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Gender Differences among Professional Football Fans: Serious Leisure, Emotional Expressivity, and Cognitive Distortions

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GENDER DIFFERENCES AMONG PROFESSIONAL FOOTBALL FANS: 
SERIOUS LEISURE, EMOTIONAL EXPRESSIVITY, AND COGNITIVE DISTORTIONS

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Submitted in Partial Fulfillment of the Requirements for the Degree of

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Dissertation Approval

This is to certify that the thesis presented to us by Megan Wolensky on the 7th day of May 2019, in partial fulfillment of the requirements for the degree of Doctor of Psychology, has been examined and is acceptable in both scholarship and literary quality.

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of teamwork, toughness, and loyalty that simply does not exist in any other city. To personally experience many of the phenomena discussed in this paper as we journeyed to our first Super Bowl victory was extraordinary. So, I have to say it, FLY EAGLES FLY!
Abstract

Increasingly, people report that leisure activity gives their lives meaning and significantly contributes to the formation of their personal identities. In fact, many individuals rank leisure activities as essential as work, family, and religion. (Gillespie, Leffler, & Lerner, 2010; Stebbins, 1992). Recent research has demonstrated that leisure involvement provides psychological benefits that contribute to wellbeing for both men and women (Caltabiano, 1995; Kim, Heo, Lee, & Kim, 2015). National Football League (NFL) fandom in the U.S. has been identified as a leisure activity that supersedes traditional gender norms and provides opportunities for family and group involvement. Although fandom has been examined as a social phenomenon, the literature regarding emotional and cognitive consequences of fan experience is sparse. The purpose of the present study was to investigate the relative influence of levels of leisure involvement, emotional expressivity, and cognitive distortions in male and female NFL fans when exposed to high-stakes, game-related stimuli. NFL fans were measured on variables of leisure involvement, emotional expression and cognitive distortions, using the Serious Leisure Inventory Measure (Gould, Moore, McGuire, & Stebbins, 2008), the Berkeley Expressivity Questionnaire Gross & John, 1995) and the Inventory of Cognitive Distortions (Yurica, 2001), following exposure to an emotional NFL fandom stimulus, after being randomly assigned to either a win or a loss condition. Results revealed that women demonstrated higher emotional expressivity (positive, negative, impulse strength, and overall) and more cognitive distortions. Being female and having higher levels of fan involvement were predictive of cognitive distortions. Finally, men and women did not differ in levels of fandom involvement.
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Chapter 1: Introduction

Statement of the Problem

**Gender differences in emotional experience.** The notion that men and women differ in emotional responsiveness has been extensively researched for decades (Simon & Nath, 2004). As Fischer and Manstead (2000) assert, “The current stereotype still holds that emotionality, and particularly emotional expressiveness, is the core of the differences between the sexes.” (p.71). Recent research posits that both genders experience emotions with similar frequency and intensity (Simon & Nath, 2004); however, popular convictions that women express emotions more often, and men suppress emotional expression has been found to be accurate (Brody, 1997). There are advantages that both sexes enjoy because of these differences in affective display patterns. Although it has been found that women enjoy the catharsis that comes with being more emotionally expressive (Greenberg, Wortman, & Stone, 1996; Giese-Davis et al., 2002), it is argued that men are better able to withstand adverse events and stressful situations because they can easily suppress emotions (Bar-On, Brown, & Kirkcaldy, 2000). However, the long-term disadvantages of either of expressing or of suppressing too much emotion for extended periods of time are also evident.

Women perceive the experience of painful emotions more intensely, putting them at greater risk for mood and anxiety disorders and other negative effects of stress (Bradley, Codispoti, Sabatinelli, & Lang, 2001). Although women report higher negative affect than men, females also perceive more intense positive emotions, which may act as
a counterbalancing effect (Levenson et al., 1994; Fujita, Diener, & Sandvik, 1991). On the other hand, men often miss out on mental and physical health benefits gained from expressing their feelings. The gender gap in premature death is well known, and is suggested that it is most likely to be explained by related social factors such as gender roles (Moller-Leimkuhler, 2003). Women generally outlive men, and men, who suppress their feelings, appear to be at greater risk for physical ailments such as high blood pressure, as well as untreated depression, drinking, and suicidality (Robertson et al., 2013). To further explain this phenomenon, researchers have pointed to a discrepancy between perception of need and help-seeking behavior (Moller-Leimkuhler, 2002; Moller-Leimkuhler, Bottlender, Straub & Rutz, 2004). Specifically, men consistently report fewer symptoms than women because such emotionality would transgress traditional gender norms. Thus, men may fail to perceive or report symptoms that would reach diagnostic thresholds that would necessitate treatment (Angst et al., 2002; Zimet, Dahlem, Zimet & Farley, 1988). In addition, women are reported to perceive higher somatic symptoms of psychological distress (Matud, 2004). Consequently, it is argued that social norms of traditional masculinity make help-seeking less probable because the inhibition of emotional expressiveness suppresses the perception of various emotional symptoms, such as depression (Moller-Leimkuhler, 2002; Angst et al., 2002).

**Social norms and emotional expression.** It is well established that socialization to gender norms is instrumental in dictating when and in what context emotional expression is appropriate (Plant, Hyde, Keltner & Devine, 2000; Simpson & Stroh, 2004; Brody, 2000). *Display rules*, or prescriptive social norms that dictate how, when, and where emoting is appropriate by male and females in any particular culture, are the
process by which this socialization occurs (Brody, 2000; Underwood, Coie, & Herbsman, 1992). Display rules are implicitly learned and assumed through social interaction. It follows that women likely perceive the experience of emotions more intensely because they are taught to be in touch with their feelings, be compassionate and tender; they are also encouraged to discuss and express feelings more openly (Dedovic, Wadiwalla, Engert, & Pruessner, 2009). On the other hand, men are hypothesized to have more uncontrolled negative and aggressive emotional outbursts because they are taught to withhold their emotionality and to appear stronger (by suppressing emotion), more assertive, or even aggressive (Dedovic et al., 2009; Mahalik, 1999).

Of course, socialization evolves across various changing environments, both immediate and under the broader scope of culture and society (Bronfenbrenner, 1977). Deaux and Major (1987) were the first to propose a model of understanding gender-related behaviors as variable, proximally caused, and context-dependent. Because gender-related behaviors are encoded socially at an early age and are repeatedly reinforced over time, it can be inferred that the decision about when it is appropriate or expected to emote is also contextually bound throughout the lifespan, implicating cultural norms as a major determinant for emotional expression (Colley, 1987; Niedenthal & Brauer, 2012). In American and European cultures, feminine display rules conventionally require the suppression of negative emotions and the simulation of positive emotions; however, masculine display rules often require the suppression of positive emotions and the simulation of negative feelings (Simpson & Stroh, 2000; Brody, 2000). These rules place undue influence on each gender to behave in certain, prescribed ways that might restrict their emotional experiences. In addition, gender
differences in emotional expression seem to be more pronounced in Western countries than in non-western countries (Zahn-Waxler, Friedman, Cole, Mizuta, & Hiruma, 1996; Copeland, Hwang, & Brody, 1996; Frymier, Klopf, & Ishii, 1990; Fischer & Manstead, 2000).

Despite these patterns of display rules guided by gender stereotypes, the research on gender patterns concerning where, when, and why emotions are expressed or repressed is similarly mixed and inconclusive, potentially due to a lack of cultural consideration (Bradley, Codispoti, Sabatinelli, & Lang, 2001; Fujita, Diener, & Sandvik, 1991; Fischer, 1993), making it difficult to claim, categorically, specific gender differences and to establish related health-promoting recommendations regarding emotional expression. Specifically, previous research and popular convictions assert that women are more emotional than men, in general; however, a closer review of the literature suggests that women and men actually experience emotions to a similar extent (Simon & Nath, 2004). Because men are far less likely than women to report negative emotions, and affective displays follow gender stereotypes and display rules, this may confound research conclusions regarding levels of emotional experience (Angst et al., 2002; Brody, 2000). It seems that gender differences in self-report and affective displays used in research may tell us more about Western sex-role stereotypes than about women and men’s actual emotions and consequently should be viewed against a backdrop of culture and societal factors (Fischer, 1993).

**Cognitive factors in emotional experience.**

Similarly, our cognitive appraisals of said contexts can influence the perception and eventual expression of emotions (Roseman & Smith, 2001). Beck’s cognitive theory,
first proposed in the 1960s (Beck, 1964; 1967), has been influential in conceptualizing and modifying emotional phenomena by focusing on the influence of thought patterns. Some of these thought patterns may be adaptive and logical. Others may involve cognitive distortions, or specific irrational or otherwise inaccurate thoughts and beliefs that can lead to problematic emotional states and behavior (Beck, 2011). Cognitive distortions are filtered through an individual’s perception and manifested in automatic thoughts, conceptualized as the stream of thinking that co-exists with a more conscious stream of thought (J. Beck, 2011; Beck, 1964). Thus, biased perceptions result in distorted thoughts, which can result in inappropriate or exaggerated emotions and maladaptive behaviors that are not consistent with more accurate perceptions and interpretations.

Beck (1979), Ellis (1958), and the early Greek stoic philosophers proposed that it is the interpretation of a situation (rather than the event itself) that influences our emotional, behavioral, and even our physiological response to specific stimuli. Although the research on gender differences in cognitive distortions is limited, two studies have found that women may internalize life stressors with self-debasing distortions, whereas males may externalize their problems using self-serving distortions (Bruno, 2010; Leung & Wong, 1998). Distortions in our cognitive appraisals can serve to uphold gender norms and the unbalanced dichotomy of emotional expression (e.g. men often think they must act aggressively or ‘macho’ to be worthy or accepted by others; whereas women may believe that they must be pleasant and social to be valued). (Mahalik, 1999).
Benefits of Leisure

Certain therapeutic models such as Rational Emotive Behavior Therapy (Ellis, 1962; 1977; Dryden, 2005) and Cognitive Behavior Therapy (Beck, 1964; J. Beck, 2011) aim to help clients implement healthier ways of thinking, emoting, and behaving; however, they may fail to reach the larger population outside of the clinical arena. One non-clinical area of research that offers a source of mental health benefit to the general population is the study of leisure activities. The literature provides substantial evidence that participation in leisure activities produces considerable and widespread psychological benefits (Caltabiano, 1995; Kim, Heo, Lee, & Kim, 2015). In addition, leisure has proven effective at combating depression and anxiety in both men and women (Nimrod, Kleiber, & Berdychevsky, 2012). Contemporary trends in the literature have focused on the construct of Serious Leisure (SL), a concept that was first proposed by Robert Stebbins in 1992. Serious leisure is defined as long-term, active, and frequent engagement in an activity; casual leisure is more passive and short-term. Increasingly, serious leisure is being viewed along with the pillars of work, family, and religion as essential to shape the meanings peoples give their lives and identities that overall, contribute to life satisfaction (Gillespie, Leffler, & Lerner, 2010). The influence of gender roles in leisure behavior has been a topic of interest. For example, Hirschman (1984) found that gender roles, defined in The American Heritage New Dictionary of Cultural Literacy (2005), as the behaviors, attitudes, and activities learned by a person as appropriate to his or her sex, determined by the prevailing cultural norms explained more variance in motivation for engaging in leisure activities than did biological sex. Similarly, Fontenelle and Zinkhan (1993) view leisure as taking place in an evolving
social world that is subject to applying and to receiving influence from the zeitgeist and culture in which it occurs. Gender norms are undoubtedly one of these influences.

The world of leisure in the U.S. has seen a recent shift towards bridging the gender gap because many historically male-dominated or female-dominated leisure activities can now be considered mixed-gender leisure. Take, for example, roller-derby. A historically female-dominated sport, roller derby has become increasingly popular, moving from niche to mainstream, and in doing so has attracted an influx of male participants (Copland, 2014). Likewise, hockey, boxing, and American-rules National Football League (NFL) football have recently found their place among female fans. Co-ed social sports leagues have grown rapidly in recent years and include sports from kickball to softball to football (Case, 2012). Although both genders are beginning to access novel sports and recreation, they have taken two very different paths to get there. Participation and viewing of sports have been engrained in the childhood of most men in the U.S.; however, until recently this was a path not chosen as frequently for or by the American female. The introduction of Title IX of the Education Amendments in 1972 stated, “No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance.” (p. 943). Prior to Title IX implementation, girls and women faced discrimination, prejudice, and often ridicule in every area of athletics. Six years following the initiative, the percentage of girls playing team sports in college had jumped six-fold, from 4 percent to about 25 percent -- a number that continues to rise (Parker-Pope, 2010). As sports participation continued to gain ground, female sport fandom began to follow suit.
Fandom

Tajfel (1978) defined fandom in terms of social identity, stating it as “... that part of an individual’s self-concept which derives from his knowledge of his membership of a social group together with the value and emotional significance attached to that membership” (p. 63). One of the more popular examples of serious leisure for both genders is NFL football fandom. In 2002, Willming, Gibson, and Holdnak extended Stebbin’s work and demonstrated that football fandom was in fact a serious leisure activity, as opposed to a passive activity such that Stebbins had previously suggested. In addition, Wilming et al. (2002) contested that as a serious leisure activity, fandom has major implications for community and individual wellbeing that has previously been overlooked, and suggests that fandom as a form of leisure should be given more attention in the literature.

NFL fandom. Like other leisure activities and varieties of sports fandom, NFL football fandom has rapidly changed from being dominated by men to be an almost equal gender divide. In the U.S., about 190 million people view sports, in general, and 160 million view NFL football games on a regular basis, 55 percent of whom are men and 45 percent women (Jones, 2015; Dockterman, 2014). This change in demographics has accelerated research into differences between the male and female fans (Clark, Apostolopoulou, & Gladden, 2009). In addition, fandom is a rich source of leisure for both men and women, perhaps in several ways. Regarding emotional expression, Derks, Fischer, and Bos (2008) suggest that women often occupy roles that conform to feminine display rules, which require them to amplify their emotional response to impress others. Conversely, recent literature in fandom specifically asserts that women often downplay
their gender identities to reinforce their fan identities (Jones, 2008). This implies that when engaging in fandom, women might exhibit lower levels of emotional expression to attain the affiliation of group membership because feminine display rules do not conventionally apply during sports spectatorship, particularly in the historically male-dominated game of NFL football. Conversely, it is suggested here that men use fandom as a socially acceptable outlet for a wide array of emotional displays. Elias and Dunning (1986) assert that sports provide a means through which individuals can release tension and satisfy “the need to experience the upsurge of strong emotions in public” (p.168), contrary to everyday existence where they are confronted by the social requirements of emotional restraint. Considering the aforementioned gender role constraint that men experience in western societies, fandom may be a particularly important and accessible opportunity for this emotional release. In this way, it seems that sports provide an opportunity for catharsis. In fact, Angst et al. (2002) found that men used sports activity to cope with symptoms of depression. In addition, Collins (1990) examined the mechanisms of interaction during a range of social experiences and concluded that emotional cognitions and emotions themselves underlie social cohesion and relationships (Cottingham, 2012). It would appear emotions play a vital role in the experience of relationships and social situations. Collectively, these findings, in part, may explain the reason why sports fans (both men and women) suffer fewer bouts of depression and alienation than do most people uninterested in sports (Branscombe & Wann, 1991; Wann, Dunham, Byrd, & Keenan, 2004).

**Summary of Problem Statement:** Research has determined that there are risks associated with typical gender patterns of emotional expression. Although research
clearly asserts that leisure involvement leads to enhanced wellbeing and better health outcomes, there have, to date, been no studies addressing potential applications of leisure to promote healthy emotional expression. Furthermore, there is a paucity of controlled, experimental research in the influence of emotional reactions and associated cognition for individuals exposed to highly emotional stimuli in non-clinical populations, such as occur in leisure activities such as sports fandom.

