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## Fake Sports, Real Impact? Investigating Social Identity, Identity Construction, and Perceptions of Self Using Fantasy Sports Leagues as a Platform for Communication Research

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FAKE SPORTS, REAL IMPACT? INVESTIGATING SOCIAL IDENTITY, IDENTITY  
CONSTRUCTION, AND PERCEPTIONS OF SELF USING FANTASY SPORTS  
LEAGUES AS A PLATFORM FOR COMMUNICATION RESEARCH

Adam J. Mason

102 Pages

The present study used fantasy sports as a vehicle for investigating social identity formation and expression in online communication scenarios. Particularly of interest to the researcher were the mechanisms by which affinity for an individual's fantasy sports league was generated, perceptions of public commitment to a fantasy sports identity, and the impact that commitment had on respondents' behavior and self-concept. It was believed completing tasks associate with fantasy sports competitions and interacting socially with fellow fantasy league participants would have a direct effect on players' level of collective self-esteem. It was also posited evaluations of collective self-esteem would then predict the likelihood of and extent to which players publicly committed themselves to fantasy sports as part of their identity. Recent research in the field of computer-mediated communication has investigated the effects of perceived public commitment to a personal identity trait. Building on such research, the present study looked to document the effect of public commitment to a group based, social identity. In sum, a total of five hypotheses were proposed predicting various relationships among variables including collective self-esteem, public commitment, prototypical behavioral displays, and personal self-esteem. Survey data was collected and used to test each hypothesis. The majority of

hypothesized relationships were supported. The implication of these findings and their impact on the fields of communication, fantasy sports, psychology, and sociology are discussed here.

**KEYWORDS:** social identity; fantasy sports; self-esteem; public commitment

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ADAM J. MASON

A Thesis Submitted in Partial  
Fulfillment of the Requirements  
for the Degree of

MASTER OF SCIENCE

School of Communication

ILLINOIS STATE UNIVERSITY

2017

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ADAM J. MASON

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## CONTENTS

	Page
ACKNOWLEDGMENTS	i
CONTENTS	iii
CHAPTER I: INTRODUCTION	1
CHAPTER II: LITERATURE REVIEW	2
Social Identity	2
Self-Esteem	7
Social Identity and Public Commitment: The Missing Link	13
Interpersonal Interaction in CMC	17
Receivers	18
Senders	19
Characteristics of Channel	20
Feedback	20
CMC and Social Groups	21
Identity Shift in CMC	25
Fantasy Sports Leagues	29
Social Interaction in Fantasy Sports Leagues	32
Situating Fantasy Sports in CMC Research	34
Fantasy Sports: Collective Self-Esteem and Commitment to a Fantasy Sports Identity	37
Fantasy Sports: Social Identity and Identity Shift Investigation	39
CHAPTER III: METHODS	46
Participants	46

Procedure	46
Measures	46
Task Participation	47
Social Interaction	47
Collective Self-Esteem	48
Public Commitment and Size of Public	48
Prototypical Behavior	49
Personal Self-Esteem	49
Performative Feedback	50
CHAPTER IV: RESULTS	51
CHAPTER V: DISCUSSION	57
Limitations	75
Conclusion	79
REFERENCES	80
APPENDIX A: SCALES	92
APPENDIX B: FIGURES AND TABLES	100

## CHAPTER I: INTRODUCTION

The study of identity, specifically ideas and expressions of identity dependent upon other social actors, is by no means new. Goffman (1959) discusses a dramaturgical perspective to the presentation of self, proposing we display to others, as if on a stage, those identities we wish to convey. This extends to those identities which may be performed as a matter of expectation, function, or even as part of a team performance. Goffman (1959) goes on to explain that in most situations individuals wish for others to be taken in by their performances, and, in some instances, those individuals are taken in by our own displays, thus incorporating that character into their concept of self. This is to say, Goffman (1959) highlights, through explication of everyday social interactions, the importance of others when it comes to the creation and enactment of our own identities. What is new, relative to Goffman's (1959) assertions, is the exploration of identity and the collaborative social construction thereof in computer-mediated environments (Carr & Foreman, 2016; Gonzalez & Hancock, 2008; Turkle, 1994; Walther, 1996; Walther et al., 2011). Despite a growing body of work on the matter, online interaction and how it contributes to one's self-concept remains a complex issue requiring additional study due, in part, to the occurrence of communication in an ever-increasing array of online contexts. One such environment is fantasy sports leagues, whose study may have much to contribute to the application and understanding of current CMC theories (Boyan, Westerman, & Daniel, 2016). Therefore, the present research looks to understand the effects of participation in fantasy sports leagues and resultant social interactions on one's self-concept. To accomplish this, it is important to first review extant research and literature on social identity, self-esteem, related CMC concepts, and fantasy sports.

