a $50 Visa gift card. Three participants changed their identified teams from preseason to postseason, resulting in their exclusion from data analysis at postseason. Of the 78 participants included in data analysis at postseason, 22 individuals (28.2%) identified with the local team and 56

\(^1\)The study included an additional wave of data collection prior to postseason that took place at the end of the fall semester between Weeks 14 and 15 of the 2013 NFL season. Of the original 160 participants, 145 completed the same measures and questions used at preseason. Prior to data collection, the success criterion during this wave was determined as eligibility for postseason play. Utilizing this success criterion, 128 participants identified with successful teams compared to only 17 participants who identified with unsuccessful teams. As a result of so few participants in the unsuccessful condition, these data were excluded from the study and not analyzed.
individuals (71.8%) identified with a distant team. Table 1 reports participant demographic information at preseason and postseason.

**Measures**

**Sport Spectator Identification Scale (SSIS).** Team identification was measured using the Sport Spectator Identification Scale (SSIS; Wann & Branscombe, 1993). The SSIS is a widely-used measure of team identification that has demonstrated strong reliability and validity (Wann & Branscombe, 1993). The SSIS contains seven items scored on an 8-point scale that are summed to create a composite score ranging from 7 to 56. Participants in the study completed the scale with their favorite National Football League (NFL) team as the focus. At preseason, participants’ scores on the SSIS ($M = 33.70, SD = 13.21$) had a median of 35. Men ($M = 36.93, SD = 13.08$) had higher scores on the SSIS at preseason than women ($M = 29.87, SD = 12.50$), $t(143) = 3.33, p < .01$. A median split classified fans’ levels of team identification as either high (scores greater than 35) or low (scores equal to or less than 35). Participants’ mean score on the SSIS at postseason was 34.15 ($SD = 13.44$) with a median of 36. Consistent with preseason, men ($M = 37.97, SD = 12.05$) scored higher on the SSIS at postseason than women ($M = 30.71, SD = 13.83$), $t(76) = 2.46, p < .05$. Internal consistency was excellent at both preseason ($\alpha = .95$) and postseason ($\alpha = .95$).

**UCLA Loneliness Scale (UCLA-LS).** Loneliness was measured using the UCLA Loneliness Scale-Revised (UCLA-LS; Russell et al., 1980). The UCLA-LS is a measure of loneliness that has demonstrated strong reliability and validity (Russell et al., 1980). It contains a total of 20 items relating to satisfaction and dissatisfaction with social relationships. Participants indicated the frequency they experienced each item on a
4-point scale ranging from 1 (never) to 4 (often). The test items are split so that 10 of the items relate to satisfaction with social relationships that are reverse scored and 10 items relate to dissatisfaction with social relationships. Test items relating to satisfaction with social relationships are reversed score. A composite loneliness score, which was used in the study, is created by summing responses from every item on the scale with higher scores indicating higher degrees of loneliness. Participants had mean scores of 32.86 (SD = 8.20) at preseason and 35.03 (SD = 11.02) at postseason. Internal consistency was good at preseason (α = .89) and excellent at postseason (α = .95).

Collective Self-Esteem Scale (CSES). The Collective Self-Esteem Scale (CSES; Luhtanen & Crocker, 1992) is a measure of collective self-esteem (i.e., appraisal of individuals’ identified groups) with strong reliability and validity. The CSES contains 16 items that are presented as statements (e.g., “In general, others respect the social groups I am a member of.”). Participants indicated their level of agreement with each item on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). Responses are summed to create a composite score, which was used in the study, with higher scores reflecting higher collective self-esteem. Prior to summing all 16 responses, six test items reflecting negative sentiments of collective self-esteem (e.g., “I often regret I belong to some of the social groups I do”) are reverse scored. Participants had mean scores of 87.73 (SD = 10.89) and 86.17 (SD = 12.17) at postseason. Internal consistency was good at preseason (α = .86) and excellent at postseason (α = .90).

Positive Affect Negative Affect Schedule (PANAS). In order to obtain a measure of affect, participants completed the Positive Affect Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988). The PANAS has been a reliable and valid
measure of both positive and negative affect (Watson et al., 1988) commonly used in research concerning affect. It is a 20 item questionnaire that measures aspects of both positive affect and negative affect. The 10 specific dimensions of positive affect are: attentive, interested, alert, excited, enthusiastic, inspired, proud, determined, strong, and active (Watson et al., 1988). Due to an error during the construction of the survey, alert was excluded from the measure, resulting in measurement of only nine of the ten dimensions of positive affect. The 10 items of negative affect included in the PANAS are: distressed, upset, hostile, irritable, scared, afraid, ashamed, guilty, nervous, and jittery (Watson et al., 1988). Participants completed the PANAS by rating each item of affect on a 5-point scale from 1 (slightly or not at all) to 5 (extremely) consistent with their experience of each over the last few weeks. A composite score is created for both positive and negative affect by summing all of the items under each category (positive or negative). Participants had mean composite scores of positive affect of 35.07 (SD = 6.20) at preseason and 32.37 (SD = 7.25) at postseason. Mean composite scores of negative affect were 20.99 (SD = 6.14) at preseason and 18.59 (SD = 7.65) at postseason. Internal consistency for items measuring positive affect was good at preseason (α = .89) and excellent at postseason (α = .91). Internal consistency for negative affect items was good at preseason (α = .84) and excellent at postseason (α = .92).