**Purpose of the Study:** The purpose of the present study to investigate the relative influence of levels of leisure involvement, emotional expressivity and cognitive distortions in male and female NFL fans when exposed to high-stakes game-related stimuli. It is possible that by clarifying the connections between fandom, emotional expressivity, and cognitive distortions, a more balanced repertoire of healthy emotional expression through leisure can be promoted; this may also include a better understanding of fan experience, including emotional reactions to wins and losses. Although participation in leisure activity can be salubrious, little is known about the underlying cognitive processes involved. This study seeks to add to our knowledge in this regard.

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**Literature Review**

**Emotional Expressivity**
Emotions serve an array of related functions necessary for survival, as evidenced in part by the associations between contentment and sleep, love and mating, or panic and the fight or flight response (Gross & John, 1997). Emotions can motivate us to take action; for instance, fear, empathy and anxiety can move us to help someone who is choking. Emotions help us understand our environments (both internal and external) and help us respond to our environments (externally).

Emotion also plays a key role in decision-making processes (Lowenstein & Lerner, 2003). In the same example, recognizing emotional expressions of fear and distress on the face of someone who is choking may evoke similar emotions of fear and anxiety within us. Both the external recognition of others’ emotions as well as the internal feelings that we have, influence our cognitions, emotions, and behavior. Clearly, emotions help us communicate with others in a reciprocal manner by giving and receiving cues of emotional expression. Although emotions represent internal states such as cognitions or physiological sensations, we frequently communicate these states to the external world. *Emotional Expressivity (EE)* is a term used to describe the behavioral manifestation of emotional impulses (Gross & John, 1997). In fact, in infancy, emotional expressivity is said to be the core form of communication. Babies cry to tell their parents what they need (e.g. food, sleep, comfort). As individuals grow, they learn to discriminate how and when to use emotional expression to influence/manipulate our environment and the people in it more effectively (Buss, 1987; Grieve & Panebianco, 2012).

Abnormally high or low levels of EE can play a role in severe pathologies.
A key feature of individuals diagnosed with Borderline Personality Disorder is an inability to regulate their emotions (Johnson, Hurley, Benkelfat, Herpetz, & Taber, 2003; Rosenthal et al., 2008). Emotional regulation can be defined as “…the extrinsic and intrinsic processes responsible for monitoring, evaluating, and modifying emotional reactions, especially their intensive and temporal features, to accomplish one’s goals” (Thompson, 1994, p.27). A key component of emotional regulation is emotional expression and individuals with Borderline Personality Disorder consistently demonstrate more intense responses to negative emotions than do controls (Levine, Marziali, & Hood, 1997; Yen, Zlotnick, & Costello, 2002; Rosenthal et al., 2008). Additionally, deficiencies in effective use of EE are at the crux of possibly the greatest suffering for individuals with a borderline personality disorder: tumultuous and unstable interpersonal relationships. For example, Koeningsberg (2001) found that affective instability was significantly correlated with levels of identity disturbance, and that a borderline patient’s impulsive aggression was related to unstable interpersonal relationships.

Conversely, studies show that individuals with schizophrenia demonstrate significantly fewer affective displays of emotion than controls, although this does not reflect diminished subjective experience of emotion (Aghevli, Blanchard, & Horan, 2003; Kring & Neale, 1996; Kring, Kerr, Smith, & Neale, 1993). Individuals with schizophrenia frequently have lower levels of EE; however, the EE of those around them greatly affects the course of their pathology. There is substantial evidence that high EE in family members of those with schizophrenia functions as a predictor of relapse of positive/psychotic symptoms (Kavanagh, 1992; Butzlaff & Hooley, 1998; Cechnicki, Bielanska, Hanuszkiewicz, & Daren, 2013; Bogojevic, Ziravac, & Zigmund, 2015).
Moreover, one study suggested that even having negative attitudes towards the expression of emotion can predispose a person to more severe post-traumatic stress reactions following a traumatic event (Nightingale & Williams, 2000).

Theories abound, relative to when, where, and why we express emotions, and the complexities of answering these questions confound a simple analysis. For the focus of this investigation, theories attributing our emotional behavior to both social and cognitive appraisals will be examined (Bandura, 1986; Harre, 1986; Gross & Barrett, 2011; Roseman & Smith, 2001; Lazarus, Scherer, Schorr, & Johnstone 2001)

**Bandura's Social Cognitive Theory and social construction models.** Albert Bandura’s Social Cognitive Theory posits that human behavior is motivated and regulated by ongoing self-influence or agency (Bandura, 1989). This overarching self-regulating system operates through three main functions, including self-monitoring of one’s behavior, judgment of one’s behavior in relation to personal and environmental standards, and affective self-reaction (Bandura, 1991). *Perceived self-efficacy*, which refers to a person’s belief in his or her ability to influence events that directly affect his or her life and acts as a mechanism that influences cognition, actions, and emotional arousal (Bandura, 1982; 1994). According to Bandura, self-efficacy is the foundation all human motivation, performance accomplishments, and emotional wellbeing (Bandura, 1982; 2006). Although the desire for self-efficacy drives thoughts, feelings, and behaviors related to personal agency, the individual and people surrounding the individual are active in shaping the experience. In essence, people are producers, as well as products of social systems (Bandura, 1998).
Social Cognitive Theory delineates three modes of agency: direct personal agency, proxy agency (relies on others to act on one’s behalf to secure desired outcomes), and collective agency (socially coordinated effort) (Bandura, 2001). Led by Bandura’s charge, collective agency in particular has been steadfast in its growth and recognition as a major behavioral determinant. In 2000, Bandura stated, “the growing interdependence of human functioning is placing a premium on the exercise of collective agency through shared beliefs in the power to produce effects by collective action” (p.75).

The idea that people work together to shape their social futures has been the focus of social construction models of emotion that suggest emotions and cognitions are rooted in experience (Bandura, 1998; Harre, 1986). These models have also provided insight into gender-related behaviors. Deaux and Major (1987) were the first to propose a model of understanding these gender-related behaviors as variable, proximally caused, and context-dependent. Similarly, Bussey and Bandura (1999) assert that gender roles are constructed through a broad network of social influences, operating interdependently in a variety of societal subsystems. Accordingly, expressions of emotions are seen as socially charged “performances” that often adhere to cultural settings (i.e., gender norms) more so than to cognitive events (Harre, 1986). According to Gross and Barrett (2011), knowing the social script, or display rule for each emotion, allows one to regulate and express emotional behaviors in ways that are appropriate for the social/cultural context. This aligns closely with Bandura’s theory, which posits that knowledge of social scripts is acquired developmentally through modeling and repeated instances of reinforcements (Bandura, 1986; 1989). Conformity to display rules and social scripts begins in infancy (Malatesta & Haviland, 1982) and becomes solidified in childhood (Brody, 2000).
Malatesta and Haviland (1982) found that girl infants 3 to 6 months showed more ‘interest’ facial expressions than boy infants. By preschool, girls have been shown to be superior to boys in suppressing negative emotions; for instance, when they receive unattractive gifts. Many examples illuminate the feminine gender norm of prosocial behaviors (Cole, 1986; Davis, 1995).

Gender norms in EE are socialized in accordance with display rules (Underwood, Coie, & Herbsman, 1992). The social scripts, or the content of display rules, typically conform to cultural gender stereotypes regarding EE. Those rules that are particularly salient in the U.S. and in many European countries, include, "Girls shouldn’t be aggressive” and "Boys shouldn’t cry” (Brody, 2000). Furthermore, social learning theory proposes that display rules remain relevant only because social consequences exist for breaking them. Men who express negative emotions such as fear, sadness/depression, or self-conscious emotions such as shame and embarrassment are less likely to be comforted than women and they are viewed more negatively than women who exhibit similar behavior (Seigel & Alloy, 1990; Barbee et al., 1993); moreover, boys who display aggression are judged to be more socially competent than those who do not (Hart, DeWolf, & Burts, 1993). In contrast, the expression of any emotion that threatens a social relationship tends to be condemned for women, but emotions that facilitate social belongingness are favored (Brody, 2000). For example, girls who act in overtly aggressive manners are less liked and have poorer social/peer relationships than girls who do not (Crick, Casas, & Mosher, 1997; Coyne, Archer, & Eslea, 2006). This carries into adulthood, because women frequently are concerned, often accurately, that the expression of anger will disrupt their relationships (Davis, LaRosa, & Foshee, 1992).
Appraisal theories. Appraisal theories were developed to provide a useful framework for understanding conditions surrounding expressive behaviors, or the reasons why people react differently in situations (Roseman & Smith, 2001). As with social construction models, appraisal theories also recognize the importance of context in EE; however, they focus on how the individual perceives and interprets that context as the main catalyst for EE. The initial theory was pioneered by Magda Arnold, who in 1960 developed her cognitive theory, which specified appraisal as the first step in emotion. According to Arnold, the initial perception of a situation begins the process that leads to emotional experiences and actions themselves. Richard Lazarus, another pioneer of appraisal theory, followed Arnold’s work closely and contributed his structural model, with a focus on cognitions underlying appraisals, as well as antecedent conditions of these cognitions (Lazarus, Scherer, Schorr, & Johnstone 2001). Our thinking in any number of situations is the result of our own perceptions, judgments, and experiences. Biases in any of these domains serve to help us to support our current beliefs, whether they are accurate or not. Specifically, relevant, confirmation bias refers to the phenomenon of interpreting incoming information in ways that are partial to existing beliefs, expectations, or, hypotheses in hand (Nickerson, 1998).

Cognitive Distortions

Cognitive distortions are specific irrational or otherwise inaccurate thoughts and beliefs that can lead to problematic emotional states and behavior. Cognitive distortions are theorized to be based in underlying schema, or an interpretational framework that is mainly developed during early childhood (Beck, 1967, 2011; Young, Klosko, & Weishaar, 2003). Numerous cognitive theorists have identified and labeled specific
cognitive distortions. Beck (1967) proposed six original distortions, including: (1) dichotomous thinking, (2) arbitrary inference, (3) minimization and magnification, (4) overgeneralization, (5) personalization, and (6) selective abstraction. Then, in the early 1990s, Burns (1990, 1991) proposed 10 cognitive distortions with the goal of making them more comprehensible to the public and easier to use in clinical settings. These included: (1) all-or-nothing thinking, (2) discounting the positive, (3) emotional reasoning, (4) jumping to conclusions, (5) labeling, (6) magnification, (7) mental filter, (8) overgeneralization, (9) blaming and personalization, and (10) should-statements. Around the same time, Freeman & DeWolf added three additional cognitive distortions to encapsulate interpersonal phenomena (1) comparison, (2) externalization of self-worth, and (3) perfectionism (Freeman & DeWolf, 1990; Freeman & DeWolf, 1992; Freeman & Oster, 1999, as cited in Rosenfield, 2004, p. 21).

When a person encounters life stress, the information processing of stimuli by cognitive distortions causes individuals to be more susceptible to emotional/psychological and behavioral dysfunction (Beck, 1967; Abela & D’Alessandro, 2002). For example, Tolliver (2016) found that cognitive distortions predict psychological distress in those with perfectionistic tendencies. In addition, Rosenfield (2004) determined that approximately half the variance of pathology in most clinical syndromes and personality disorders was accounted for by the frequency of self-reported cognitive distortions, as determined by the ICD. Garruba (2015) also used the Inventory of Cognitive Distortions (ICD) to investigate quality of life in survivors of spinal cord injuries and discovered that having a higher quality of life was related to better physical health and a lower frequency of cognitive distortions. In addition,
individuals who reported a higher frequency of cognitive distortions also reported depressive symptoms, such as loss of interest or pleasure in activities that were once enjoyed. Moreover, the severity of disorders was directly correlated with the frequency of cognitive distortions. Additionally, as comorbidity increased (meeting criteria for two or more disorders, either clinical syndromes or personality disorders) so, too, did the frequency of cognitive distortions. Consequently, different patterns of cognitions can help to identify the presence of pathology and inform treatment of various psychological disorders. For example, specific cognitive distortions of magnification, fortune-telling, and jumping to conclusions have been shown to play a role in hopeless thinking, which contributes significantly to depression and suicidality (Milligan, 2013). Clark, Beck, and Brown (1989) found that thoughts of loss and failure were associated with depression, whereas thoughts surrounding harm and danger predicted anxiety. Similarly, Leung and Poon (2001) found that different patterns of cognitive distortions were associated with anxiety, depression, and aggression. Strohmeier, Rosenfield, DiTomasso, & Ramsay (2016) found a positive correlation between self-reported cognitive distortions and ADHD. Finally, Roberts (2015) studied cognitive distortions with the ICD in a community sample and with differences among demographic variables, indicating cognitive distortions as a relevant area of study in nonclinical samples as well. Roberts (2015) found that participants between the ages of 18 and 29 had significantly higher rates of cognitive distortions than those between the ages of 41 and 85. Additionally, he found that levels of cognitive distortions predicted levels of perceived stress, indicating that the ICD detects subthreshold levels of distress in individuals with no diagnosable disorder.
Although a recent review of the literature reveals that the research regarding gender differences in cognitive distortions is practically nonexistent (Bruno, 2010), cognitive distortions may also hold important implications for many gender differences. For example, masculine gender role strain has been shown to contribute to cognitive distortions, to emotional disconnection, and sometimes, to aggressiveness in men (Mahalik, 1999). This strain leads to cognitive distortions surrounding emotional control/restrictive emotionality; for example, “If I share my feelings with others, people will view me as weak.” Likewise, due to social norms, the need to be perceived as fearless dictates the importance of adventure, risk-taking, and aggression (Mahalik, 1999). Aggression may be one emotional outlet that some men perceive as appropriate to express in numerous situations connected to distortions, such as “A real man isn’t afraid of anything.” The literature in cognitive distortions of male sex offenders is influential in understanding the onset and maintenance of deviant sexual behavior (Bumby, 1996; Ward, 2000; Feelgood, Cortini, & Thompson, 2005). For example, Sigre-Leiros, Carvalho, & Nobre (2015) used the Young Schema Questionnaire (Young & Brown, 1994) with 50 rapists, 59 child molesters, and 51 nonsexual offenders to determine the relationship between early maladaptive beliefs and distinct types of sexual offending behaviors. The researchers concluded that male rapists may have cognitive perceptions related to justifying rape that come from beliefs regarding entitlement/grandiosity.

Relatedly, Latella-Zakhireh (2009), using the ICD to measure cognitive distortions and the Mahan and DiTomasso Anger Scale (MAD-AS; Mahan, 2001) to measure anger, found a strong relationship between cognitive distortions and various components of
anger (i.e. tendencies towards argumentativeness/emotional control; \( r = 0.56; p = .01; N = 128 \)) in an adult nonclinical sample.

Moreover, more research is necessary to clarify gender-related patterns in cognitive distortions because inconsistent findings prevail. One study exploring depressive cognitions suggested men exhibit a higher level of distortions (Sowa & Lustman, 1984); another study found that women generally outpace men on cognitive distortions (Batmaz, Kaymak, Kocbiyik, & Turkcapar, 2014), and a third study found no difference between genders (Oliver & Baumgart, 1985). As has been seen, differences in psychopathology in these samples may account for much of the difference in these samples (Rosenfield, 2004). Regardless, it is clear that emotional dysregulation is due, in part, to cognitive processing errors. Combining the cognitive appraisal element of ATs with the social context outlined in social construction model, it can be inferred that EE is a behavior that relies on the simultaneous experience of a situation/context, cognition, and emotion, all of which are regulated to a degree, by gender norms and social scripts. Cole, Michel and Teti (1994) define Emotional regulation as the ability to respond effectively to the ongoing demands of experience in a way that is socially acceptable, yet being sufficiently flexible to permit spontaneous reactions and the ability to suppress those reactions as needed. Because successful EE is critical to interpersonal communication, emotional regulation is vital to functioning in the social world. In other words, individuals are not simply compelled to express emotions; rather, from an early age, individuals may regulate emotional expression in some situations, yet express them in others. However, related cognition may be subject to distortion, interfering with
socially appropriate EE (Gross & John, 1997). It is suggested here that leisure is a rich source of experience, in which EE often can be freely expressed or repressed.