## CHAPTER II: LITERATURE REVIEW

### **Social Identity**

Given the various ways identity has been studied, it is appropriate to first offer some concrete conceptualization with regard to how the construct will be approached in the present research. *Social identity* has been described as, “that part of an individual’s self-concept which derives from his knowledge of his membership of a social group (or groups) together with the emotional significance attached to that membership” (Tajfel, 1974, p. 69). Similarly, Brewer (1991), explicates that *personal identity* is “the individual self – those characteristics that differentiate one individual from others in a given social context” (p. 476). At their core, these definitions describe two distinct yet related concepts and illuminate a consistent theme in the discussion regarding identity. Identity, both its formation and confirmation, is an inherently social process. Jenkins (2008) argues for this reason the term “social” should be removed when discussing social identity. However, such a change would certainly create confusion when trying to delineate the previously mentioned terms, appreciate their differences, or study their interaction.

Despite a shared social component, the distinction between personal identity and social identity is best understood based on the ability of each to satisfy, in different ways, the basic and often competing human needs of individuality and acceptance (Brewer, 1991; Jenkins, 2008). Both Brewer (1991) and Jenkins (2008) argue, at a very basic level, personal identity serves to highlight differences between people. By comparing themselves to others, individuals are able to identify those things about themselves that make them unique. Conversely, Brewer (1991) and Jenkins (2008) describe social identity as primarily related to how individuals categorize themselves into or seek membership in various groups of similar others. However, both personal

and social identity are far more complex than these simplified statements can reflect. For an example of this, we turn to social identity theory (SIT; Tajfel & Turner, 1979).

SIT posits that one's various group memberships, based on shared similarities between themselves and other group members, have the ability to affect social interaction and self-concept (Tajfel & Turner, 1979). Although this assertion by Tajfel and Turner (1979) implies group membership based on certain similarities like ethnicity and gender might lie beyond the control of group members, Brewer (1991) refers to social identity related group memberships as choices which depend on a commitment to a shared similarity or a recognition of its salience to one's personal identity. Regardless, these groups, united through similarity, are commonly referred to as *in-groups* (Allport, 1954; Brewer, 1991, 1999; Tajfel & Turner, 1979). SIT goes further by asserting positive evaluations of this shared identity are contingent upon comparing one's chosen in-group to other groups, or *out-groups*, in a bid to recognize the superiority of the in-group (Tajfel, 1974; Tajfel & Turner, 1979). If these comparisons, however, lead to a negative evaluation of social identity, individuals are likely to leave or distance themselves from a particular in-group as a means of maintaining positive evaluations of self (Tajfel 1974, Tajfel & Turner, 1979). Basically, social identity may be concerned with self-concepts derived from similarity to other individuals, but evaluations of that identity rely on differentiation and competition with out-groups. For Tajfel (1974), researching intergroup dynamics and the resultant effects on identity was about more than just trying to better define social identity; it was about understanding social identity's capacity as a tool for social change (Hornsey, 2008; Tajfel, 1974). This makes sense, as the foundation of SIT offered by Tajfel (1974) and Tajfel and Turner (1979) was likely influenced by their roles as British social psychologists in post-World War II Britain. Hornsey (2008) notes that in the aftermath of the war, researchers, including Tajfel and

Turner, were driven to better understand the social interactions and principles that may have contributed to the crisis lived by various groups during the war. While SIT has guided many significant contributions to social identity research and continues to be used as a framework by many researchers today, it does little to account for those social groups one may belong to which do not readily rely on negative out-group evaluations or constant intergroup comparison as a means of in-group promotion or affinity building.