Procedure

Prior to collecting data, the study was submitted to and approved by the Xavier University Institutional Review Board (See Appendix A). Data collection occurred by means of an Internet survey provider (Survey Monkey). Participants were recruited through the psychology department’s participant pool Blackboard page in addition to
sign-up sheets posted on the participant pool bulletin board. Participation in the study consisted of two mandatory waves of data collection to be compensated with course credit and an optional third wave of data collection (postseason). Prior to taking part in the study, participants were informed that the completion of the optional wave of data collection entered participants in a raffle for a $50 Visa gift card.

**Preseason.** The first wave of data collection began two weeks prior to and up until the start of the 2013 NFL regular season. Upon accessing the study’s website, participants gave their informed consent to participate in the study. In order to have a means of contacting participants to complete measures at postseason, participants then provided their names and an e-mail address. Despite disclosure of their names and e-mail addresses, participant identifying information was separate from responses to all other items. Upon providing their e-mail addresses and informed consent, participants completed the four questionnaires described above: the SSIS (Wann & Branscombe, 1993), the UCLA-LS (Russell et al., 1980), the CSES (Luhtanen & Crocker, 1992), and the PANAS (Watson, et al., 1988). Upon completion of the questionnaires, participants indicated whether or not their teams qualified for postseason play the previous season with 144 participants answering correctly and 16 participants responding incorrectly. Participants then rated how successful they perceived their team to be during the previous season on the scale from 1 to 10 ($M = 5.53, SD = 2.12$). They were then informed of the details of participation at postseason. Consistent with End et al. (2002), the success criterion used in the study at preseason was qualification for the postseason during the 2012 season. Teams who qualified for the 2012 postseason were classified as successful whereas teams who failed to qualify were classified as unsuccessful.
Postseason. Immediately following the conclusion of the 2013 NFL regular season, participants received an e-mail with the link to the survey with the reminder that they had five days to complete the survey in order to be considered for the raffle. Participants completed the same questionnaires as preseason. Participants also indicated whether or not their team qualified for the postseason during the 2013 season with 74 responding correctly compared to four who responded incorrectly. Participants then rated their perception of their teams’ success during the 2013 regular season on the same 10-point scale as preseason ($M = 5.86, SD = 2.66$). Upon completion of the demographics form, participants were thanked for their participation. All participants received an e-mail debriefing them on the purpose of the study during the first week of the 2014 spring semester. The winner of the raffle was notified at that same time. The success criterion at postseason was qualification for the postseason during the 2013 season.

Results

Table 2 summarizes the participant breakdown at both preseason and postseason. Following the playoff eligibility criterion for success during the 2012 NFL season, 95 participants (59.4%) indicated identification with a successful team while 65 participants (40.6%) identified with an unsuccessful team at preseason. Because the local team qualified as successful, the sample lacked local fans who identified with an unsuccessful team. Postseason data collection used the same criterion for success as preseason with the focus on playoff eligibility in the 2013 NFL season. Forty-seven participants (60.3%) identified with a successful team and 31 participants (39.7%) identified with an unsuccessful team at postseason. As with preseason, the local team was successful, resulting in a lack of fans who identified with an unsuccessful local team.
Analysis of Data: Overview of Statistical Strategies

In order to maximize statistical power, three multivariate analyses of variance (MANOVA) and a paired-samples t-test were used to analyze all data related to the hypotheses.² A 2 (team identification: high vs. low) X 2 (team performance: successful vs. unsuccessful) X 2 (team location: local vs. distant) X 2 (time: preseason vs. postseason) MANOVA tested the first set of hypotheses related to social outcomes. Two MANOVAs tested the second set of hypotheses related to affect. A MANOVA was used to test these hypotheses at preseason, and a 2 (team identification: high vs. low) X 2 (team performance: successful vs. unsuccessful) MANOVA explored the second set of hypotheses related to affect at postseason. A paired-samples t-test was used for the third set of hypotheses predicting changes in team identification according to changes in team performance from preseason to postseason.

Social Psychological Well-Being Outcomes (Part I of Hypotheses)

A 2 (team identification: high vs. low) X 2 (team performance: successful vs. unsuccessful) X 2 (team location: distant vs. local) X 2 (time: preseason vs. postseason) mixed- MANOVA was used to explore all hypotheses concerning social outcomes. The dependent measures were collective self-esteem and loneliness. Because of the inclusion of time and team performance in the MANOVA, the analysis included only fans who completed measures at both preseason and postseason (n = 78) with no changes in their teams’ performance over that time period. Six participants’ teams changed in their team performance classification, resulting in 72 participants included in the MANOVA.

² Data were also analyzed utilizing regression. Results with regression were comparable to results obtained by means of MANOVAs. Although the use of regression maximized statistical power, the lack of changes in findings in conjunction with the ability to make comparisons across groups contributed to the decision to use MANOVAs over regression.
Contrary to the hypothesis, results from the mixed-MANOVA failed to reveal a main effect of team identification on collective self-esteem and loneliness, Wilk’s $\Lambda = 1.00$, $F(2, 65) = .15$, $p = .86$, partial eta squared $= .01$. Table 3 depicts mean scores and standard deviations on social outcomes of high and low identifying participants at preseason and postseason.