**Serious Leisure**

**Historical overview.** The concept of leisure was all but ignored in the field of psychology for over 100 years; however, it is now being extensively investigated as a definitive aspect of society, social life, and mental health. In 1982, Robert Stebbins introduced the concept of serious leisure as a formal conceptual phenomenon for the first time. During these early years, Stebbins did fieldwork and exploratory research on an array of leisure activities in the hopes of furthering the basis for his theory. Some of these leisure groups included actors, musicians, Canadian football players, magicians, and stand-up comics. From this work, he was able to propose a formal grounded theory backed by substantive evidence (Stebbins, 2001) and then elaborated on it by delineating three noted forms of leisure under the Serious Leisure Perspective: casual leisure (e.g., play, entertainment, sociable conversation), project-based leisure (e.g., one-shot art projects), and serious pursuits, which consist of hobbyists, volunteers, and amateurs (Stebbins, 2007). Since then, serious leisure research has crossed many parts of the world, generalizing its claims beyond the West where it was originally proposed, and extending activities that range from belly dancing in the Middle East to lawn bowling in Western Australia (Moe, 2012; Heuser, 2005). In Stebbin’s 2015 report update, he reported that Serious Leisure Perspective has seen extension into sixteen scholarly fields, including: ethnicity, quality of life/wellbeing, leisure education, gender, self-directed learning, disabilities, and entertainment/popular culture.
The Serious Leisure Perspective. The Serious Leisure Perspective (SLP) is considered as the formal grounded theory that encompasses leisure in the literature, and is included under the broader scope of positive psychology/sociology (Glaser & Strauss, 1968; Seligman, 1991; Hartel et al., 2009; Stebbins, 2015); it explores how, when, and why people pursue their desires from which they, subsequently, obtain satisfaction and fulfillment. Martin Seligman, the pioneer of positive psychology, has sought to move away formally from an exclusive focus on pathology that dominated the field of psychology since its beginnings, to build a science based on the positive traits and institutions that contribute to wellbeing and emotional health (Seligman, 1991; Seligman & Csikszentmihalyi, 2014). Similarly, Stebbins created serious leisure because of the failure of modern sociologists to view leisure, a part of social life that society itself takes seriously and spends copious amounts of time and money on, as a distinct aspect of social life (Stebbins, 2015, p. xxi). The SLP continues in the tradition of positive psychology by deeming itself a ‘positive sociology’ that investigates those activities that not only promote wellbeing and happiness, but which can be mobilized to help individuals transcend negative life events (Hartel, et al., 2009; Stebbins, 2015; Kleiber, Hutchinson, & Williams, 2002).

SLP synthesizes three main forms of leisure: serious leisure, casual leisure, and project-based leisure. Serious leisure is a concerted effort to engage in an activity in which certain skills are acquired; casual leisure is more immediately and intrinsically rewarding, usually lasting a shorter amount of time with no training required, and project-based leisure is an occasional, infrequent and short-term creative undertaking (Stebbins, 2015, p.xx). All three forms of leisure have important implications for the
promotion of wellbeing; however, the most relevant category for the purposes of this paper is serious leisure. Serious leisure is defined as the “systematic pursuit of an amateur, hobbyist, or voluntary core activity sufficiently substantial, interesting, and sufficiently fulfilling in nature for the participant to find a career there, acquiring and expressing a combination of its special skills, knowledge, and experience” (Stebbins, 2015, p. xx). Stebbins delineates six distinguishing qualities of serious leisure. Rather than being considered requirements for serious leisure, the six qualities are common themes which may vary in scope and applicability on a case-by-case basis. The six qualities are: (a) the need to persevere; (b) career (which, by definition, is not necessarily a paid occupation but rather an opportunity in the broader subjective sense to demonstrate one’s abilities); (c) significant personal effort, using specially acquired knowledge, training, experience, or skill; (d) durable benefits; (e) unique ethos; and (f) a strong identification. Because serious leisure pursuits are those that people continue to voluntarily engage in voluntarily, it can also be inferred that they are activities perceived as enjoyable and intrinsically rewarding to the participant.

**Benefits and costs of serious leisure.** Research on serious leisure has led to the identification of distinctive sets of both personal and social rewards for each activity investigated (Stebbins, 2001, p.13). Collectively, Stebbins proposes ten types of rewards (see Table 1), with the first seven representing personal rewards, and the last three being socially rewarding in nature.
Table 1

Summary of serious leisure rewards

<table>
<thead>
<tr>
<th>Personal Rewards</th>
<th>Social Rewards</th>
</tr>
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<tbody>
<tr>
<td>Personal enrichment</td>
<td>Development of friendships/social</td>
</tr>
<tr>
<td>Facilitation of self-actualization</td>
<td>attraction</td>
</tr>
<tr>
<td>Opportunity for self-expression</td>
<td>Group accomplishment</td>
</tr>
<tr>
<td>Enhancement of self-image</td>
<td>Altruistic feelings</td>
</tr>
<tr>
<td>Self-gratification</td>
<td></td>
</tr>
<tr>
<td>Recreation of the self</td>
<td></td>
</tr>
<tr>
<td>Financial return</td>
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</table>

Note: Adapted from Stebbins, 2001, p. 13

First, personal enrichment is often achieved through the cherished experiences that leisure provides. Second, development of certain skills, abilities, and knowledge surrounding the activity facilitates self-actualization. Similarly, the third personal reward is the opportunity for self-expression through the acquired skills, abilities, and knowledge. A fourth personal reward derived from leisure is that of being seen as a member or participant of an activity, which in turn, enhances self-image. Fifth, both superficial enjoyment and deep, lasting fulfillment experienced together beget self-gratification. Because leisure involvement is often enjoyed following hard work (e.g., crafting after returning home from a day at work), the sixth personal reward can be the experience of re-creation, or regeneration of oneself. A final identified personal reward is the possibility of financial return.

Regarding social rewards, leisure has been found to facilitate the development of friendships (Coleman & Iso-Ahola, 1993). In addition, associating with other serious
leisure participants can earn a person social attraction. Similarly, group accomplishment can be gained through engagement of certain leisure activities with others of similar interest. Finally, contribution to the participant’s specific leisure community by making helpful or needed contributions to the maintenance and development of the group can engender altruistic feelings.

Serious leisure, and leisure in general, have made important contributions to quality of life and wellbeing (Stebbins, 2004; Haworth & Hill, 1992; Mannell, 1993; Iwasaki, 2007; Heo & Lee, 2010). *Quality of life* is defined, from a want-based approach as, “a sense of achievement in one’s work, an appreciation of beauty in nature and the arts, a feeling of identification with one’s community, a sense of fulfillment of one’s potential” (Campbell, Converse, & Rogers, 1976, p.1). It has been established that physical leisure involvement can alleviate stress and depression, as well as provide other health benefits (Penedo & Dahn, 2005; Gillison, Standage, & Skevington, 2006; Babyak et al., 2000). Furthermore, serious leisure has focused on numerous kinds of activity involvement and has discovered social benefits that are not always exercise-induced (Stebbins, 2015). Keyes (1998, p.121) defines *social wellbeing* regarding serious leisure as the “absence of negative conditions and feelings, the result of adjustment and adaptation to a hazardous world.” Stebbins (2015) posits the idea that social wellbeing comes from having a high quality of life, which is derived in part by serious leisure. In fact, research suggests that wellbeing is an important by-product of serious leisure (Haworth & Hill, 1992; Mannell, 1993). Various researchers have discussed the negative effects of current working patterns on wellbeing, and the need for greater leisure involvement for a more balanced lifestyle (Haworth & Lewis, 2005; Galinsky, Kim, &
Bond, 2011; Sonnentag, 2001). Sonnentag (2001) studied diaries completed by 100 Dutch teachers on leisure time activities and situational wellbeing for 5 days, and found that leisure time activities and a low-stress work situation contributed independently to wellbeing. Haworth and Hill (1992) investigated the relationship between psychological wellbeing and various categories of experience in both work and leisure in 20-30-year-old ‘white collar’ workers. They found that enjoyment both in work and in leisure was related to wellbeing, and that the type of psychological wellbeing derived from work can also be obtained from leisure. In addition, findings of the positive relationship between wellbeing and high investment in leisure activities cover the lifespan. Serious leisure has been found to be associated with positive affect and subjective wellbeing in older adults (Heo & Lee, 2010; Heo, Lee, McCormick, & Pedersen, 2010; Mannell, 1993). In a study of college students in the USSR, leisure and recreation satisfaction were found to be the strongest predictors of subjective wellbeing, based on self-reports and an event memory task (Balatsky & Diener, 1993). Similarly, Lloyd & Auld (2002) found that leisure satisfaction was the best predictor of quality of life, and additionally, that people who engaged in leisure, in the form of social activities, more frequently experienced higher perceived quality of life.

Further, leisure can help those suffering from both physical and mental disabilities. It has been established that physical activity alleviates both depression and anxiety (Martinsen, 2008). Patterson and Pegg (2009) studied a sample of adults with intellectual disabilities who were participating in serious leisure activities and found that participants could engage at level that was sufficient to increase confidence, skills, and self-esteem. In addition, leisure appears to provide effective relief for people dealing
with excessive stress by facilitating companionship and providing feelings of support (Coleman & Iso-Ahola, 1993). For example, Chun and Lee (2008) established that engaging in leisure activity facilitates posttraumatic growth among people with spinal cord injuries, enabling them to foster social relationships and enhance positive emotions while developing a sense of self, meaning, and satisfaction. However, many of the beneficial mechanisms of leisure involvement are not entirely known. Scarmeas, Levy, Tang, Manly, & Stern (2001) conducted a longitudinal study in New York of individuals aged 65-years or older to see if leisure involvement modified the risk for development of dementia. At the beginning of the study, none of the participants was experiencing dementia symptoms. At the end of seven years, 207 participants had become demented; however, the authors determined that the risk of dementia was decreased in subjects engaged in high leisure activity. The authors concluded that leisure involvement might provide a reserve that delays the onset of clinical manifestations of the disease. Mausbach, Cardenas, Goldman, and Patterson (2006) discovered that in individuals with Schizophrenia, lack of satisfaction with leisure activities predicted both negative symptoms and depressive symptoms. This association disappeared when individuals reported high levels of satisfaction. The researchers suggested that behavior therapists encouraging higher levels of activity involvement could improve the outcomes of psychosis treatment by reducing depression, promoting wellbeing, and increasing functional outcomes by increasing leisure activities. It is clear that leisure involvement is a rich source of promoting wellbeing for anyone, and has specific implications for improving the treatment of many psychological and physical ailments.
Costs. Although literature regarding costs and leisure is sparse, certain activities can be detrimental to wellbeing. For example, high-risk activities such as bungee jumping, drag racing, or extreme mountain climbing can be dangerous, if not fatal. In addition, Stebbins (2001) proposed the notion that there may be negative consequences when individuals take casual leisure too seriously. Casual leisure may involve relaxing activities such as napping, strolling, watching TV, listening to music, party drinking, and sociable conversation. Stebbins (2001) identified four costs to maladaptive casual leisure:

1. Boredom, wariness, or restlessness can occur when the participant no longer gains pleasurable benefits of the activity and, instead, momentarily experiences a low quality of life.
2. Casual leisure is unlikely to yield a distinct identity as does more serious leisure pursuits.
3. Large chunks of time spent in casual activities pursuing momentary pleasure or hedonism can take away from other meaningful experiences they might otherwise be engaged in and in a way, deprive them of an optimal leisure lifestyle and deeper level of happiness.
4. Often, casual leisure makes only a small contribution to self and community, and often fails to create substantial feelings of self-esteem that lead to personal development.

Stebbins has suggested that the sustained attention and commitment that serious leisure involves can reduce the problems resulting from meaningless leisure (Stebbins, 2015; Siegenthaler & Gonzalez, 1997). However, the excessive pursuit of serious leisure
activities can also yield similar negative consequences, although perhaps less often.
Surely, most people know what it is like to lose their passion and become bored with what was once a serious pursuit. Furthermore, many activities provide substantial identity, community, and fulfillment for some, but not for others. Stebbins himself suggests that what defines serious leisure is the meaning of the pursuit to the individual, and that each activity may have its own constellation of costs unique to that experience (Stebbins, 2015). Perhaps the most damaging cost of leisure is the possibility that time dedicated to activity involvement becomes excessive and overwhelms or outweighs other important aspects of an individual’s life. For example, individuals who spend copious amounts of time sitting without taking breaks, at the expense of being physically active (e.g., watching TV, reading, playing board games, driving) are at heightened risk for developing a chronic illness and, possibly, premature death (Owen, Bauman, & Brown, 2009; Owen, Healy, Matthews, & Dunstan, 2010). Conversely, excessive exercise can become unhealthy and commonly contributes to a more severe pathology in those diagnosed with eating disorders (Mond & Calogero, 2009; Bratland-Sanda et al., 2009).

Cognitive dissonance, a negative affective state resulting from contradiction between attitude and behavior, can result when the attraction of participating in serious leisure activities outweighs other obligations or social responsibilities (Harries & Currie, 1998). This may also be characterized as an approach-avoidance conflict in which the person struggles with indecisiveness and inaction. In addition, there may be unwanted consequences when a person engages in leisure activities in an illegal or inappropriate way, such as underage drinking in adolescents (Caldwell & Darling, 1999), or youth sports league involvement as serious leisure for coaches and parents (Siegenthaler &
Furthermore, there are direct monetary costs to engaging in leisure activities seriously. Activities such as rock climbing, scuba diving, or horseback riding (as examples) require access to costly specialized equipment and coaching, as well as travel to specific locations to practice.

Regarding professional sports, fan memorabilia are at a premium, with popular items ranging from jerseys to license plates frames to art. Game attendance is less than affordable for most; one example is the rapacious pricing of seats at some of the more popular professional sports venues. In 2014, Team Marketing Report, a sports information publisher, found that the average NFL ticket price was $84.43 (Greenberg, 2014). They determined that it would cost, on average, for a family of four to attend an NFL (taking into account 4 tickets at average price, 2 small beers, 4 small sodas, 4 hot dogs, parking, 2 programs and 2 adult caps) $479.11.

Additionally, sports fandom involvement often leads to betting or gambling behaviors that can incur significant financial loss. Finally, there are affective consequences to being a sports fan. Research shows that fans who strongly identify with a sports team experience more heightened levels of physical and emotional arousal when viewing their sport, which can become unhealthy if pervasive (Dietz-Uhler & Lanter, 2008). There are a variety of situations in which the costs to serious leisure may be serious themselves; however, most scholars cited previously agree that the benefits far outweigh the costs.

**Gender and serious leisure.** Although the role of gender in leisure has been a topic of attention for some time, research into the subject has become increasingly prominent in recent years. The research into gender and serious leisure tends to focus on
developing a deeper understanding into participation by viewing it through the social, cultural, and political contexts in which it takes place. As a response to early androcentric leisure theories, relevant research and discourse through the past 30 years has viewed women’s leisure almost exclusively through a lens of feminism and inequality. In particular, investigations have identified the central significance of physicality, social relationships, gender identities, and the dual burden of being a mother and careerist in the experiences of, and motivations for women’s participation in leisure activities (Dilley & Scraton; Bartram, 2001; Henderson & Dialeschki, 1991; Jackson & Henderson, 1995; Bhatti & Church, 2000; Pai & Pai, 2012).