Allport (1954) asks whether or not an in-group truly needs an out-group to achieve identity, solidarity, and cohesion. He admits, by definition, the existence of an in-group recognizes that all other groups are, indeed, out-groups. This is a simple function of boundaries. These boundaries do not in and of themselves indicate groups are locked in competition or comparison with out-groups as a means of achieving optimal feelings about their in-group (Allport, 1954). As Allport (1954) explains:

Although we could not perceive our own in-groups excepting as they contrast to out-groups, still the in-groups are psychologically primary. We live in them, by them, and, sometimes, for them. Hostility toward out-groups helps strengthen our sense of belonging, but it is not required (p. 42).

This claim does not reject the potential power of out-group comparison, competition, or denigration, but asserts that not all in-groups are reliant on such things to achieve sustainability or warrant affiliation. In a review of approximately 40 years of social psychology research, Brewer (1999) shows there is ample justification for Allport's (1954) approach, suggesting that even in cases of discrimination and uneven distribution of resources, preference is given to in-groups by their own members due to in-group affinity rather than a required dislike or hatred for the out-group. That being said, dependent on context and outcome, in-group situations do

become fertile grounds for negativity, competition, and hatred between groups when a clearly defined and competing out-group can be identified (Allport, 1954; Brewer, 1999). Allport's (1954) assertions do not exist in mutual exclusion from the proposition of SIT; they instead admit certain groups may perpetuate affiliation and social identity via intergroup comparison, but offer alternative explanations for situations in which intergroup comparison is overly broad or irrelevant. In this way, intergroup competition, social comparison, and out-group discrimination are behaviors contingent on specific group norms, a claim likely to be rejected by Tajfel and Turner (1979) who felt SIT could offer a foundational explanation for many group processes. Given the importance of in-group affiliation regardless of comparison to relevant out-groups, further research is needed to discover how in-group connection is perpetuated in social contexts where the in-group exists without a clearly defined and competing out-group.

Despite conflicting views on how social groups build and solidify positive group identity, it is generally accepted that individuals form and/or seek groups as a means of building a positive self-concept through the preservation or improvement of self-esteem (Allport, 1954; Brewer, 1991; Tajfel & Turner 1979), a hypothesis often associated with SIT (Brewer, 1991). This hypothesized connection between group membership and self-esteem complicates the distinction between individual and group processes, showing individual motivation to participate in groups which consequently affects the individual. Humans seek group affiliation as a means of acceptance and related emotional fulfillment so that social identification can enhance one's self-esteem. Unfortunately, neither Tajfel (1974) nor Tajfel and Turner (1979) specify the type of self-esteem central to SIT's self-esteem hypothesis, the idea that in-group members differentiate themselves from and denigrate out-group members as a means of boosting the status of the in-group thereby generating positive self-esteem. This hypothesis was derived, in part, as the result

of minimal group research conducted by Billig and Tajfel (1973) who found individuals even arbitrarily assigned to groups would demonstrate favoritism to the in-group at the expense of the out-group. In fact, Billig and Tajfel (1973) state “the mere mention of ‘groups’ by experimenters was sufficient to produce strong intergroup discrimination” (p. 48). In relation to SIT’s self-esteem hypothesis, however, the minimal group paradigm conflates rather than clarifies the multiple roles self-esteem may play in helping one form a social identity.

As previously stated, the impetus for joining a group or identifying as a group member is done as a means of developing a positive self-concept related to needs for inclusion. Here self-esteem functions as a motivator, a reason in and of itself for why individuals join, and potentially leave, groups. Alternately, explanations of minimal group research suggest in-group members promote the in-group at the expense of the out-group as a means of increasing the value of in-group membership. The justification for this line of reasoning being that with no prior group connection or established group norms, the driving force behind in-group promotion is the establishment of a more positive connotation for membership in said group. In other words, to generate more positive self-esteem, in-group members instinctually discriminate against out-groups. Thus, self-esteem is also treated as a consequence of group promotion. In effect, SIT argues that self-esteem both motivates group membership and is mediated by the boosting of group status, but does little to fully differentiate between these processes. After all, why would one work to promote a group as a means of building self-esteem instead of simply distancing themselves from that group if it were incapable of meeting their self-esteem needs? Recognizing the complexity of self-esteem as a concept, something not clearly done by Tajfel and Turner (1979), could help answer this question.