It was also hypothesized that high identifying fans of successful teams would report higher levels of collective self-esteem than high and low identifying fans of unsuccessful teams at both preseason and postseason. Results revealed no significant interaction between team performance and team identification, Wilk’s $\Lambda = .98$, $F(2, 65) = .70$, $p = .50$, partial eta squared $= .02$. Table 4 reports mean scores on the CSES of high and low identifying fans of successful teams and high and low identifying fans of unsuccessful teams at preseason and postseason.

It was also hypothesized that high identifying fans of the local successful team would report lower levels of loneliness than high and low identifying distant fans of both successful and unsuccessful teams at preseason and postseason. Because the local team was successful at preseason and postseason, the hypothesis could not be tested by a MANOVA due to empty cells. Instead, eight independent samples $t$-tests compared loneliness scores of high identifying local fans to the other four distant groups (high and low identifying fans of distant successful and unsuccessful teams) at both preseason and postseason. Contrary to the hypothesis, results failed to yield significant differences among loneliness scores of high identifying fans of the local successful team and high and low identifying distant fans of successful and unsuccessful teams at either preseason or postseason. Table 5 reports the mean scores on the UCLA-LS of high and low
identifying local fans and high and low identifying fans of successful and unsuccessful teams at preseason and postseason.

The final hypothesis of the first set of hypotheses predicted no significant changes in high identifying, local fans’ scores on collective self-esteem and loneliness from preseason to postseason when team performance remained constant. Consistent with the hypothesis, results revealed no such changes in these participants’ scores on collective self-esteem and loneliness across time, Wilk’s $\Lambda = .99$, $F (2, 65) = .33$, $p = .72$, partial eta squared = .01. Mean scores at preseason and postseason on the CSES were 87.71 ($SD = 9.72$) and 89.21 ($SD = 13.70$), respectively. Mean scores on the UCLA-LS at preseason and postseason were 32.36 ($SD = 10.08$) and 34.07 ($SD = 11.03$), respectively.

**Positive and Negative Affect Outcomes (Part II of Hypotheses)**

Two separate MANOVAs tested the second set of hypotheses (part II) related to affect. A MANOVA tested the hypothesized interaction between team identification and time on the dependent measures of positive and negative affect. The analysis included all participants who completed measures at preseason ($n = 160$). Specifically, high identifying fans were predicted to report greater positive affect and lower negative affect than low identifying fans at preseason. Contrary to the hypothesis, there were no significant differences in either positive or negative affect at preseason between high and low identifying fans, Wilk’s $\Lambda = .99$, $F (2, 157) = 1.88$, $p = .31$, partial eta squared = .02. Mean scores of positive affect at preseason were 35.44 ($SD = 6.70$) for high identifying fans and 34.70 ($SD = 5.70$) for low identifying fans. Mean scores of negative affect at preseason were 20.25 ($SD = 6.12$) for high identifying fans and 21.72 ($SD = 6.11$) for low identifying fans.
A 2 (team identification: high vs. low) X 2 (team performance: successful vs. unsuccessful) MANOVA tested the hypotheses exploring the interaction between team performance and team identification on positive and negative affect. Specifically, it was hypothesized that high identifying fans of successful teams would report greater positive affect and lower negative affect than high identifying fans of unsuccessful teams at postseason. Low identifying fans of unsuccessful teams were predicted to report lower negative affect and greater positive affect than high identifying fans of unsuccessful teams. The analysis included all participants who completed measures at postseason ($n = 78$). Results from the MANOVA indicated significant differences among the groups, Wilk’s $\Lambda = .88$, $F(2, 73) = 4.96$, $p < .05$, partial eta squared = .12. Applying the Bonferroni method, follow-up analyses of variance (ANOVA) revealed that significant differences existed among groups for negative affect when tested at the .025 level, $F(1, 73) = 8.41$, $p < .01$. Contrary to the hypotheses, there were no significant differences for positive affect, $F(1, 73) = 2.10$, $p = .15$. Consistent with the hypothesis, post hoc independent samples $t$-test indicated that high identifying fans of successful teams reported significantly lower negative affect ($M = 15.73$, $SD = 4.65$) than high identifying of unsuccessful teams ($M = 23.70$, $SD = 9.19$) when tested at .025 divided by 3 (.008) level, $t(34) = 3.46$, $p = .001$. Using the same .008 level, a post hoc independent samples $t$-test revealed no significant differences with negative affect scores between low identifying fans of unsuccessful teams ($M = 18.00$, $SD = 7.96$) and high identifying fans of unsuccessful teams ($M = 23.70$, $SD = 9.19$), $t(29) = 1.78$, $p = .09$. Table 6 reports mean scores of positive and negative affect of high and low identifying fans of both successful and unsuccessful teams at postseason.
Influence of Team Performance on Team Identification (Part III of Hypotheses)

It was hypothesized that fans’ team identification would change in conjunction with their team performance from preseason to postseason. Specifically, fans of teams who were unsuccessful at preseason and successful at postseason would increase in their degree of team identification with the opposite effect predicted for fans of teams that transitioned from successful to unsuccessful during that time. No change in team identification was predicted for fans of teams whose success level remained constant from preseason to postseason. Due to a small sample size of participants who identified with teams that changed in their classification of success from preseason to postseason ($n = 6$), analyses were not conducted to test these hypotheses. As hypothesized, a paired-samples $t$-test revealed no significant changes in fans’ levels of team identification from preseason ($M = 32.19, SD = 13.90$) to postseason ($M = 33.75, SD = 13.58$) when their team performance remained constant across that time period, $t(71) = 1.88, p = .06$.