The role of gender in leisure, and specifically women’s leisure has been commonly viewed through a lens of leisure constraint; that is, specific obstacles limiting leisure enjoyment and participation for women. Leisure constraints can be defined as “factors that limit people’s participation in leisure activities” (Scott, 2003, p.75). Overall, women are more constrained in their leisure than men (Jackson & Henderson, 1994; Raymore & Godbey, & Crawford, 1994). In addition, because constraints are intertwined with roles and stereotypes, a cultural interpretation of gender rather than universal interpretation of biological sex is more informative (Jackson & Henderson, 1994; Hirschman, 1984). For example, contextual factors such as level of income and family structure can mediate and influence the perception of constraint as well as of leisure involvement (Raymore, Godbey, & Crawford, 1994; Brown, Brown, Miller, & Hansen, 2000). Women with young children are less likely to participate in active leisure than women who do not have children, which may be due in part to obstacles such as a lack of time, money, negative body image, or energy (Brown et al., 2000; Frederick & Shaw,
Although social pressure to fulfill the role of being a good mother or housewife has been suggested as a constraint to activity, the use of leisure as means to resist gender constraints has also been proposed (Miller & Brown, 2005).

In 1994, Shaw published a paper identifying and summarizing three approaches in the analysis of women’s leisure. The first two approaches, according to Shaw, interpret women’s leisure as occurring within the structured constraints of traditional gender roles; the third and more contemporary view, however, posits the idea that women’s leisure offers opportunities for resistance against these constraints. The first approach is the most dominant one for understanding women’s leisure, emphasizing ways in which women are disadvantaged or oppressed within a patriarchal society, and citing how their subordinate status within that society limits their access to, and enjoyment of leisure. The second, less popularized approach, posits the notion of the constraining nature of leisure activities and the gendered nature of recreation. This second approach has not been as utilized as an interpretive framework for gender and leisure, but it has led to a third, more contemporary view of women’s leisure, proposing that leisure provides a basis for resistance against societal gender role constraints. For example, female participation in ‘macho’ recreation such as that which Roster describes in her 2007 article on women Harley riders, demonstrating the movement as embracing both femininity and masculinity, a movement that resists stereotypes that restrict choices in leisure pursuits.

Employment has been important as an emerging theme in the gender constraint literature. Specifically, the dual pressure of being a mother and a careerist has often been cited as a major obstacle for women to access leisure activities (Brown et al., 2000; Haworth & Lewis, 2005, Jackson & Henderson, 1995). Raisborough (1999) introduced
gender and women’s access to leisure into the serious leisure research by examining volunteers in the British Sea Cadet Corps. The British Sea Cadets is the UK’s largest maritime youth charity that provides youth with experience and training opportunities that can then funnel into a career in their parent service, the Royal Navy and Royal Marines. Raisborough viewed the cadets as a prime example of serious leisure because adult volunteers who run the operation dedicate substantial amounts of time to recruit, train, and supervise the cadets so that these cadets acquire knowledge in nautical practices and specialized training in areas such as engineering. Women’s access to leisure, often viewed as limited by normative feminine roles, was described by Raisborough in this context as an active, ongoing process that continually shapes and empowers the leisure experience and leisure identity. Furthermore, consistent with the resistance hypothesis outlined by Shaw, Raisborough concluded that women’s views of their careers are shaped by the meaning they give to their participation, as well as their successful distancing from normative femininity in other social worlds. The study of gender as it relates to serious leisure is burgeoning; however, it has yet to seriously consider male constraints or take into consideration gender differences in emotional expressivity in a social context (Stebbins, 2015.)

**Sports fandom as serious leisure.** The six distinguishing qualities of serious leisure (cited previously) have been conceptualized in terms of sports fandom. In 1982, Stebbins considered sport spectating as a casual, rather than serious, pursuit. However, in 2000, Jones first made the case that football fandom was a case of serious leisure. Gibson, Willming and Holdnak (2002) successfully contested that college football fans demonstrate high levels of commitment and team identification. Gibson, et al. (2002)
examined the rituals and practices of being a sports fan in the context of serious leisure by interviewing fans of the University of Florida Gators, illustrating that fandom can typify the serious leisure category of a hobbyist. A Hobbyist has been defined by Stebbins as “a specialized pursuit beyond one’s occupation, a pursuit that one finds particularly interesting and enjoyable because of its durable benefits” (1992, p.10). Stebbins (1992, 2001) identified collectors, makers and tinkerers, noncompetitive rule-based activities, players of sports and games, and liberal arts as distinct types of hobbyists, but noted that further research would likely change or provide additions to these categories. Therefore, another purpose of this paper is to provide additional rationale and evidence that support the proposition made by Gibson et al. (2002) to expand the hobbyist categorization to include the term sport enthusiast (p. 400) by examining professional football fandom.

1. Perseverance. The first quality of serious leisure, perseverance, is accomplished in several ways. To be considered part of the Serious Leisure Perspective, the leisure of interest requires a distinctive set of interrelated actions or steps that must be followed to achieve an outcome that the participant finds attractive (Stebbins, 2007). This goal-oriented perseverance typically takes the form of physical action and is a main feature of serious leisure. In sports fandom, perseverance in this way might take the form of driving to the stadium, getting up and cheering during positive plays, chanting or singing team songs with other participants, making food, hosting parties for games, and so on. Perseverance is also displayed through loyalty to a team during both winning and losing seasons. Serious sports fans are notorious for sticking with one team for their entire lives (Scarinzi, 2015). In other words, loyalty is valued, whereas rooting for
whatever team is winning at a given moment is disloyal -- not an admirable characteristic because it undermines the idea of being a “true” fan. It seems that to be considered a real fan, it is necessary to experience a certain level of defeat and still claim loyalty. In the article titled, *a model of serious leisure identification: the case of football fandom*, Jones (2000) suggests that social identity can help maintain participation. Cleveland topped ESPN’s list for “Most Tortured Fan Base in the U.S.” in 2015. This "torture" arises from the fact that it has been 147 seasons since any of their 3 major sports teams won a title, yet the fans persevere (Leonhardt, 2015). In Eric Simons’ book, *the secret lives of sports fans: the science of sports obsession* (2014), the author points to research that indicates pride as a particularly important motivator for this perseverance. Pride, or the idea that others will eventually recognize one’s abilities and successes (or, in this case, the team’s abilities and successes), enables us to continue a behavior that has negative consequences when there is a good chance for long-term benefits (Robins & Beer, 2001).

B.F. Skinners early work with rats established the fact that variable ratio schedules, in which unpredictable timing of reinforcement but knowing that sooner or later (or even much later), the reinforcer will occur, produces the most effective reinforcement schedule for maintaining a behavior (Ferster & Skinner, 1957). This, plus the evolutionary tendency to stay proud regardless of continued defeats, due to the expectation of an eventual reward, might explain the reason why fans very rarely change teams (Stebbins, 2015; Simons, 2014; James, 1997). According to Stebbins (2015), at some point, when there continues to be a lack of accomplishment to be proud of, individuals are just proud of their pride, with nothing to show for it (Stebbins, 2015,
p.106). Perhaps this is the reason why the stereotype of sports fans being stubborn, aggressive, or ignorant abounds (Stebbins, 2015; Scarinzi, 2015).

2. **Career.** Opportunity for career is the second characteristic of serious leisure. Stebbins (2015) identifies a serious leisure career as a subjective term, and places importance on the “temporal continuity of the activities associated with it” (p. 19). He provides the example of a woman knitting a sweater that a friend praises and compliments, which reinforces the woman’s sense of confidence in her abilities, not to mention her knitting skills, and motivates her to continue to master this practice. This is consistent with social learning theory (Bandura, 1971). Athletes can get a similar motivational jolt for being reinforced for their accomplishments. Similarly, it is inferred that fans of a sport begin by being socially reinforced (presumably by other fans) for their initial expressions of interest and knowledge; they are then motivated to gain more knowledge and exhibit similar behavior. In behavioral terms, this can be conceptualized as response generalization (Skinner, 1953). Their leisure career may expand by joining a fantasy sports league or watching sports channels more frequently, attending games, or researching the history of a team, leading to even more sports-related behavior and subsequent reinforcement in the form of social praise and acknowledgement (Stebbins, 2015). Stebbins (2015) delineates 5 possible stages of career (p.20):

a. **Beginning** -- lasts or until the interest takes root. For many individuals who grew up in a household of fans, this may be some length of time during their childhood until they began engaging in fandom for their own personal interest.

b. **Development,** during which time the leisure pursuit becomes more automatic and a part of the individual’s routine. This may initially occur by watching
Sunday football every week during the season, followed by more in-depth activities.

c. *Establishment* occurs once the individual has surpassed the basic knowledge required for participation.

d. *Maintenance*, the time when the leisure career is in full effect and individuals can now enjoy participation, having surpassed the obstacles associated with establishment. In fandom, being accepted into a social community of fans might indicate the maintenance phase.

e. *Decline* can occur but often does not. Decline in interest is sometimes associated with deteriorating mental or physical skills, or can occur because of competing interests and time pressures. Decline may not occur frequently in fandom, because many fans are termed “diehards” because they are fans "until death" (Scarinzi, 2015, p.123).

In 2001, Funk and James postulated a conceptual framework for understanding a spectator’s connection to sport. Their framework, titled, “The Psychological Continuum Model”, is similar to Stebbins’ career stages by describing the movement from initial awareness of a sport or team to full allegiance in four levels: Awareness, Attraction, Attachment, and Allegiance.

3. **Personal effort.** Personal effort (the third quality of serious leisure) may become linked to sports fandom in such an intense psychological and emotional capacity, that it might usurp that of many other leisure activities -- and even supplant other more essential responsibilities. As previously discussed, the endurance requirement of being a true sports fan means that one repeatedly engages in an activity even when the costs
surpass the rewards. In fact, the extraordinary devotion, as well as the frequency and intensity of behavior exhibited in sports fanaticism may be like addictive and obsessive-compulsive behaviors, although, in the case of fandom the behavior may not always be detrimental (Chung, Beverland, Farrelly, & Quester). However, the drive for fans to persevere despite outcome, in addition to obsessive-compulsive behaviors are frequently demonstrated by fans who are highly identified with their team (Wilson, 2011).

Also, the effort to acquire specific skills or gain knowledge (Stebbins, 2015) is evident in the observation of football fans that engage in fantasy football (Holleman, 2006; Dwyer, 2011). For example, American Express has estimated that nearly 75 million people (roughly a quarter of the U.S. population) played fantasy football during the 2015 season, spending billions of dollars over thousands of hours (Bresiger, 2015). Furthermore, some fans continually make pilgrimages to see their teams play (sometimes in the freezing cold), tailgate, purchase material goods that represent their teams, throw viewing parties, cheer loudly, and engage in various other effortful ways to demonstrate their allegiance.

4. Unique ethos. The fourth quality of serious leisure, the unique ethos of football, is evident in the experience of the NFL fan. This was illustrated in the weeks surrounding the most recent Super Bowl (2018) when the Philadelphia Eagle’s fans received national media attention for their passionate, rowdy, bizarre, and occasionally destructive behavior, all of which seemed to contribute to their earning “underdog” status going into the big game. Eagle’s fans adopted this term as their own, wearing uniform dog masks to the games to demonstrate their loyalty; fan scenarios in Philadelphia were particularly, emotionally charged. It is not uncommon for a fan base to express a
particular culture that aligns with their team or locale, and emotional, cognitive, and
gender implications of this unique ethos deserve separate discussion.

a. Emotional experience. The emotional experience of the NFL fan is notably intense during both negative and positive experiences and is critical to the fan subculture. Ironically, empirical literature on sports fandom or NFL fandom (mainly written by men) frequently bypasses discussion of the extreme displays of emotion frequently witnessed during games, perhaps in a subtle or unconscious attempt to abide by gender norms. Yet, the reality of the experience is powerful. Fans who highly identify with their teams show greater increases in physiological arousal while watching their teams play (Branscombe & Wann, 1992).

Stebbins suggests that the intensity with which some engage in their leisure might suggest at times that they are in psychological flow (Stebbins, 2015; Csikszentmihalyi, 1990; Seligman & Csikszentmihalyi, 2014). Flow is a form of optimal experience associated with the sensation of complete absorption while engaging in an intrinsically rewarding activity (Csikszentmihalyi, 1990; Seligman & Csikszentmihalyi, 2014). Stebbins discusses thrills, or “sharply exciting events and occasions that stand out in the minds of those who pursue a kind of serious leisure” (Stebbins, 2015, p.15) as unique experiences of flow. He suggests that such high points are key motivational factors in participation because they are so intrinsically rewarding. For the NFL football fan, a win may not always be necessary. Rather, thrills may come from a positive play on the field, seeing a favorite player run out, cheering/chanting with other participants, or even from the excitement of a negative play or from booing or heckling players or fans of the other team with fellow fans.
b. **Cognitive experience.** Cognitive distortions have a dominant influence on fan behavior and contribute significantly to the unique ethos of the population. Both anxiety and depression are positively associated with cognitive distortions (Rosenfield, 2004); cognitive distortions, commonly termed ‘biased perceptions’ or ‘attributions’ in the social psychology literature, are common in sport fandom, (Hastorf & Cantril, 1954; Boen, Vanbeselaere, & Feys, 2002; Wann & Branscombe, 1990; Madrigal, 1995). Biased perceptions and evaluations appear to occur more frequently in serious or highly identified fans, perhaps as a self-esteem maintenance strategy (Dietz-Uhler & Lanter, 2008). For example, Wann & Dolan (1994) found that strongly identified fans made more “team-serving” evaluations of their favorite teams than did fans who were weakly identified. Social identity theory informs our understanding of groups such as fan bases, and argues that to maintain a positive view of one's own group, one's evaluations of that group and its members will be more favorable than evaluations of another group and its members (Dietz-Uhler & Lanter, 2008; Hogg, 2006). This in-group, out-group distinction has been a popularized theme in the social psychology research and maintains that the awareness of the existence of categories (e.g., two groups) become part of the psychological self, affecting thoughts, feelings, and behaviors (Tajfel, 1974; Smith & Henry, 1996). Accordingly, because fan bases see themselves as members of the same in-group, distortions or attributions (explanations made for behavior) made are typically biased in a manner that supports the in-group. Smith and Henry (1996) asked participants to provide descriptive judgements on a variety of traits, quickly. They found that participants responded slower and made more errors when they did not perceive themselves to be part of the in group or were not similar in the traits they were
describing, suggesting that cognitive representations of the self and in-group are directly linked. It seems that descriptions of the self are facilitated for (similar) in-group traits and inhibited for (dissimilar) out-group traits.

Redden and Steiner (2000) reviewed intensity and intolerance as two common identifiers of serious fans, and posit the idea that the combination of the two may lead to incoherence in thinking, behavior, and goals. Human beings perceive the world as revolving around the self and are unaware of doing this. In addition, confirmation bias ensures that the individual typically feels strongly that he or she is being objective even when that is not true (Simons, 2013), and this applies specifically to how football fans interpret games. In 1951, Dartmouth and Princeton played each other in a controversial game that sparked disagreement between the two schools of fans regarding what occurred. Then, in 1954, researchers Hastorf and Cantril conducted one of the most famous studies in selective perception. They replayed film of the game to participants at each school and administered a questionnaire regarding the game’s events. They found two completely different versions of what transpired and noted that the diametrically-opposed versions, although interpreted differently by each group, were experienced as accurate to the competing perceivers (Hastorf & Cantril, 1954). The study also demonstrated that during football fandom, most individuals believe that referees are more objective when they make calls favoring their own teams. Likewise, more strongly identified fans make more internal attributions (e.g. we played awesome”) following a victory, but more external attributions (e.g., “the refs were crooked”) following a loss (Wann & Dolan, 1994).
In a related and common distortion, fans usually perceive that their own team and fan base are superior to those of rival teams (Wolfson, Wakelin, & Lewis, 2005), due, in part to cultural cognition. Cultural cognition is the strong and unconscious emotional prejudice against incoming information that undermines how an individual sees the world or compromises his or her social connections; this has implications for fandom because it results from human being’s unique motivation to share psychological states with others, which make it a sort of social tribalism (Tomassello, Carpenter, Call, Behne, & Moll, 2005).