In a review of over 20 studies addressing SIT's self-esteem hypothesis, Rubin and Hewstone (1998) found "the majority of evidence does not support social identity theory's self-esteem hypothesis in its full and unqualified form" (p. 56). Instead, Rubin and Hewstone's (1998) meta-analysis indicated when the type of self-esteem being researched was used to categorized studies (e.g. *specific personal state self-esteem*, *global social trait self-esteem*, *specific social trait self-esteem*), each category included at least one study offering support for SIT's self-esteem hypothesis and one study labeled unsupportive of SIT's self-esteem hypothesis. These findings suggest one's self-esteem (in a generalized sense) is not reliant on bolstering the importance of in-group membership via out-group denigration. Rubin and Hewstone (1998) offer a revision to SIT's self-esteem hypothesis, acknowledging a relationship between the concept of social identity and self-esteem but, in effect, highlighting the potential for that relationship to shift dependent upon the type of self-esteem under observation. A more complete understanding of the relationship between social identity and self-esteem therefore requires clarity when addressing the concept of self-esteem. The present research is concerned with both *specific personal state self-esteem* and *specific collective (social) state self-esteem*. Consequently, the following section explores self-esteem conceptually.

### **Self-Esteem**

*Self-esteem* has reached a certain level of ubiquity in both society and academic research. Even those with an applied, professional interest in self-esteem, such as counselors, seem to understand the concept at some abstract level, but are rarely clear about how the term is defined (Guindon, 2002). Ironically, it is this expansive understanding of certain terms which requires researchers and practitioners alike to be explicit in their use. James (1890), whose writings on self-esteem are regularly mentioned in research addressing the concept (e.g., Breckler &

Greenwald, 1986; Guindon, 2002; Leary, 1999; Rosenberg, Schooler, Schoenbach, & Rosenberg, 1995), offers a basic definition of self-esteem where our personal successes are divided by our pretensions. What James (1890) essentially claims is our assessment of self-worth involves comparing what we believe about ourselves and our abilities to how successful we are at matching those preconceived beliefs. While this definition laid the groundwork for over a century of research, the definition of self-esteem has since evolved. Rosenberg (1979) argues that self-esteem is a positive or negative attitude toward an object: in this case, the self. This builds on James' (1890) definition by directly including an emotional evaluative component (positive/negative) to self-esteem development.

Researchers have categorized and examined various dimensions of self-esteem. Those self-esteem dimensions most commonly referenced in the literature are global/specific (Rosenberg et al., 1995), trait/state (for review see Heatherton & Polivy, 1991), and personal/collective (Breckler & Greenwald, 1986; Luhtanen & Crocker, 1992).

First, *global* and *specific self-esteem* focus on perceptions of self-worth as a whole or perceptions of self-worth related to a particular facet of the self, respectively. Rosenberg (1979) defined self-esteem as consisting of a positive or negative orientation toward the self. An individual having a positive orientation, or high self-esteem, “has self-respect, considers himself a person of worth” (p. 54), whereas an individual having a negative orientation, or low self-esteem, “lacks respect for himself, considers himself unworthy, inadequate, or otherwise seriously deficient as a person” (p. 54). While Rosenberg (1979) explicates development of self-concept can happen at both global and specific levels, the assessment of self-esteem is primarily discussed in a global fashion, leading to the development of the Rosenberg Self-Esteem Scale (Rosenberg, 1979). Later, the global/specific delineation made regarding self-concept would also

be applied to self-esteem (Marsh, 1986), generating research seeking to compare the two concepts. Rosenberg et al. (1995) bring attention to this difference by testing global self-esteem and self-esteem related directly to academic performance, academic self-esteem. The need for a conceptual separation between global and specific self-esteem was supported. Additionally, specific self-esteem, in its many iterations, was identified as a likely factor in the development of global feelings of self-esteem, but global self-esteem as a generalized concept is likely to have little effect on specific self-esteem development. Put another way, one might show high proficiency at scrapbooking and as a result feel better about one's self due to their ability to preserve memories in a fun and creative fashion, thus contributing to a better overall feeling of self-esteem. However, having a generally high feeling of worth does not serve as an indicator that they will excel at scrapbooking nor does it indicate how they might feel about success or failure at such a task. The question then becomes to what degree a particular type of specific self-esteem might affect an individual's performance at specific self-esteem related tasks and an individual's feelings of global self-esteem.