Discussion

The primary aim of the current study was to further explore the Team Identification-Social Psychological Health Model (TISPH; Wann, 2006a) and, potentially discounted, influencing factors. The TISPH posits that social connections gained through a high (i.e., strong) identification with a sports team leads to improved social psychological well-being evident through reduced feelings of loneliness and increased collective self-esteem. Previous research supports the relationship between high team identification and improved social psychological well-being when the team identification is with a local sports team (Wann, Dimmock et al., 2003; Wann & Pierce, 2005; Wann, Rogers et al., 2011; Wann et al., 2005) but not with a distant team (Wann, Dimmock et
al., 2003; Wann & Pierce, 2005). Although the TISPH theorizes that social connectedness is the key contributing factor, research has failed to demonstrate its role as either a mediating or moderating factor in the positive relationship between team identification and social psychological well-being (Wann, Waddill et al., 2011). The current study explored a hypothesized interaction between team identification and team performance on social psychological well-being in addition to affect.

**Social Psychological Well-Being Outcomes**

Despite its established impact on social psychological well-being, results failed to reveal a main effect of team identification on social psychological well-being. Low and high identifying fans in the study demonstrated similar levels of collective self-esteem and loneliness. Although contrary to Wann’s (2006a) TISPH, the lack of significant differences between high and low identifying fans could be the result of other social identities (e.g., XU student, member of Psych Club, etc.). The additional social identities of a low identifying fan may lead to similar boosts in social psychological well-being experienced by a highly identified fan. Furthermore, the salience of university-related and other close-proximity social identities potentially held by participants would promote their social psychological well-being. The proximity of group identifications is a central aspect in Wann’s (2006a) TISPH.

Although unrelated to the hypotheses, the interaction between team identification and team location on social psychological well-being was explored to more fully understand the lack of significance of the main effect of team identification. Contrary to previous research emphasizing the importance of team location on fans’ social psychological well-being (Wann, Dimmock et al., 2003; Wann & Pierce, 2005; Wann,
Rogers et al., 2011; Wann et al., 2005), results failed to reveal an interaction between team identification and team location on either collective self-esteem or loneliness. The finding supports the idea that additional social identities may account for the lack of significant differences among high and low identifying fans of local and distant teams.

As self-identified fans of an NFL team, it is likely that participants had identifications with additional sports teams. Research has demonstrated that college students who are sports fan have an average of three team identifications (End et al., 2002). One such team identification that was likely held and shared by participants is identification with their university’s men’s basketball team. The 2013-2014 college men’s basketball season commenced two months after the 2013 NFL season, resulting in two months of overlap between the two sports seasons. Identification with the men’s basketball team may have contributed to participants’ social psychological well-being and negated the importance of both the intensity of their NFL team identification and the team location.

Advances in technology may have also rendered team location as a less significant factor than previously demonstrated. Fans have multiple outlets to converse and interact with other fans (e.g., social media, team message boards, texting, etc.). Fans may feel socially connected with other fans via these means of communication in a similar manner to being physically present with same-team fans in the same city as their teams (i.e., local team identification). Although research has yet to explore this possibility, the rapid advancement of social media since the development of the TISPH (Wann, 2006a) certainly influences the way that fans follow their teams.
Interestingly, research exploring the TISPH (Wann, 2006a) has almost exclusively relied upon undergraduate students identifying with their university’s men’s basketball team (Branscombe & Wann, 1991; Wann, 2006b; Wann & Branscombe, 1993; Wann & Pierce, 2005; Wann, Waddill et al., 2011; Wann, Walker et al., 2005) with few exceptions (Wann, Dimmock et al., 2003; Wann, Rogers et al., 2011). Although similar unpublished studies may exist, the current study is unique in its exploration of the TISPH (Wann, 2006a) through its focus on professional team identification of undergraduate students. The contrary findings to the TISPH may suggest that the TISPH is not as ubiquitous as previously theorized. Team identification may be more powerful in a college setting where fans are residing on or near the campus of their teams (e.g., men’s basketball). Because the findings may be unique to the current study, more research and replication of the study is necessary to support the claims above.