Over the last 30 years, researchers have used the terms, Basking in Reflected Glory (BIRGing) and Cutting off Reflected Failure (CORFing) to investigate and illustrate the process of impression management that sports fans demonstrate (Boen, Vanbeselaere, & Feys, 2002; Wann & Branscombe, 1990; Madrigal, 1995). Stemming from social identity theory, BIRGing occurs when fans further associate and identify themselves with successful, or winning parties; CORFing is utilized to disassociate oneself from the failure of other parties. For example, Dietz-Uhler and Murrell (1999) found that strongly identified fans tend to evaluate a football team more favorably after wins, game outcomes that were expected, and games receiving more positive media coverage. BIRGing and CORFing involve distorted cognitive strategies and are utilized most frequently by those who highly identify with their teams and serve to increase self-esteem and positive emotions, while neutralizing negative emotions (Bizman & Yinon, 2002; Wann & Branscombe, 1990).

c. Gender. Fans will differ based on social and psychological needs, and the motives for engaging in fandom corresponds with those needs (Farrell, Fink, & Fields,
However, there is no consensus in the literature regarding differences in gender motives for engaging in sports fandom (Dietz-Uhler, Harrick End, & Jacquemotte, 2000; James & Ridinger, 2002; Wann, 1995). For example, Wann (1995) found that women were more highly motivated by family to engage in sport-spectating, but men were higher in motives of escape, affiliation, and self-esteem. However, James and Ridinger (2002) did not find any significant gender difference regarding a motive of escape, and found that men were higher on the family motive. Regardless of motives, increasingly busy lifestyles in American society leave family members with the need to connect with each other through shared activities. Wagner (2008) suggests that NFL football fandom has emerged as an important shared activity for families to engage in, and that appears to supersede traditional gender roles.

5. **Durable benefits.** The fifth quality of serious leisure, durable benefits, seems to be clear regarding leisure, but sports fandom is slightly more complex. One position that Stebbins (2015) originally took to explain the reason why people continually engage in a leisure activity is the **profit hypothesis**, whereby the rewards exceed the costs. As Jones (2000) points out, sports fandom may represent a phenomenon whereby the costs (losses) frequently exceed the rewards (wins), yet fans continue to remain loyal. Relative to football fandom specifically, Jones drew upon a recent surge in fandom literature and was able to delineate unique durable benefits that explain the reason why fans of losing teams persevere despite the profit hypothesis. When people truly love a sports team, development of the self is facilitated through the creation of a fan identity. Specifically, when individuals identify themselves as fans of a particular team, they take ownership of the cultural climate of the team and of the fan base, and it becomes integrated into their
personal identities. Furthermore, deep and satisfying emotions are experienced just by forming an allegiance with a team and with other fans (Ahuvia, 2006). It has been argued that sports fanaticism is one way that people satisfy the basic human need for affiliation and that fans form deep and meaningful relationships through identification with their teams (Scarinzi, 2015; Simons, 2013). Furthermore, fandom provides a unique opportunity to increase social affiliation, social supports, and social wellbeing, all which contribute to better health outcomes as well as to reinforcement of such fan-related behaviors (Jetten, Haslam, & Alexander, 2012). Similarly, another benefit of fandom is the opportunity for self-care. Self-care is defined as “the decision and strategies undertaken by the individual in order to maintain life, healthy functioning, and wellbeing” (Jaarsma, Stromberg, Martensson, & Dracup, 2003, p. 364). As previously discussed, leisure activities play a key role in psychological wellbeing and in finding social support, indicating that many leisure pursuits can be conceived of as falling under the umbrella of self-care. However, a search for relevant literature suggests that self-care is primarily examined in the context of medical management of chronic illnesses rather than in the context of psychological wellbeing.

6. Identification. The sixth and final quality of SL is identification. After an individual adopts the social identity of a serious leisure participant, or in this case, that of a "sports fan," it becomes a key element of his or her personal identity (Jones, 2000). Sports fans are sometimes considered, using negative connotations such as stubborn, aggressive, or ignorant. However, Simons (2014) posits the notion that it might be more accurate to conceive of sports fans as having “the ability to form deep, meaningful, quasi-relationships with sports teams” (p. 130). Although by very definition a relationship is
two-sided, modern research has proven that the brain does not know the difference. Simons asserts that being a sports fan means watching something with a certain intrigue that causes the viewer to need to interpret it. To do this, the individual may recruit the brain to process what is being seen in the same way he or she processes relationships. As with human-to-human relationships, observing the human-to-team relationships formed during sports fandom may be a metaphor that teaches about intrinsic human nature; that is, reasons why people love other people, form relationships and commit altruistic acts, as well as the reasons why people hate, commit acts of war and aggression, and divide themselves. Indeed, level of identification is a theme in the literature that seems to be predictive of various physical, cognitive, and emotional phenomena that occur during fandom. For example, level of enjoyment while engaging in fandom positively correlates with team identification (Madrigal, 1995; Wann & Schrader, 1997). Level of identification seems to vary, directly, with intensity of emotional reactions. Research shows that fans who strongly identify with a sports team experience more heightened levels of arousal (Dietz-Uhler & Lanter, 2008). Specifically, Branscombe and Wann (1992) found that strongly identified American fans had higher blood pressure readings after watching a boxing match, but those who more weakly identified with the sport had no change in blood pressure readings. Wann and Waddill (2007) conducted an investigation of fan sympathy following the death of Dale Earnhardt, Sr., who crashed while racing. The researchers found that NASCAR fans who identified as fans of Dale Earnhardt, Sr. expressed more sympathy than those who did not identify as such, indicating that emotional reactions by fans may vary with level of identification.
The brains of sports fans have been studied repeatedly to determine how, when, and why fans react to their teams in such robust ways, and evidence has been mounting since the 1990s that mirror neurons play a significant role. About one-fifth of the motor neurons that fire in the premotor cortex when an individual performs an action also fire at the sight of somebody else performing that action, and these are the neurons called “mirror neurons” (Kohler, Keysers, Umilta, Fogassi, Gallese, & Rizzolatti, 2002). When an individual sees a familiar action (e.g., throwing a ball), his or her mirror neurons activate, and continue firing until the action is complete or the individual ceases observation of the action (Gallese, Fadiga, Fogassi, & Rizzolatti, 1996). In this fashion, during sports fandom, there is evidence that the "spectating brain" activates in ways that are similar, in an attenuated way, to the "playing brain." In fact, while watching strenuous action, mirror neurons can even provoke a small uptick in heart and respiration rate (Paccalin & Jeannerod, 2000; Mulder, de Vries, & Zijstra, 2005). Specifically, a 2008 study found that while participants watched their favorite sports teams, mirror neurons put fans' brains in sync with their team’s players and in this way, are theorized to have allowed them to perceive themselves as taking part in the athlete’s actions. This is consistent with subjective report in which fans view themselves as part of the game. (Iacobani, 2008; Aglioti, Cesari, Romani, & Urgesi, 2008).

Aglioti et al. (2008) conducted the most relevant study at the University of Rome, where investigators recruited 10 professional basketball players, 10 “expert watchers” (basketball journalists and coaches), and 10 students who had never played basketball. In the first phase of the experiment, all three groups watched clips of players attempting free throws. The clips were paused at different intervals during the course of the shooting and
participants were asked to guess whether the shots would go in or not. The players made the most accurate predictions, and excelled at predicting shots before the balls had even left the player’s hands, compared with the expert watchers and novices. Experience clearly gave athletes an edge at understanding cues from the players’ bodies in the film.

In order to determine how much mirror neurons and motor systems contributed to reading the shots, the study was repeated in a second phase, but this time transcranial magnetic stimulation (which measures exact timing of neuronal firing in the brain) was used on all three groups to check for activity in the left primary motor cortex (an area where mirror neurons are particularly active and previously shown to fire when watching another human in action). Across all groups, there was an increase in electrical activity in this area, but both the players and the expert watchers showed a spike in activity in the specific motor areas involved in shot-taking (Aglioti et al., 2008). The players also showed greater excitation of motor evoked potentials, or signals preparing for intended action, specifically of the hand muscles controlling the ball. Furthermore, this activation was greatest when players watched the launch of a ball that was going to miss, as if they were trying to correct the shot.

Apparently, having direct experience with an action increases the rate at which mirror neurons fire, the resultant accuracy, and possibly even empathy. Iacoboni (2008) explains that transcranial magnetic stimulation, as used in the previous study, is best at measuring “strictly congruent” mirror neurons, or neurons that fire at the sight of a precise action that is in the spectator’s motor repertoire. There are also “broadly congruent” mirror neurons, which fire at observed actions that are only similar to the ones the spectator has previously performed. About two-thirds of our mirror neurons are
broadly congruent, which might suggest that even if fans have never directly played a sport, they likely have tossed a ball around or have run sprints, which allows for mirror neuron activation during spectatorship. However, those with more direct experience with the specific action will have both broadly congruent and strictly congruent neurons firing while watching their teams play; this enhances the overall spectator experience (Iacoboni, 2008). The evidence from Aglioti et al. (2008) implies that many more men than women have played football in their lives; therefore, their mirror neurons likely fire at a higher rate and they have greater excitation of motor-evoked potentials when acting as a spectator, priming them for action behaviors. Coupled with the findings that highly identified fans demonstrate greater empathy (Wann & Wadill, 2007) leads to the hypotheses that men who are highly identified NFL fans, as a group, may be more highly prone to impulses of outward affective displays. Gross and John (1997) define impulse strength as emotion-response tendency; they were the first to measure this along with other facets of emotional expressivity in the Berkeley Expressivity Questionnaire, a measure used in the present study.

To simplify, the fundamental need to belong and align ourselves with others is seen in sports fandom and is represented neurologically. Mirror neurons fuse the connection between the fan and the team by physiologically enhancing the way individuals watch (Simons, 2014) and it seems that experience enhances expertise and skills -- all of which can be very reinforcing -- further increasing the probability of future fan-related behavior.
Fan Reactions to Wins and Losses

Further support for the intense emotional experience of sports fans comes from affective reactions that were examined following a sporting event. In 1992, Hirt, Zillmann, Erickson, and Kennedy found that strongly identified basketball fans reported more severe emotions than the weakly identified fans following a game (i.e., higher levels of elation after a win and higher levels of depression after a loss). Recently, Crisp, Heuston, Farr, & Turner (2007) examined soccer fan emotions following a loss and discovered that highly involved fans reported more anger than sadness, and weakly identified fans experienced sadness, but not anger.

Nevertheless, fans reactions to wins and losses are gleaming examples of the intensity with which some participants are psychologically involved with the sport. It comes as no surprise that fans report an increase in positive emotions following a win and an increase in negative emotions following a loss (Dolan & McGeorge, 1994). Furthermore, the negative emotions experienced during NFL fandom can be damaging in the short-term. Simons (2013) asserts, “From the break of the huddle to the break of the heart takes about ten seconds” (p.7). And losses have literally broken hearts. After analyzing death rates in Los Angeles after the city’s team lost the Super Bowl in 1980 and after they won in 1984, researchers concluded that the intense emotional stress of a Super Bowl loss can trigger total deaths and cardiovascular deaths (Kloner, McDonald, Leeka, & Poole, 2009). In a follow-up article, the researchers discussed the mental stress, anxiety, and anger induced by sporting events that can trigger myocardial infarction and cardiovascular death (Leeka, Schwartz, & Kloner, 2010).
In addition, aggressive behaviors seem to increase following a loss. Card & Dahl (2011) investigated police reports of violent incidents between family members following losses of local NFL teams and found a rise in violence near the end of the game and immediately after an upset loss (when their team was predicted to win). In addition, this increase in violence was greater in response to more important games (Card & Dahl, 2011). Still, fewer suicides occurred on recent Super Bowl Sundays compared with non-Super Bowl Sundays (Joiner, Hollar, & Van Orden, 2006), perhaps due to the mass level of leisure enjoyment. These findings suggest that sports viewing plays a powerful role in the emotional reactions of sports fans, especially those who identify more strongly with their teams. For those with a deep psychological attachment to a team, emotions such as elation, satisfaction, contentment, depression, anxiety, and frustration can fluctuate dramatically over the short course of a single game (Dietz-Uhler & Lanter, 2008).

NFL

Stebbins (2015) posits the theory that leisure is influenced by its historical, cultural, and structural contexts. The professional American football league consists of 32 teams, split evenly into two conferences and eight divisions. The NFL is the most lucrative of any professional sports league in the world, making a staggering 13 billion dollars in the 2015 season (Ejiochi, 2014; Isidore, 2015). To put this in perspective, Major League Baseball brought in 9.5 billion (Brown, 2015); the National Basketball Association brought in 5.2 billion (Forbes, 2016); and the National Hockey League brought in 3.7 billion during their 2015 seasons. Major league soccer made just 461 million in their 2014 season. From Labor Day until the week after Christmas, 160 million fans watch the drama unfold, with team standings often changing on a weekly
basis (Brady, 2015). Following the regular season, the six highest-ranked teams from each conference advance to the playoffs to compete in a single-elimination tournament that culminates with two conference champions contending for the title in the ultimate championship game -- the Super Bowl, which is itself a monumental event considered by many Americans akin to a national holiday.

Of the four major professional sports leagues in North America, including basketball, football, hockey, and baseball, the NFL has been the most popular for over 30 continuous years (Rovell, 2014). About half of the entire U.S. population (160 million people) includes fans of the NFL, with current estimates asserting that men make up fifty-five percent (about 88 million) of the NFL fan base, and women compose forty-five percent (about 72 million) of fans (Dockterman, 2014). After almost a century of being branded a seriously male-dominated culture, women have powerfully and rapidly transformed the NFL fan base, and their presence has received considerable attention from the organization and from media in recent years. When analyzed by a prominent media marketing and analytics firm, female fan viewership was found to have risen 26 percent from 2009 to 2013, compared with an eighteen percent rise in men (Chemi, 2014). Similarly, there had been a 25 percent increase in Sunday Night Football viewing by women, compared with a 10 percent increase by men. It is not just viewership numbers on the rise for females, but engagement. Fantasy football participation grew to include 6.4 million women in 2013, a 10 percent jump from the 5.8 million who played in 2012 (Chemi, 2014). In various categories of growth of viewership, women seem to be consistently outpacing men. Consequently, the NFL has been forced to adjust. Changes in the organization’s policies on handling ethical issues that arise, marketing strategies,
and personnel decisions are just a few of the ways in which they have responded to their new consumers (Ambrose, 2007).

The ethical issues confronting the NFL over the years have not changed much, but the management of ethical controversies have. In the past, problems such as drug abuse, the concussion crisis, and domestic abuse historically have been handled in ways seen as too passive by many spectators. Players had been going free after violations such as punching women, raping women, shooting people, getting into bar fights, and even for cheating on the field (Marshall, 2016). The NFL has had a formal policy addressing off-field conduct since 1997 (National Football League, 1997). In an effort to appease growing unrest amongst fans and to prevent the continued downfall of its image, the NFL introduced a new conduct policy in 2007 (National Football League, 2007), and then again in 2014, (National football league, 2014), both of which limit the league’s disciplinary power in favor of that issued by more official authorities (O’Shaughnessy, 2010). The newest conduct policy emphasizes careful consideration of domestic violence, child abuse, and sexual assault and provides resources for those affected by players who come under investigation (NFL, 2014). In addition, the strict enforcement of the new personal conduct policy for crimes against women suggests that the league is now more carefully conceptualizing players’ controversial choices in ways that will not offend, and in consequence, lose the significantly growing fan base of women, as Janusz (2012) asserts. Recent popular articles with titles such as Women are pro Football’s Most Important Demographic: Will They Forgive the NFL? (Harwell, 2014) and The NFL is Only Growing Because of Women (Chemi, 2014) further illustrate these points.
With many believing that male interest in the sport is maxing out and that women represent a greater portion of future growth, marketing efforts towards the new fan base have ramped up considerably in recent years (Wagner, 2008). Targeted initiatives such as the NFL’s annual breast cancer awareness promotions and the launch of a new women’s apparel line reflect the league’s recognition that women represent 70 to 80 percent of all consumer spending for the NFL. In fact, marketing to females is logical, given that women frequently make decisions on behalf of their families with regard to recreational spending and are often the ones organizing household social activities, even those involving football (Brennan, 2013). Additionally, NFL franchises have been going out of their way to create a more inclusive culture. In the summer of 2007, the Baltimore Ravens created “Purple”, a club dedicated to female fans whose goal was to do a better job at involving the current women fan base (Llovio, 2007). Although the NFL has historically catered their marketing efforts to the male demographic, they have quickly adjusted to focus on the newer, more lucrative female half of their fan base.

The new female presence in the NFL represents a drastic change, if not a nascent evolution of the way the NFL staffs its positions. In April of 2015, Sarah Thomas was named as the first female football official of the NFL (Patrick & Keith, 2015). Shortly after, in July of 2015, Jen Welter became the NFL’s first female coach, after working as an intern for the Arizona Cardinals and coaching linebackers during their 2015 preseason (Edholm, 2015). Then, in January of 2016, Kathryn Smith was hired by the Buffalo Bills as the special teams quality control coach, making her the first woman to be a full-time member of an NFL coaching staff (Rodak, 2016). These three events, happening within a span of 9 months, represent a major breakthrough in the NFL’s gender barrier.
Furthermore, NFL fandom is a subculture whereby gender norms are blurred and social acceptance is heightened. Gender norms surrounding emotional expression in the United States have recently begun shifting away from the traditional notions that women are expected to express, and men, to suppress. The contemporary resistance hypothesis asserts that women access leisure opportunities in ways that oppose traditional gender roles (Shaw, 1994). Accordingly, the research in women’s leisure supports the idea that women may utilize leisure activities in ways that are different from men. Regarding the NFL, Wagner (2008) purports that the recent surge in female fans can, in part, be attributed to the notion that women have more opportunities than ever before to participate in organized sports at all levels of play, including spectatorship. Additionally, busy lifestyles leave many women feeling the need to connect with partners and family members through shared activities, and the surfacing of football as a defining social and cultural element in U.S. society has superseded traditional gender roles to provide that opportunity (Wagner, 2008). This is reflected in the “football is family” NFL commercial campaigns in recent years. Thus, athleticism and athletic knowledge may contribute to today’s evolving definition of being a woman, which is in stark contrast to traditional norms of femininity. As a result, women may use NFL fandom as an outlet to oppose gender norms and constraints, including gender norms of emotional expression, and therefore, may demonstrate fewer affective displays in the context of engaging in sport-related leisure. Conversely, recent studies in mirror neurons demonstrate that individuals with personal experience in a sport activity have more intense firing in the motor cortex while observing others play, which may lead to greater empathy and, consequently, affective displays from men while engaging in NFL fandom (Aglioti, 2008; Iacobani,
If this proposed, reversed gender pattern of emotional expression (men expressing and women withholding) is true, then NFL fandom is a community in which individuals can express emotions outside of the traditionally normed ways that have historically been tied to poor health (Bradley et al., 2001; Robertson et al., 2013)

In addition to the emotional implications, being a participant in fandom culture has specific cognitive and behavioral consequences. Specifically, the more highly involved/identified a person is with a team, the more intense are the emotional reactions to game outcomes (wins/losses; Crisp et al., 2007; Card & Dahl, 2011; Kloner et al., 2009; Leeka et al., 2010), as well as are the cognitive biases and distortions (Dietz-Uhler & Lanter, 2008; Redden & Steiner, 2000). Higher levels of cognitive distortions can serve to uphold group and individual identity and maintain self-esteem and pride, and may be particularly present in the emotionally invested sports fan in the form of external cognitive attributions following a loss, and in internal attributions following a win (Hogg, 2006; Wann & Dolan, 1994; Hastorf & Cantril, 1954; Uhler & Murrell, 1999).

It seems that NFL fandom in America has quickly become a serious leisure activity that is socially recognized as acceptable for both genders. Now, with half of the U.S. population identifying as NFL fans, and that half being almost evenly split amongst men and women, NFL fandom represents a leisure activity that is accessible for participants as well as for researchers interested in fandom behavior and gender-related variables. Despite the research indicating the widespread benefits of serious leisure, there have been, to date, no studies addressing its potential applications to promote healthy emotional expression.
Chapter 2: Research Questions/Hypotheses

Research Questions:

1. Is there a gender difference in rates of emotional expressivity (total scores on the BEQ) when exposed to an NFL fandom related prompt and does gender predict higher emotional expressivity (overall, positive, and negative as measured by the BEQ overall scores and BEQ positive and negative scale scores)?

2. Is there a gender difference in impulse strength of emotional expression (impulse strength scale on the BEQ) among NFL fans when exposed to an NFL fandom related prompt?

3. Does gender and NFL fandom (higher totals on the seriousness index of the SLIM) predict higher rates of cognitive distortions (measured by total ICD scores)?

4. Is there a gender difference in cognitive distortions (total scores on the ICD) among NFL fans when exposed to an NFL fandom related prompt?

5. Is there a gender difference in NFL fans in the seriousness of fandom involvement (measured by the SLIM seriousness index scores) when exposed to an NFL fandom related prompt?

Hypotheses:

1. It was hypothesized that women would demonstrate significantly higher rates of emotional expressivity than men and being female would significantly predict higher levels of positive, negative, and overall emotional expression.
2. It was hypothesized that men would display significantly higher rates of emotional expression impulse strength than women.

3. It was hypothesized that gender would not significantly predict cognitive distortions, but that NFL fandom involvement would.

4. It was hypothesized that there would be no significant gender difference in rates of cognitive distortions.

5. It was hypothesized that male and female NFL fans would not significantly differ in levels of NFL fandom involvement.
Chapter 3: Methodology

Design & Design Justification

The study employed 1.) a combined cross-sectional, experimental research design and 2.) a correlation design utilizing self-report measures to investigate the impact of gender and leisure involvement (as measured by the SLIM), emotional expressivity (as measured by the BEQ), and cognitive distortions (as measured by the ICD), during a football fandom experience (operationalized as exposure to a win or loss stimulus).

Recruitment of Participants

Power analysis for a MANOVA with two levels and 3 dependent variables was conducted in G*Power to determine a sufficient sample size, using an alpha of .05, a power of .95, and a medium effect size ($f = 0.25$), and it was found that the desired sample size is 153. Thus, given the likelihood of attrition, the study aimed to recruit a minimum of 200 potential participants through Facebook and by utilizing snowball-sampling methods. A recruitment invitation, posted on the researcher’s Facebook page, was sent to prospective participants via Facebook messenger that targeted NFL fans and attempted to encourage participation through the offer of a chance to win $100 gift card to the NFL fan shop. The posting included a link that could be clicked on at the participant’s leisure, leading to the demographics, followed by the surveys, created and hosted by SurveyMonkey. Snowball sampling was indicated because many participants were known by the researcher and her acquaintances. Baltar and Brunet (2012) recently conducted a study on virtual snowball sampling method using Facebook and found that
the use of Facebook in non-probabilistic samples can increase response rate/sample size
and its representativeness. In addition, using social networking sites for snowball
sampling saves both time and money, making it a rich source of participants for
researchers (Bhutta, 2012).

Inclusion and Exclusion Criteria

The inclusion criteria included being 18 years of age or older, endorsing that one
is a fan of the NFL and/or a fan of at least one NFL team. Because this study is targeting
fans of the NFL, an organization with significant cultural relevance in the U.S., and
additionally involves specific notions regarding gender socialization in the U.S., other
prescreening questions ensured that participants were born in the United States or
permanently reside in the United States, and that they are fluent in English. Participants
needed access to the internet to be included in the study. Based on the place where the
study was conducted and the fact that snowball sampling was utilized, it was expected
that the majority of participants lived in the eastern U.S., especially in or near
Pennsylvania, but it is possible participants from other regions were included.

Excluded were those who are under the age of 18, did not have internet access,
did not endorse being a fan of NFL football, and those who did not speak fluent English
or did not grow up in or permanently reside in the United States.

Measures

To measure leisure involvement, the Serious Leisure Inventory and Measure
(SLIM; Gould, Moore, McGuire, & Stebbins, 2008) was used as an additive index. To
measure positive expressivity, negative expressivity, and impulse strength, the Berkeley
Expressivity Questionnaire (BEQ; Gross & John, 1995) was utilized. Finally, the
Inventory of Cognitive Distortions (ICD; Yurica, 2001) was used as a measure for rates of cognitive distortions. See Table 2 for a breakdown of independent and dependent variables.

### Table 2

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<th>Independent Measures</th>
<th>Dependent Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gender (male or female)</td>
<td>1. SLIM Seriousness Index: measure of seriousness in a leisure pursuit. Higher scores indicate higher level of involvement in leisure activity</td>
</tr>
<tr>
<td>2. SLIM Seriousness Index</td>
<td>2. BEQ: measure of emotional expression (overall, positive, and negative). Higher scores on measure and subscales indicate higher emotional expressivity.</td>
</tr>
<tr>
<td></td>
<td>3. ICD: measures cognitive distortions. Higher scores indicate higher frequency of cognitive distortions.</td>
</tr>
</tbody>
</table>

*Note.* SLIM Seriousness Index = Serious Leisure Inventory and Measure Seriousness Index. BEQ = Berkeley Expressivity Questionnaire. ICD = Inventory of Cognitive Distortions.

**Serious Leisure Inventory and Measure.**

The *Serious Leisure Inventory and Measure (SLIM) Short Form* (Gould, Moore, McGuire, & Stebbins, 2008): The original version of the SLIM is a 72 item self-report measure that has demonstrated acceptable reliability and equivalency across samples. Two samples were used in the development of the SLIM, a convenience sample of 415 university students enrolled in a leisure skill/activity class, and a sample utilizing three
groups from different targeted pursuits (adventure racing such as canoe racing or bike racing; trail running, and paddling enthusiasts) totaling 485 participants. The second sample (composed of the three leisure groups) was used for cross validation to confirm psychometric properties in homogenous contexts. Gould et al. (2008) shortened the original version, using a Common Factor Analysis (CFA) so that each factor came to be represented by its 3 best performing items. The resulting 54-item SLIM short form demonstrated good model fit and construct validity (SRMR = .05; RMSEA = .04; NNFI = .94; CFI = .95) (Gould et al., 2008). There were no significant differences found as a result of the common factor analysis between the long and short form, demonstrating high internal consistency reliability, with Chronbach’s alphas ranging from .83 to .98 for 6 factors representing seriousness, and ranging from .67 to .96 for the 12 factors representing outcomes ($p \leq .01$ level), leading to the conclusion that serious leisure behavior is measured equally well with the original 72-item SLIM and the 54-item version of the SLIM (Gould et al., 2008).

The SLIM has been successfully used to measure the construct of serious leisure. It is considered to be a well-developed instrument reflecting systematic leisure pursuit (Heo et al., 2008). The SLIM short form utilizes a likert-scale anchored by 1, “strongly disagree” and 7, “strongly agree.” Six factors in both versions of the SLIM load on five qualities of serious leisure: perseverance, leisure career, significant effort, unique ethos, and identification with pursuit, representing an additive index that reflects level of ‘seriousness’ in a pursuit (Gould et al., 2008). This excludes a sixth and final quality of serious leisure: durable benefits, which are considered a consequence, rather than a reflection of a serious pursuit. As such, the remaining 12 factors (36 items) reflect an
inventory of outcomes/benefits of a serious pursuit and can be scored separately if desired. This study utilized the scoring of items loading on the five qualities (six factors, or 18 items) as an additive indication of seriousness. The possible range of scores for the 54 item SLIM short form seriousness index are 18 to 126 using a 7-point Likert scale. These scores were used for hypothesis-testing regarding level of leisure involvement. The remaining scores, or inventory of outcomes, is a measure to provide supplemental information that supports the discussion of benefits of engaging in the leisure activity. Specifically, there are three group outcomes that can be used in this discussion. For the purposes of this study, this inventory of outcomes was not utilized.

**Berkeley Expressivity Questionnaire.**

*Berkeley Expressivity Questionnaire (BEQ) (Gross & John, 1995).* The BEQ purports to measure emotional expressiveness. The BEQ (Gross & John, 1995) is based on a two-stage model of emotions consisting of an emotional impulse in the first stage and emotionally expressive behaviors in the second stage. The BEQ assesses the following three facets of emotional expressivity: 1.) impulse strength (e.g. “I have strong emotions.”); 2.) positive expressivity (When I’m happy, my feelings show.”); and 3.) negative expressivity (e.g., “It is difficult for me to hide my fear.”). Impulse strength measures the strength of emotional response tendencies, where positive and negative expressivity measure the degree to which emotions are behaviorally manifested. This self-report measure contains 16 items in Likert-scale format (1 = strongly disagree to 7 = strongly agree) and is scored as a total scale or scored separately for the individual facets. Development of the BEQ utilized three large undergraduate samples, a derivation sample (N = 470) and two replication samples (Ns = 394 and 528; Gross & John, 1995). For the
BEQ Total scale, coefficient alpha greater than .80 and an average inter-item correlation (AIC) of approximately .25 supported internal consistency; 68 undergraduate students retested after a 2- to 3-month interval yielded a test-retest reliability of .86. Recent coefficient alphas for the three subscales were .70, .70, and .80 for Negative Expressivity, Positive Expressivity, and Impulse Strength, respectively (Gross, 2000). Possible range of scores for the BEQ are 16 to 112. Range of scores for Negative Expressivity is 6 to 42; for Positive Expressivity is 4 to 28, and for Impulse Strength it is 6 to 42.

**Inventory of Cognitive Distortions.**

*Inventory of Cognitive Distortions (ICD) (Yurica, 2001).* The ICD was developed to identify and define the content of cognitive distortions. The ICD is a 69-item measure that was factor analyzed in a sample of patients from two outpatient clinics (N = 188) to reveal 11 different cognitive distortions: (1) externalization of self-worth, (2) fortune-telling, (3) magnification, (4) labeling, (5) perfectionism, (6) comparison with others, (7) emotional reasoning, (8) arbitrary inference/jumping to conclusions, (9) emotional reasoning and decision making, (10) minimization, and (11) mind-reading. The ICD is appropriate for use with adult participants and takes approximately 15-20 minutes to complete. Scores range from 69 to 345. The ICD was developed to have broad and standardized applicability and scope (Yurica, 2002). Recent psychometric properties of the ICD when used with a nonclinical, community sample were strong, with a Coefficient Alpha of .97 and were consistent with a .98 alpha in the previous clinical samples (Roberts, 2015). Rosenfield (2004) examined the relationship between cognitive distortions and psychological disorders to further investigate the use of the ICD, and found that across almost all axis I and axis II disorders, as the severity and sheer number
of disorders increased, so too did the frequency of cognitive distortions. In addition, he
found that half of the variance in number and severity of psychological disorders was
accounted for by the frequency of cognitive distortions. Rosenfield’s study demonstrates
the utility of the ICD in differentiating between healthy individuals and individuals with
psychopathology, as well as those with increased cognitive distortions (Rosenfield,
2004). Several other studies have shown a direct relationship between the frequency of
cognitive distortions and psychological dysfunction, as illuminated previously.