In addition to the lack of a significant interaction between team identification and team location on social psychological well-being, results from the study also failed to demonstrate a significant impact of team performance on participants’ social psychological well-being. High identifying fans of successful teams did not significantly differ with fans of unsuccessful teams on their scores of collective self-esteem at either preseason or postseason. Furthermore, high identifying fans of the local successful team did not significantly differ with high and low identifying fans of successful and unsuccessful distant teams on loneliness scores at preseason or postseason. Although unexplored in the current study, the coping mechanisms used by fans to deal with their teams’ poor performance, as proposed by Wann (2006a) in the TISPH, may have accounted for the lack of differences of collective self-esteem scores between fans of
successful and unsuccessful teams. Unfortunately, due to the quasi-experimental nature of the study, the sample lacked fans who identified with an unsuccessful local NFL team and thus we were unable to test whether the location of the team might account for the lack of differences between successful and unsuccessful fans. As hypothesized, high identifying fans of the local team demonstrated similar scores on collective self-esteem and loneliness from preseason to postseason. Although there are issues with failing to reject the null hypothesis discussed in more detail below, it is believed that the lack of significant changes in the high identifying local fans' social psychological well-being scores is the result of their team's performance remaining constant. Alternatively, the participants' proposed additional social identities may have also accounted for the lack of change in scores.

**Positive and Negative Affect Outcomes**

Although no significant interaction between team performance and team identification on social psychological well-being existed, there was a significant interaction among team performance, team identification, and time on affect. As hypothesized, high identifying fans of unsuccessful teams reported significantly greater negative affect than high identifying fans of successful teams at postseason. Results failed to reveal significant differences on scores of positive affect between the two groups at either postseason or preseason. These findings are consistent with findings of previous research suggesting the greater impact of poor team performance versus successful team performance (Hirt et al., 1992; Wann et al., 1994). Highly identified fans may only be negatively impacted by team performance when compared with one another, evident
through greater negative affect experienced by fans of unsuccessful teams than fans of successful teams.

Interestingly, and contrary to the hypothesis, low identifying fans of unsuccessful teams did not significantly differ with highly identified fans of unsuccessful teams on scores of both positive and negative affect. This finding may support the idea that team performance is more likely to negatively impact fans' affect than enhance it. Specifically, because fans low in team identification should be less affected by team performance than highly identified fans (Wann et al., 1994), they would be expected to experience less negative affect than highly identified fans when team performance is poor. Although negative affect scores trended in this direction, results failed to reach statistical significance. Alternatively, the failure to reach significance may also suggest that poor team performance affects fans high and low in team identification in a similar manner.

In order to more fully understand the interaction among team performance, team identification, and time on affect, the researcher examined all output from the 2 (team performance) X 2 (team identification) MANOVA with the dependent measures of positive and negative affect at postseason. Although irrelevant to the hypotheses, results indicated an interaction between team performance and time on positive affect. Fans of successful teams reported significantly greater positive affect than fans of unsuccessful teams at postseason. Consistent with previous research (Bizman & Yinon, 2002; Hirt et al., 1992; Wann et al., 1994), team performance appears to benefit the positive affect of fans of successful teams when compared with fans of unsuccessful teams. The findings of the current study, however, suggest that team identification fails to influence the
impact of team performance on fans’ positive affect. In regards to negative affect, high team identification may be detrimental to the fan of an unsuccessful team when compared to the highly identified fan of a successful team.

**Team Identification Changes Across Time**

A final aim of the study was to explore the impact of team performance on team identification. Although only supported by means of failing to reject the null hypothesis, fans of teams whose performance remained constant across the entire season demonstrated similar levels of team identification from preseason to postseason. Unfortunately, the study lacked a sample size large enough to meaningfully examine changes to fans’ team identification when their team’s performance changed from preseason to postseason. Only six participants experienced a change of team performance from preseason to postseason, a change hypothesized to significantly impact the degree of participants’ team identification.

**Limitations**

One of the primary limitations of the study resulted from its quasi-experimental design. The fans’ specific teams and their future performance were unknown at recruitment and beyond the scope of the researcher’s control. As a result, the study lacked the necessary participants to make all of its comparisons. Most importantly, the interaction between team performance and team location on social psychological well-being was unable to be explored as a result of the local team’s success at postseason. The study could have been improved if the researcher-favored outcome (the local team having a poor regular season and missing the playoffs) would have come to fruition, although fans of the local team may argue to the contrary.
Secondly, due to the longitudinal nature of the study and despite the researcher’s best efforts, it was difficult to obtain a sample size large enough to sufficiently explore all hypotheses. One of the main reasons believed to contribute to attrition was, in order to get pre- and postseason data, data collection extended beyond the end of the fall semester. Although research credit presented as a useful form of compensation initially (retained 91% of participants), it ceased to be an option at postseason as students were no longer enrolled in any classes. The raffle opportunity to win a $50 Visa gift card (retained 51% of participants) appears to be less effective than course credit at retaining participants.

An additional limitation to the study was the reliance on failing to reject the null to test two hypotheses. In a recent review on the topic, Verdam, Oort, and Sprangers (2014) cautioned against the assumption that failure to reject the null hypothesis suggests that the alternative hypothesis is false. Failure to reject the null hypothesis increases the risk of Type II error. Verdam et al. (2014) recommended verifying the statistical power of the analyses prior to assuming that the alternative hypothesis is false (i.e., reliably failing to reject the null hypothesis). Unfortunately, the sample size of the current study failed to reach an adequate statistical power (.80 power). The small effect sizes of the results suggesting failure to reject the null hypotheses, however, were small, making it more likely that there were no significant differences among groups.