 Procedure

Recruitment advertisements were posted on the researcher’s and researcher’s
close contacts’ Facebook profile pages and sent in Facebook Messenger; it was also as e-
mailed to listservs of all graduate students at a graduate school in the Northeastern region
of the U.S. that specialized in professional training. Potential research participants
clicked a link taking them to the surveys. Prior to beginning the survey, participants were
asked if they were fans of the NFL and/or a specific NFL football team. If they answered
“no” to this or to any of the other inclusion criteria questions, they were thanked for their
time and informed that they were not eligible to participate in the study. If they met
inclusion criteria, they were then asked demographic questions including age, gender, and
relationship status; how they became a fan, if they had ever played on a football team,
and to name their favorite NFL team. Participants were then exposed to a prompt asking
them to imagine the last time they had a particularly emotional, personal experience
while they watched their favorite team play in an important game. The experimental
conditions were win or lose; they were asked to recount a time that their favorite team
either won or lost, to prime them and have them cognitively and emotionally to engage in
fandom. Participants were randomly assigned either to the win or to the loss prompt. Participants were asked to write briefly about a particularly emotional, personal experience they had, either with a team win or team loss while acting as a fan of the NFL. Participants then completed the SLIM, the BEQ, and the ICD. Survey monkey controlled for order effects by randomizing the order in which participants completed the questionnaires, after the initial prompt and emotion rating scale, which was always presented first. Recalling an emotional experience through writing has been used to prime individuals to rate the extent to which they had experienced emotions during that experience (Harmon-Jones, Bastian, & Harmon-Jones, 2016). After they had completed the questionnaire, participants were provided the option to enroll in a raffle to win a $100 gift card to NFL.com by providing an e-mail address. Participants were thanked for their time. The winner was later randomly chosen using the app, “Pretty Random.”

Statistical Plan

Preliminary analyses were conducted to examine the statistical assumptions of linear regression. A correlation matrix was used to explore intercorrelations among variables. Estimates of skewness and kurtosis were examined to verify the assumptions of normality and tolerance, and the Variance Inflation Factor (VIF) was used to examine the assumption of multicollinearity, using the full dataset. Variables in this model were assessed for univariate normality and had skewness and kurtosis values within ranges recommended by Curran, West, and Finch (1996), suggesting the data were normally distributed. The collinearity diagnostics were acceptable based on recommendations from O’Brien (2007). Homogeneity of variances were also tested using Levene’s tests, and unless otherwise noted, were normal.
To test the hypotheses, multiple regression analyses were conducted, with gender as a categorical predictor and leisure involvement as another predictor; levels of serious leisure involvement, emotional expressivity (positive, negative, overall), and cognitive distortions as the outcome variables. T-tests for independent samples were also conducted, using gender as the independent variable, and serious leisure involvement, emotional expressivity (overall, impulse strength), and cognitive distortions as dependent variables.

Chapter 4: Results

Participants
To investigate the hypotheses, volunteer participants were recruited using online social networking sites and through an e-mail listserv from a graduate school in the Northeastern region of the US. The initial participant “seeds” for the snowball sample were Facebook users or were students from the aforementioned college. The snowball collection method was initiated by sending out the survey via a Survey Monkey hyperlink. The survey was posted online for 9 months. At the time of the survey closing, 288 individuals had accessed the survey link by clicking on it through Facebook or e-mail. Of the 228 participants, 73 individuals did not meet inclusion criteria so were not advanced in the online questionnaire to complete the survey, or they did not complete the survey in full and were eliminated from the study, leaving N = 155 individuals who were eligible and completed all items. The data from these participants were utilized for the investigation of analyses.

Analyses of the demographic characteristics of all participants were conducted (see Table 3). Of the 155 participants, 76 were male (49%) and 79 were female (51%), which is approximately a 1:1 ratio of males to females. Ages of participants ranged from 20 years old to 68 years old. Eighty-five participants fell into the 20-29 range, composing approximately 55% of the total sample; 27 participants fell into the 30-39 range, composing approximately 17% of the total sample; 13 participants fell into the 40-49 range, composing approximately 8% of the total sample; 18 participants fell into the 50-59 range, composing approximately 12% of the total sample; and 12 participants fell into the 60-69 range, composing approximately 8% of the total sample. About 40% of participants were married; 32% were single, and 26% were in a relationship and/or living with their partner. Of the 155 participants, 74 identified as fans of the Philadelphia Eagles.
(47%). The second and third most popularly identified teams were the New York Giants (13%) followed by the New England Patriots (5%). When asked how much they identified with their favorite team on a scale from 1 to 5, with 5 being the highest level of identification, 4 participants (3%) rated at a 1; 14 participants (9%) rated at a 2; 23 participants (15%) rated at a 3; 52 participants (33%) rated at a 4, and 62 participants (40%) rated at a 5. Of all female participants, 15.2% reported they had played football on a team, and 75% of all male participants endorsed having played.

Tests of Assumptions

An initial correlation matrix was computed to investigate the dependence between all independent and dependent variables (See table 4). As a result, further analyses of the lost/won condition were ruled out due to insufficient correlation, indicating this experimental condition had no significant effect. Because of this, the resulting regression analyses were focused on gender, emotional expressivity, fandom, and cognitive distortions. Preliminary analyses were conducted to ensure no violations of the assumptions of normality, linearity, multicollinearity and homoscedasticity for relevant analyses (see Table 5).
Table 3

Demographic Characteristics of Participants (N = 155)

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range: 20-68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean: 34.94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard Deviation: 13.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>76</td>
<td>49.0%</td>
</tr>
<tr>
<td>Female</td>
<td>79</td>
<td>51.0%</td>
</tr>
<tr>
<td><strong>Relationship Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>62</td>
<td>40.0%</td>
</tr>
<tr>
<td>Single</td>
<td>51</td>
<td>32.9%</td>
</tr>
<tr>
<td>In a relationship/living with partner</td>
<td>40</td>
<td>25.8%</td>
</tr>
<tr>
<td><strong>Top Favorite Teams</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philadelphia Eagles</td>
<td>74</td>
<td>47.4%</td>
</tr>
<tr>
<td>New York Giants</td>
<td>20</td>
<td>12.8%</td>
</tr>
<tr>
<td>New England Patriots</td>
<td>8</td>
<td>5.1%</td>
</tr>
<tr>
<td><strong>Identification with Favorite Team (1-5 Likert scale)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>4</td>
<td>2.6%</td>
</tr>
<tr>
<td>2</td>
<td>14</td>
<td>9.0%</td>
</tr>
<tr>
<td>3</td>
<td>23</td>
<td>14.8%</td>
</tr>
<tr>
<td>4</td>
<td>52</td>
<td>33.5%</td>
</tr>
<tr>
<td>5</td>
<td>62</td>
<td>40.0%</td>
</tr>
</tbody>
</table>
Table 4
Correlation Matrix for all Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. LOST/WON</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Gender</td>
<td>.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. BEQNegScale</td>
<td>-.05</td>
<td>-.24**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. BEQTotal</td>
<td>.00</td>
<td>-.35**</td>
<td>.81**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. BEQPosScale</td>
<td>.03</td>
<td>-.24**</td>
<td>.47**</td>
<td>.79**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. SLIMSerious</td>
<td>.00</td>
<td>.05</td>
<td>.07</td>
<td>.04</td>
<td>.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. ICDTotal</td>
<td>.04</td>
<td>-.17*</td>
<td>.22**</td>
<td>.28**</td>
<td>.10</td>
<td>.21**</td>
<td></td>
</tr>
</tbody>
</table>

Note. BEQ-NegScale = Berkeley Expressivity Questionnaire Negative Scale. BEQ-Total = Berkeley Expressivity Questionnaire. BEQ-PosScale = Berkeley Expressivity Questionnaire Positive Scale. SLIMSerious = Serious Leisure Inventory Measure. ICDTotal = Inventory of Cognitive Distortions.

** p < .01
* p < .05

Table 5
Levene’s Test Statistics with Gender as the Independent Variable

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>F</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Emotional Expression</td>
<td>2.5</td>
<td>153</td>
<td>0.116</td>
</tr>
<tr>
<td>Positive Emotional Expression</td>
<td>1.73</td>
<td>153</td>
<td>0.19</td>
</tr>
<tr>
<td>Negative Emotional Expression</td>
<td>7.55</td>
<td>153</td>
<td>0.007*</td>
</tr>
<tr>
<td>Impulse Strength</td>
<td>3.99</td>
<td>153</td>
<td>0.047*</td>
</tr>
<tr>
<td>Fandom Involvement</td>
<td>2.45</td>
<td>153</td>
<td>0.119</td>
</tr>
<tr>
<td>Cognitive Distortions</td>
<td>0.174</td>
<td>153</td>
<td>0.677</td>
</tr>
</tbody>
</table>

*Equal variances not assumed due to violation of homoscedasticity
Hypothesis One & Two

Gender effect and difference in emotional expression.

Three linear regressions were conducted to determine if gender predicted emotional expressivity (i.e., positive emotional expression, negative emotional expression, and overall emotional expression). Three significant regression equations were found (see Tables 6, 7 and 8):

(a) Gender significantly predicted positive emotional expressivity, $F(1, 153) = 9.392, p < .01, R^2 = .058)$. These results indicate that gender explains 5.8% of the variance in positive emotional expressivity (see Table 6).

<table>
<thead>
<tr>
<th>Predictor</th>
<th>$b$</th>
<th>$\beta$</th>
<th>Test Statistic</th>
<th>$p$-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-1.72</td>
<td>-0.24</td>
<td>-3.07**</td>
<td>&lt;.01</td>
</tr>
</tbody>
</table>

(b) There was a violation of the assumption of homogeneity of variances in this model. With equal variances not assumed, gender also significantly predicted negative emotional expressivity, $F(1, 153) = 9.390, p < .01, R^2 = .058$. These findings indicate that gender explains 5.8% of the variance in negative emotional expressivity (see Table 7).
Table 7

**Negative Emotional Expressivity Predicted by Gender**

<table>
<thead>
<tr>
<th>Predictor</th>
<th>$b$</th>
<th>$\beta$</th>
<th>Test Statistic</th>
<th>$p$-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-2.42</td>
<td>-0.24</td>
<td>-3.06**</td>
<td>&lt;.01</td>
</tr>
</tbody>
</table>

**$p < .01$**

(c) Gender also significantly predicted overall emotional expressivity, $F(1, 153) = 21.428, p < .001$, $R^2 = .123$. These results indicate that gender explains 12.3% of the variance in overall emotional expressivity. (see Table 8)

Table 8

**Overall Emotional Expressivity Predicted by Gender**

<table>
<thead>
<tr>
<th>Predictor</th>
<th>$b$</th>
<th>$\beta$</th>
<th>Test Statistic</th>
<th>$p$-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-8.56</td>
<td>-0.35</td>
<td>-4.63***</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

***$p < .001$***

An independent samples t-test was conducted to compare emotional expressivity for men and women (see Table 9). There was a significant difference in scores of emotional expressivity between men ($M = 70.72$, $SD = 10.27$) and women ($M = 79.28$, $SD = 12.57$); $t(155) = 4.63, p < .001$, two-tailed. On average, women demonstrated a higher level of emotional expressivity than men. The magnitude of the differences in the means (mean difference = 8.55, 95% CI: 4.90 to 12.21) was moderate, approaching large (eta squared = .12).
An independent samples t-test was conducted to compare impulse strength of emotional expressivity for men and women (see Table 10). There was a violation of the assumption of homogeneity of variances in this model ($p < .05$). With equal variances not assumed, there was a significant difference in scores of impulse strength between men ($M = 27.01$, $SD = 4.95$) and women ($M = 31.43$, $SD = 6.18$), $t (155) = 4.92$, $p = .000$, two-tailed. On average, women demonstrated higher impulse strength than men. The magnitude of the differences in the means (mean difference = 4.42, 95% CI [2.64, 6.19]) was large (eta squared = .14).

Table 10

Mean Gender Differences for Impulse Strength of Emotional Expressivity

<table>
<thead>
<tr>
<th></th>
<th>Impulse Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
</tr>
<tr>
<td>Males</td>
<td>27.01</td>
</tr>
<tr>
<td>Females</td>
<td>31.43</td>
</tr>
</tbody>
</table>

Hypothesis Three & Four

The effect of fandom and gender on cognitive distortions.

A multiple linear regression was conducted to determine if fandom and gender predict cognitive distortions (see Table 11). A significant regression equation was found
(F (2, 153) = 6.292, \(p < .01\)), \(R^2 = .076\). Participants’ cognitive distortions increased .296 points for each point of fandom, and females scored 11.455 points higher, on average, than males. Both fandom and gender were significant predictors of cognitive distortions.

Table 11

*Multiple Regression Results for Cognitive Distortions*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>(\beta)</th>
<th>Test Statistic</th>
<th>(p)-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-11.46</td>
<td>-0.181</td>
<td>-2.32**</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Fandom</td>
<td>0.3</td>
<td>0.22</td>
<td>2.79**</td>
<td>&lt;.01</td>
</tr>
</tbody>
</table>

**\(p < .01\)

* \(p < .05\)

An independent samples t-test was conducted to compare cognitive distortion scores for men and women (see Table 12). There was a significant difference in scores of cognitive distortions between men (\(M = 92.74, SD = 31.73\)) and women (\(M = 103.54, SD = 31.75\)), \(t(155) = 2.15, p < .05\). On average, women demonstrated a significantly higher level of cognitive distortions than men. The magnitude in the difference in the means (mean difference = 10.81, 95% CI [.86, 20.76]) was small (eta squared = .03).

Table 12

*Mean Gender Differences for Cognitive Distortions*

<table>
<thead>
<tr>
<th></th>
<th>Cognitive Distortions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(M)</td>
</tr>
<tr>
<td>Males</td>
<td>92.74</td>
</tr>
<tr>
<td>Females</td>
<td>103.54</td>
</tr>
</tbody>
</table>
Hypotheses Five

Gender and fandom.

An independent samples t-test was conducted to compare seriousness of fandom for men and women (see Table 13). There was no significant difference in scores for men ($M = 73.93$, $SD = 21.68$) and women ($M = 71.75$, $SD = 24.84$); $t(155) = -.583$, $p = .561$.

Table 13
Mean Gender Differences for Seriousness of Fandom

<table>
<thead>
<tr>
<th></th>
<th>Fandom</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>SD</td>
</tr>
<tr>
<td>Males</td>
<td>73.93</td>
<td>21.68</td>
</tr>
<tr>
<td>Females</td>
<td>71.75</td>
<td>24.84</td>
</tr>
</tbody>
</table>
Chapter 5: Discussion

Gender differences in emotional experience have vast implications for both mental and physical health (Bradley, Codispoti, Sabatinelle, & Lang, 2001; Robertson et al., 2013). Leisure involvement is one promising area of study that has been identified as an effective mechanism for improving health outcomes for both genders, perhaps, in part, because such activity enables self-expression (Caltabiano, 1995; Kim, Heo, Lee, & Kim, 2015). Leisure has been known to increase positive emotions and decrease symptoms of depression and anxiety (Nimrod, Kleiber, & Berdychevsky, 2012) and because men are more frequently involved in fandom of most sports (Jones, 2001), this may partly explain the lower rates of most depressive and anxiety disorders in men. Few studies have addressed gender differences in emotional and cognitive processes during participation in these activities. Sports fans are a particularly rich source of data for understanding these phenomena because they experience intense fluctuations in emotions over a brief period while viewing games (Scarinzi, 2015) and because research asserts that fandom has important implications for identity, self-expression, self-actualization, altruism, and development of social relationships (Stebbins, 2001). In addition, women are increasingly bridging the gender gap among sports fan bases. Professional football fandom has been identified as a serious leisure activity (Wilming, Gibson & Holdnak, 2002) and, to date, it has been demonstrated that there is an almost equal gender divide among fans (Jones, 2015; Dockterman, 2014). The purpose of this study was to investigate gender differences in emotional expressivity, leisure involvement (fandom), and cognitive distortions to understand the impact that this increasingly popular leisure activity has on health and wellbeing. A strength of the current study was that our sample
was almost equally distributed on gender. Consequently, the findings on gender differences are particularly noteworthy.