**Future Research**

The most surprising finding was the lack of significant differences on collective self-esteem and loneliness scores between high and low identifying fans of both local and distant teams. Because of its contradiction with the TISPH (Wann, 2006a), future
research should replicate the study prior to reconsidering the TISPH. An additional area of focus to the study is the coping mechanisms used by fans when their teams perform poorly and its impact on their social psychological well-being and affect. Examination of coping mechanisms may help to explain the lack of differences on outcome measures between fans of successful and unsuccessful teams. Although the outcomes of future NFL seasons are uncertain, replication of the study also nevertheless allows for additional opportunities to potentially explore the team location and team performance interaction on social psychological well-being. Data collection at multiple locations (e.g., multiple cities that have an NFL team) may decrease the risk of missing cells as well as increase the sample size that was lower than expected in the current study. Alternative incentives to participate in the study (e.g., NFL related apparel, autographed memorabilia, etc.) may also improve the retention of participants across the course of the season.

An additional reason for replicating the study is to further explore the impact of professional team identification as opposed to identification with a university-level sports team. As mentioned, there is a lack of research on fans identifying with professional sports teams (Wann, Dimmock et al., 2003). The TISPH (Wann, 2006a) is believed to apply all sports fans regardless of the sports teams with which they identify. Research exploring the relationship between team identification and social psychological well-being, however, has almost exclusively relied on undergraduate students with the exception of one study utilizing a sample of older adults (Wann, Rogers et al., 2011). As mentioned, undergraduate students may have additional social identities (e.g., member of university, clubs, etc.) that contribute to their social psychological well-being. Although non-college students also undoubtedly have additional social identities, their identities
may differ in their degrees of proximity and salience from those of an undergraduate student. In sum, as a result of the unexpected findings of this study, more research may be needed that utilizes more diverse forms of team identification (e.g., professional) with different samples of fans other than undergraduate students prior to assuming the ubiquity of the TISPH (Wann, 2006a).

Lastly, future research could take an experimental approach to the examination of the impact of team performance on fans’ social psychological well-being and affect. Previous research manipulating team performance has relied upon exposure to game clips resulting in victories or defeats (McDonnell et al., 2010; Schappler et al., 2013). Similar methodology could be utilized with team identification measured prior to exposure to the clips followed by completion of the other measures of the current study. Comparisons of the effects of exposure to successful versus unsuccessful team performance could allow for inferences of the effect of team performance alone on fans’ social psychological well-being and affect. Other factors, such as team location and team identification, are more difficult factors to manipulate and may require similar quasi-experimental designs to the current study.

Despite its limitations, the current study yielded interesting results. Most importantly and surprisingly, fans of local and distant teams demonstrated similar levels of social psychological well-being regardless of their degree of team identification. Although this may be unique to the sample of the study, it is also possible that team identification with a professional team fails to have the same impact on the social psychological well-being of undergraduate students as identification with university teams. Furthermore, although team performance failed to significantly impact fans’
social psychological well-being, high team identification with unsuccessful teams appeared to have a stronger impact on fans at the conclusion of the season than highly identifying with successful teams. Specifically, highly identified fans were more likely to experience negative affect resulting from poor team performance than they were to experience positive affect from successful team performance. Successful team performance at postseason, however, benefited all fans (high and low in team identification) identifying with such teams evident through greater positive affect than fans of unsuccessful teams. Based on these results, emotionally, it may be better for individuals to be fair-weather fans than to highly identify with their teams only to be let down by teams who fail to make the playoffs.
References


References


Schappler, D.N., Olson, S.M., Borczon, E.S., Kuhn, P.M., Hizer, T.J., Twehues, L.C., & End, C.M. (March, 2013). The impact of outcome and mood on group performance of fans. Poster presented to the annual meeting of the Southeastern Psychological Association, Atlanta, GA.


<table>
<thead>
<tr>
<th>Demographics</th>
<th>Preseason ($n = 160$)</th>
<th>Postseason ($n = 78$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>20.44 (1.46)</td>
<td>20.53 (1.57)</td>
</tr>
<tr>
<td>Gender</td>
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<td></td>
</tr>
<tr>
<td>Male</td>
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<td>37</td>
</tr>
<tr>
<td>Female</td>
<td>75</td>
<td>41</td>
</tr>
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<tr>
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<td>70</td>
</tr>
<tr>
<td>Black</td>
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<td>5</td>
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<td>0</td>
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<tr>
<td>Other</td>
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<td>0</td>
</tr>
<tr>
<td>Year in school</td>
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<td>20</td>
</tr>
<tr>
<td>Junior</td>
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<td>27</td>
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<tr>
<td>Senior</td>
<td>41</td>
<td>24</td>
</tr>
<tr>
<td>Fifth year or above</td>
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<td>1</td>
</tr>
</tbody>
</table>

Note. Age is the mean age with standard deviation in parentheses. Fifteen participants did not report on demographic information at preseason.
Table 2

Sample Sizes of Participants who Completed Measures at Preseason and Postseason and Participants who Failed to Complete Measures at Postseason

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Preseason (n = 160)</th>
<th>Postseason (n = 78)</th>
<th>Attrition (n = 79)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification with local team</td>
<td>44</td>
<td>22</td>
<td>21</td>
</tr>
<tr>
<td>High identification</td>
<td>20</td>
<td>14</td>
<td>6</td>
</tr>
<tr>
<td>Low identification</td>
<td>24</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>Identification with distant team</td>
<td>116</td>
<td>56</td>
<td>58</td>
</tr>
<tr>
<td>High identification</td>
<td>59</td>
<td>22</td>
<td>36</td>
</tr>
<tr>
<td>Low identification</td>
<td>57</td>
<td>34</td>
<td>22</td>
</tr>
<tr>
<td>Successful team</td>
<td>51</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Unsuccessful team</td>
<td>65</td>
<td>31</td>
<td>33</td>
</tr>
</tbody>
</table>

Note. Because three fans changed their identified teams from preseason to postseason, they were subsequently excluded from data analysis, resulting in a sample size of 78 at postseason. Attrition refers to fans who failed to complete measures at postseason, thus excluding the three fans with team changes at postseason. As a result, attrition is not equivalent to postseason participants subtracted from preseason participants.
Table 3

*Means (Standard Deviations) of High and Low Identifying Participants (n = 72) on the CSES and the UCLA-LS at Preseason and Postseason*

<table>
<thead>
<tr>
<th>Measure</th>
<th>Preseason</th>
<th>Postseason</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High ID</td>
<td>Low ID</td>
</tr>
<tr>
<td>CSES</td>
<td>87.09 (10.62)</td>
<td>87.92 (10.04)</td>
</tr>
<tr>
<td>UCLA-LS</td>
<td>33.58 (10.39)</td>
<td>33.03 (6.72)</td>
</tr>
</tbody>
</table>
Table 4

**Means (Standard Deviations) of High and Low Identifying Fans of Successful Teams and High and Low Identifying Fans of Unsuccessful Teams on the CSES at Preseason and Postseason**

<table>
<thead>
<tr>
<th>Time</th>
<th>Successful</th>
<th></th>
<th>Unsuccessful</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High ID</td>
<td>Low ID</td>
<td>High ID</td>
<td>Low ID</td>
</tr>
<tr>
<td>Preseason</td>
<td>88.72 (10.48)</td>
<td>87.42 (10.38)</td>
<td>82.00 (10.00)</td>
<td>88.40 (9.94)</td>
</tr>
<tr>
<td>Postseason</td>
<td>88.24 (12.91)</td>
<td>84.89 (13.35)</td>
<td>81.00 (11.58)</td>
<td>85.15 (11.69)</td>
</tr>
</tbody>
</table>
Table 5

Means (Standard Deviations) of High and Low Identifying Fans of the Local (Successful) Team and High and Low Identifying Fans of Successful and Unsuccessful Distant Teams on the UCLA-LS at Preseason and Postseason

<table>
<thead>
<tr>
<th>Time</th>
<th>Local</th>
<th>Distant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High successful</td>
<td>Low successful</td>
</tr>
<tr>
<td>Preseason</td>
<td>32.36 (10.08)</td>
<td>36.13 (11.12)</td>
</tr>
<tr>
<td>Postseason</td>
<td>34.07 (11.03)</td>
<td>38.63 (15.39)</td>
</tr>
</tbody>
</table>

Note. “High” and “low” refer to participants’ degree of team identification, not level of success.
Table 6

Means (Standard Deviations) of Positive (PA) and Negative (NA) Affect of High and Low Identifying Fans of Successful and Unsuccessful Teams at Postseason

<table>
<thead>
<tr>
<th>Measure</th>
<th>Successful</th>
<th></th>
<th>Unsuccessful</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High ID</td>
<td>Low ID</td>
<td>High ID</td>
</tr>
<tr>
<td>PA</td>
<td>34.27 (6.08)</td>
<td>33.43 (5.53)</td>
<td>27.30 (8.72)</td>
</tr>
<tr>
<td>NA</td>
<td>15.73 (4.65)</td>
<td>20.29 (8.35)</td>
<td>23.70 (9.19)</td>
</tr>
</tbody>
</table>
Appendix A

Xavier University IRB Letter of Approval

August 12, 2013
David Kelly
130 Fort View Place
Cincinnati, OH 45202

Re: Protocol #13-009, Redefining the Role of Team Performance in the Team Identification-Social Psychological Health Model

Dear Mr. Kelly:

The IRB has reviewed the materials regarding your study, referenced above, and has determined that it meets the criteria for the Exempt from Review category under Federal Regulation 45CFR46. Your protocol is approved as exempt research, and therefore requires no further oversight by the IRB. We appreciate your thorough treatment of the issues raised and your timely response.

If you wish to modify your study, including the addition of data collection sites, it will be necessary to obtain IRB approval prior to implementing the modification. If any adverse events occur, please notify the IRB immediately.

Please contact our office if you have any questions. We wish you success with your project!