**Effects of a Win vs. Loss on Fans**

The win/loss experimental condition, which consisted of being prompted to remember a win or a loss experience, did not produce a significant effect. There are a few different practical interpretations that could explain this finding. First, it is possible that exposure to an actual win/loss fan situation may not have had an effect on cognitive distortions, fan involvement, or emotional expression as it occurred in the present sample. However, there is an abundance of previously cited research that would directly contradict this conclusion and suggest that, in reaction to sporting events, fans do experience intense emotions (Dolan & McGeorge, 1994; Kloner, McDonald, Leeka, & Poole, 2009) and altered cognitive patterns (Wann & Dolan, 1994; Dietz-Uhler & Lanter, 2008). Therefore, the most likely interpretation of lack of experimental effect of the win/loss stimulus is that simply prompting a fandom-related memory through a writing exercise is not a potent enough stimulus to elicit changes in emotions or thinking, as measured in this study. Although writing prompts have been used in experiments investigating emotional experiences (Harmon-Jones, Bastian, & Harmon-Jones, 2016), these studies are limited, both in frequency and in scope of use and no standardized protocol has been delineated in the research.

**Results for Hypothesis Testing Involving Gender, Emotional Expression, & Fandom**

The first hypothesis, that women would demonstrate higher levels of positive, negative, and overall emotional expression than men, and that this gender difference would predict emotional expressivity was supported. Results indicated that women were
more inclined to report expression both of positive and of negative emotions. These gender differences are consistent with the aforementioned literature asserting that females experience high perception of emotions, but males experience low perception of emotions (Codispoti, Sabatinelle, & Lang, 2001; Moller-Leimkuhler, 2003) and consequently report fewer emotions (Angst et al., 2002; Zimet, Dahlem, Zimet & Farley, 1988).

The second hypothesis, that men would demonstrate higher levels of impulse strength (emotion-response tendency, or an individual’s urge to respond to stimuli with an affective display) was not supported. Emotional behavior, as with all behavior, is subject to change in response to various influences. In light of the current study, cognitive and neurological processes are particularly important considerations. It was hypothesized that men would endorse higher levels of impulse for outward affective displays because many more men than women have had direct experience playing football. This hypothesis was based, in part, on research into mirror neurons and motor-evoked potentials in sport spectators (Iacoboni, 2008; Aglioti et al., 2008). Motor neurons are nerve cells forming part of the pathway along which an impulse passes, and motor evoked potentials are impulses that prime action behaviors. Mirror neurons fire both during an act as well as when individuals observe others performing the same/similar action. All three are involved in sports playing as well as sport spectating, and these studies suggest that individuals who have direct experience playing the game have increased neuronal activation during sports viewing, which primes them for action behaviors.

Instead, results of the present study indicated that women demonstrated a significantly greater emotion-response tendency. Differences in these findings may be
explained as being due to divergent methodology. In Aglioti and colleague’s landmark studies, participants were exposed to video stimuli of individuals playing basketball, which likely exerted greater cognitive/emotional response than simply being asked to recall a game-watching experience (a decidedly vaguer, less stimulating, and short-term stimulus), as in the current study. Thus, differing stimuli between our studies may explain the differential effects.

Decades of research have confirmed that females demonstrate significantly higher levels of empathy, emotion recognition, and social sensitivity than males, and attest to the fact that these tendencies are pervasive and consistent across the lifespan and cultures (Mestre, Samper, Frias & Tur, 2009; Schulte-Ruther, Markowitsch, Shah, Fink & Piefke, 2008; Christov-Moore et al., 2014). The connection between empathy and mirror neurons is well established (Iacoboni, 2009; Lamm & Majdandzic, 2015). Results from a 2008 study by Markowitsch and colleagues examining gender differences in neural networks supporting empathy, suggest that females utilize areas of the brain with greater levels of mirror neurons than males (specifically the right inferior frontal cortex and superior temporal sulcus) during empathetic interactions. In addition, it has been theorized that these gender differences in neural networks have developed over the course of evolution (de Waal, 2008). It is possible that in the present study, strongly engrained patterns of empathetic responses to stimuli in females had a greater effect on emotion-response tendency than males’ direct experience playing football.

Another factor that could have influenced these results is that with more women joining the NFL fan base, men may be conforming more to gender stereotypes during fandom, which would require them to withhold emotions to appear stronger, particularly
in the presence of women (Dedovic et al., 2009; Mahalik, 1999). Furthermore, men are far less likely than women to report negative emotions and because affective displays typically follow gender stereotypes and display rules, gender conclusions drawn from the current study regarding emotional experience may not be accurately reflective of less artificial fan experiences (Angst et al., 2002; Simon & Nath, 2004).

The third hypothesis was that fandom would predict cognitive distortions, but gender would not. Results from the regression analysis demonstrated that fandom was in fact predictive of cognitive distortions. This finding is in line with previous research on the biased perceptions of highly identified sports fans (Dietz-Uhler & Lanter, 2008). In addition, female participants were more likely to endorse cognitive distortions, and male participants were less likely to endorse cognitive distortions. Thus, contrary to what was hypothesized, it was found that gender was predictive of fans’ cognitive distortions.

Based on the heightened emotions that fans experience, and the fact that women perceive emotions more intensely (Bradley, Codispoti, Sabatinelli, & Lang, 2001), and report them more often (Moller-Leimkuhler, 2002; Moller-Leimkuhler, Bottlender, Straub & Rutz, 2004), it follows that female participants’ elevated emotional states could lead to greater distortions in thinking.

Hypothesis 4 proposed that there would be no significant gender difference in levels of reported cognitive distortions. This hypothesis was not supported, based on the results of the t-test, which identified female participants as reporting significantly higher frequency and number of cognitive distortions. The research on gender differences in cognitive distortions is limited (Bruno, 2010; Leung & Wong, 1998); however, this
finding is not surprising when considering the connection between emotional arousal, psychological dysfunction and cognitive distortions.

Epidemiological studies have determined that females have higher rates of mental health diagnoses such as many anxiety and depressive disorders (Bradley et al., 2001; Kessler, 2003) and suggest that both biological factors and environmental provoking experiences play a role in in women’s risk for mental health diagnoses. Specifically, gender inequality and female insubordinate status in most societies lead to higher vulnerability for adverse effects of stress. In addition, women have less autonomy than men and increasing demands in modern day society (i.e., dual pressures of being a mother and careerist), which can lead to higher rates of pathology (Brown et al., 2000; Haworth & Lewis, 2005; Jackson & Henderson, 1995). These diagnoses require certain criteria to be met, including symptoms of emotional, behavioral, and cognitive dysfunction (American Psychiatric Association, 2013; Beck, 1967, Abela & D’Alessandro, 2002). Rosenfield’s 2004 study investigated the relationship between clinical syndromes and personality disorders on the one hand, and cognitive distortions on the other hand. The latter was operationalized as ICD scores. He found that that, with few exceptions, these disorders were positively associated with cognitive distortions. He also found that participants reported cognitive distortions accounted for about half of the variance in severity of pathology and number of diagnosable disorders. It is likely then, that reported cognitive distortions in the current sample may partially reflect levels of anxiety, depression, and other mental health disorders (which may be subthreshold/undiagnosed or meet diagnostic criteria because this study did not screen for
pathology) that are known to be more prevalent in females and to correlate with cognitive distortions.

Finally, hypothesis 5 was supported with the finding of no significant gender difference in seriousness of fandom (the level of long-term, frequent engagement, and concerted effort in being a professional football fan). This emphasizes the importance of (NFL) fandom as a leisure activity for both genders and reinforces the proposed notion that among the rising numbers of female professional football fans, involvement, identification, and seriousness in pursuit of their fandom may be matched in quantity to that of their male counterparts. In other words, based on the current findings, it appears that female NFL fans are as passionate about their fandom as their male counterparts.

Limitations

Several limitations for the current study should be noted. First, the method for participant recruitment was one of convenience, or a snowball sampling. Participants were recruited online through Facebook and were associated with the responsible investigator researcher by varying degrees of separation. Other participant recruitment took place over e-mail using approved listervs within the participating graduate school. Therefore, sampling was not a random representation of the general population. Although this method is thought to be more representative than many samples of convenience that employ undergraduate college students only, due to the limited region from which the majority of participants will likely come (the Northeastern United States around Pennsylvania), it likely is not as diverse as the larger population and caution should be taken when generalizing results.
A second limitation is that data were collected online, where many external variables could account for participant responses. For example, participants could have been multitasking while completing questionnaires, or they could have been distracted for a number of reasons or have had another person next to them influencing their responses.

Finally, participants were not actively engaged in fandom when data were collected; this could lower the robustness of findings. The stimulus used in the experimental condition to examine the effect of a game win or loss, asking participants to remember a game, may have lacked sufficient power to produce an effect. Additional extraneous variables that might have influenced this research include the locale of participants (which was not assessed), presence of others during participation, and whether or not their favored team had a winning or losing year.

Implications

Our finding that women endorsed higher levels of cognitive distortions is a novel contribution to recent discussions in literature, which have lacked investigation into the effect of gender on cognitive distortions. Delineating gender differences in cognitive distortions provides important considerations that can lead to improved diagnostic accuracy and can help mental health professionals further understand the nuances involved in the treatment of psychological disorders in men and women (Clark, Beck & Brown, 1989; Leung & Poon, 2001; Strohmeier, Rosenfield, DiTomasso & Ransay, 2016).

This study provides a greater understanding of the changing gender landscape in contemporary American culture, including implications for healthy emotional expression by both men and women as well as participation in popular activities, such as NFL.
fandom. Previous literature has discussed the theory that suppression of emotions in men leads to poorer physical health outcomes, and that elevated levels of emotional expression in women may lead to more frequent bouts of mental health dysregulation (Robertson et al., 2013; Moller-Leimkuhler, 2003; Bradley et al., 2001). Conversely, the finding that sports fans suffer from depression and alienation less than people who are not interested in sports (Branscombe & Wann, 1991; Wann, Dunham, Byrd & Keenan, 2004) illuminates the psychosocial benefits fandom can provide that lead to better health outcomes.

Functional improvements and better health outcomes achieved through leisure activities have been demonstrated. Specifically, leisure has been shown to alleviate both depression and anxiety (Strohle, 2009; Martinsen, 2008), improve adaptive skills in individuals with intellectual disabilities (Patterson & Pegg, 2009), facilitate posttraumatic growth among people with spinal cord injuries (Chun & Lee, 2008), potentially delay the onset of dementia symptoms (Scarmeas, et al., 2001), and modify symptom presentation in individuals with Schizophrenia (Mausbach et al., 2006).

Participation in leisure activities fosters happiness, better health, and social support, thus providing strategies to better cope with life’s stress (Majnemer, 2009). The personal, social, and community benefits of serious leisure activity has been discussed through the lens of fandom (Wilming et al., 2002). In the U.S., particularly, sports fandom is an important cultural pillar of everyday life for tens of millions of people. Collins (1990) suggests that expression of emotions and cognitions facilitate social cohesion and relationships. The in-group out-group distinction found among sports fans suggests that allegiance to one’s own fan group engenders feelings of cohesion and
solidarity, and functions as a significant source of social support, at least with the in-group (Tajfel, 1974; Smith & Henry, 1996; Stebbins, 2015). As an extension, Coleman and Iso-Ahola (1993) describe leisure as a source of relief for people with excessive stress by facilitation of companionship. Finally, Stebbins (2015) posits that social wellbeing comes from having a high quality of life, which is derived in part by serious leisure.

Fandom may be a particularly important and accessible opportunity for expression and social connection that is not as constrained by gender roles as other activities encountered in everyday life. Expanding serious leisure research in general, specifically in the area of fandom, can have far reaching implications for the general public, including the improvement of mental and physical health.

**Future Directions**

One practical suggestion is increased engagement in leisure for both clinical and non-clinical populations, and improvement in the promotion of leisure from health care providers. Although many clinicians agree that leisure is an important aspect of social life for their clients, it has been found that these professionals do not frequently promote recreation and leisure for their clients (Thomas & Rosenberg, 2003). Recently, pediatric journals have focused on topics related to patient enjoyment of leisure activities and have concluded that providers need to be more proactive advocates for policy changes that will facilitate increased participation in meaningful leisure (Majnemer, 2009). Furthermore, a gradual shift in health care practice from the medical model to a biopsychosocial model further supports the need to expand the role that health care providers take to promote the benefits of leisure in holistic treatment plans.
Another pragmatic suggestion involves the utility of leisure and sports fandom in psychotherapy. Metaphors and analogies tailored to the patient’s specific leisure involvement can help to clarify therapeutic concepts and connect skill acquisition to personal values, making the experience more meaningful. For example, someone who is a marathon runner can be guided to compare the process of the physical training and racing to other obstacles in life. The metaphorical “finish line” can provide motivation to act and perhaps produce a mental shift towards a more positive outlook. It is suggested here that because fans engage in high levels of distorted thinking, clinicians working with individuals who happen to be sports fans, employ examples of thoughts that they experience while viewing sports. The highly emotional responses that fans experience during sports fandom seem to be a naturalistic way to teach patients how to identify and modify cognitive distortions. This skill, which can then be generalized to other areas of life, is an important part of evidence-based treatment for depression and anxiety disorders, among other disorders (Beck, 2011).

Proponents of serious leisure are currently striving to ensure that it earns a prominent place in research. Although ongoing occurrences in many scholarly journals (e.g., entire issues devoted to serious leisure in the World Leisure Journal, vol. 35 (1), 1993 & vol. 43 (2), 2001) and across a diverse range of activities reflect the growth of serious leisure, sports fandom has only recently grabbed the attention of scholars in the field (Jones, 2000; Gibson, Willming, & Holdnak, 2002). Furthermore, Gibson, Willming, & Holdnak suggest that football fandom is seen as a venue for researchers to examine some of the many themes that have emerged in the serious leisure research over the years, including gender-related variables. It is also suggested that future studies
examine obstacles to accessing, engaging in, or enjoying leisure activities other than the
heavily focused upon gender constraints would help to expand the scope of leisure
literature and make it practical and relevant for the current population.

In addition, Kleiber, Kelly, and Iso-Ahola (1980) suggest that leisure is dynamic
and the meaning of activities can change course throughout the lifespan and the
transformation of family. Gibson, Willming, & Holdnak (2002) suggest that researchers
should adopt a developmental, life course perspective in order to better understand how a
leisure career fits into the life journey of individuals. This could particularly hold true for
NFL fans, as football fandom increasingly becomes a family activity in the United States.
The developmental perspective also bodes well with recent research in serious leisure that
attempts to shed light on contextual variables such as gender. It is suggested that future
gender research be conducted regarding serious leisure activities as well as emotional
expression. A review of the literature revealed that the concept of self-care is
predominately investigated under the purview of medical management. Self-care should
be defined in the research as a psychological concept as well because it may provide a
means by which individuals can access activities promoting mental health and wellbeing,
and is a term popularly used within the zeitgeist of psychology. Accordingly, leisure
might be researched as a rich landscape of activities through which self-care can be
achieved. Finally, replicating this study while participants are engaged in a live fandom
environment can increase the robustness of findings and the ability to detect important
gender differences.

This study indicates that cognitive distortions may be enduring and pervasive, but
perhaps manifest in different situations. The connectedness of cognitive distortions and
emotional experience in sports fans is another novel contribution to the literature. As such, future studies should explore both cognitive distortions and emotional experience as they present during fandom and other social situations to better understand the motivational and behavioral components that drive behavior. Similarly, this study could be repeated with objective measures such as Galvanic Skin Response (GSR), heart rate, or cortisol levels while people are reviewing game tape or watching a live game. More research investigating the use of emotional prompts is also needed. These changes could lead to greater effects within a win or loss condition as well as emotional expression.

Finally, further analyses using this data could be run to investigate the interaction between gender and fandom and corresponding implications for cognitive distortions. Future research should look at levels of cognitive distortions in women to see if the current finding generalizes. Finally, studies could include differences among fan bases (of different teams) to explore the notion that fan culture within the NFL organization is distinctly unique to each team. These are just a few suggestions for expanding on the varied investigations and findings that were included in this study. There are certainly many promising directions that could lead to improved emotional wellbeing among both clinical and nonclinical populations, and it is our hope that this study provides seeds for more ideas, theories, and philosophies.
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