Sincerely,

[Signature]

Morell E. Mullins, Jr., Ph.D. Chair, Institutional Review Board Xavier University
MEM/sb
C: Christian End, Advisor
Title: Redefining the Role of Team Performance in the Team Identification-Social Psychological Health Model

Problem. Sports fans’ affiliations with specific sports teams often become important social identities, a process referred to as team identification (Wann, 2006a). Previous research revealed the positive relationship between identification with a local sports team and social psychological well-being, specifically collective self-esteem and decreased loneliness (Wann, 2006b; Wann, Dimmock, & Grove 2003; Wann & Pierce, 2005; Wann, Rogers, Dooley, & Foley, 2011; Wann, Walker, Cygan, Kawase, & Ryan, 2005). In his Team Identification-Social Psychological Health Model (TISPH), Wann (2006a) theorized that social connectedness resulting from identification with a local sports team leads to improved social psychological well-being. Research, however, has failed to reveal social connectedness as either a mediating or moderating factor in the relationship between team identification and social psychological well-being (Wann, Waddill, Polk, & Weaver, 2011). Team performance, a discounted factor in the TISPH, has demonstrated a significant impact on fans’ selection and expression of team identifications (Cialdini et al., 1976; End , Dietz-Uhler, Harrick, & Jacquemotte, 2002) in addition to impacting their self-esteem and affect (Bizman & Yinon, 2002; Hirt, Zillmann, Erickson, & Kennedy, 1992; Wann, Dolan, McGeorge, & Allison, 1994). The current study explored the impact of team performance and team location on fans of the National Football League (NFL). The study included fans identifying with local and distant teams. A main effect of team identification was predicted on social psychological well-being such that highly identified fans would report higher social well-being than low identifying fans. An interaction between team identification and team performance on
collective self-esteem was hypothesized. High identifying fans of successful teams were predicted to report higher collective self-esteem than high and low identifying fans of unsuccessful teams. Additionally, an interaction among team identification, performance, and team location on loneliness was hypothesized such that high identifying fans of the local successful team would report less loneliness than all other fans (high and low in identification) of distant teams regardless of performance. The study also explored the impact of team performance on fans’ affect and degree of team identification.

Method. Data collection took place at two points across the course of an entire NFL regular season. Prior to the start of 2013 NFL season (preseason), 160 undergraduate students completed measures of team identification (Sport Spectator Identification Scale; Wann & Branscombe, 1993), loneliness (UCLA Loneliness Scale-Revised; Russell, Peplau, & Cutrona, 1980), collective self-esteem (Collective Self-Esteem Scale; Luhtanen & Crocker, 1992), and affect (Positive Affect Negative Affect Schedule; Watson, Clark, & Tellegen, 1988). Participants reported on their favorite NFL team and completed the team identification measure with that team as the focus. A median-split based on scores on the measure of team identification classified participants as either high or low in team identification. Seventy-eight participants completed the same measures again the week following the conclusion of the 2013 regular season (postseason).

Findings. A 2 (team identification: high vs. low) X 2 (team performance: successful vs. unsuccessful) X 2 (team location: distant vs. local) X 2 (time: preseason vs. postseason) mixed-MANOVA with dependent measures of loneliness and collective self-esteem explored hypotheses related to social psychological well-being. Contrary to the
hypothesis, results failed to reveal a main effect of team identification on either measure of social psychological well-being. Fans high and low in team identification scored similarly on both measures of collective self-esteem and loneliness. Results also failed to reveal an interaction between team identification and team location on social psychological well-being. High and low identifying fans of both local and distant teams had similar scores of collective self-esteem and loneliness at preseason and postseason. Lastly, and contrary to the hypotheses, team performance failed to interact with either team identification or team location on collective self-esteem or loneliness, respectively. High and low identifying fans of successful teams had similar scores of collective self-esteem as high and low identifying fans of unsuccessful teams. High identifying fans of the local successful team failed to score significantly lower on the measure of loneliness than fans of distant teams regardless of their performance.

A 2 (team identification: high vs. low) X 2 (team performance: successful vs. unsuccessful) MANOVA with the dependent measures of positive and negative affect revealed an interaction between team performance and team identification on affect at postseason, Wilk's $\Lambda = .88, F(2, 73) = 4.96, p < .05$, partial $\eta^2 = .12$. A follow-up analysis of variance (ANOVA) revealed significant differences among groups on negative affect, $F(1, 73) = 8.41, p < .01$. The ANOVA failed to reveal significant differences on positive affect. Post-hoc $t$-tests revealed that high identifying fans of unsuccessful teams reported significantly greater negative affect than high identifying fans of successful teams, $t(34) = 3.46, p = .001$. Low identifying fans of unsuccessful teams failed to significantly differ from high identifying fans of unsuccessful teams on scores of either positive or negative affect.
Unfortunately, because the sample contained only six fans of teams whose classification of performance changed from preseason to postseason, the impact of changes in team performance on team identification went unexplored. As hypothesized, a pair-samples t-test revealed that fans of teams whose performance remained constant from preseason to postseason experienced insignificant changes to their degree of team identification across that time.

**Implications.** Contrary to previous research, participants high and low in team identification failed to significantly differ on scores of social psychological well-being, regardless of the location of their teams. Additional social identities of participants (e.g., students of university, identification with university basketball team, etc.) may have accounted for the lack of significant differences. Conversely, the TISPH (Wann, 2006a) may be more specific to college students identifying with their university teams than with professional teams. Although team performance failed to impact social psychological well-being, it impacted the negative affect of high identifying fans when their teams were unsuccessful compared to successful. Replication of the study exploring additional factors (e.g., coping mechanisms of fans) is warranted to better understand the TISPH and its ubiquity.