As an indicator of this relationship, Rosenberg et al. (1995) found that increasing academic self-esteem has the potential to improve academic performance. For example, if one were applauded for their critical thinking skills, their feelings of worth connected to that task would improve, and as a result, they would be more likely to perform well on future tasks involving those skills. This is in line with previous research indicating feedback on one task is likely to affect performance on related tasks (Shrauger & Rosenberg, 1970). Moreover, Rosenberg et al. (1995) found that specific self-esteem generated from positive evaluative feedback on task performance was more likely to affect global self-esteem when the trait implicated by the performed task was of value to participants. Returning to the previous

example, a positive evaluation of one's critical thinking skills is likely to increase their feelings of worth related to those skills, but if that same individual assigned a great deal of value to critical thinking skills, a positive evaluation of those skills would also affect their general feelings of worth as well. The findings of Rosenberg et al. (1995) provide additional support for Rosenberg's (1979) assertion that an individual's global self-esteem is "based not solely on an assessment of his constituent qualities but on an assessment of the qualities that count" (p. 18). To evaluate the qualities that "count," one generally relies on how they wish to be viewed and believe they are viewed by significant others (Breckler & Greenwald, 1986; Leary, 1999; Luthanen & Crocker, 1992; Rosenberg, 1979). This helps to demonstrate the connection between self-esteem and identity, both social and personal which, as previously stated, have a social component to their construction (Brewer, 1991; Jenkins, 2008; Tajfel, 1974).

Next, researchers have also provided definitions of *trait* and *state self-esteem* expressing trait self-esteem is a more stable and consistent evaluation of self developed over a long period of time, whereas state self-esteem is more prone to fluctuation as it is evaluated on a situational basis and is formed in reaction to how an individual evaluates themselves at the present moment (Heatherton & Polivy, 1991; Leary, 1999; Rubin & Hewstone, 1998). While this may seem similar to the global/specific dimension, it is important to note the difference between the two. Trait and global self-esteem are similar in that they are more stable and less likely to exhibit conspicuous fluctuations compared to state or specific self-esteem, respectively. However, the distinction comes from the time frame over which the particular evaluation of self occurs. To demonstrate, it is entirely possible for one to have a momentary, overall feeling of worthlessness following a rapid series of failures (global state self-esteem), but there is no guarantee the feeling of worthlessness will be enduring. Similarly, it is also quite possible that one experiences an

enduring and unflappable feeling of accomplishment in a particular area, say academics, after repeatedly receiving high marks as a student (specific trait self-esteem) and one bad mark is unlikely to shake that confidence. The enduring or momentary nature of trait/state self-esteem is thus not synonymous with global/specific self-esteem, but instead constitutes another dimension which must be accounted for when evaluating how a variable may affect one's evaluation of self-worth.

Finally, a distinction between *personal* and *collective self-esteem* is offered. It could be argued that since the first scholarly musings of self-esteem by James (1890) the majority of self-esteem research has dealt primarily with the personal aspect of self-esteem (Luhtanen & Crocker, 1992; Breckler & Greenwald, 1986). *Personal self-esteem* is the evaluation of self crucial to one's personal identity and is comprised of an individual's traits, qualities, accomplishments, or failures. One's personal self-esteem is reliant on how successful they are at matching the image of self they wish to portray (James 1890) and the emotional evaluation of that success (Rosenberg, 1979). In contrast, *collective self-esteem* is an evaluation of self made in relation to one's group affiliations. Collective self-esteem may involve both "expected success at achieving reference group goals" (Breckler & Greenwald, 1986, p. 158) and "the value placed on one's social groups" (Luhtanen & Crocker, 1992, p. 303). Similar to the definition of social identity discussed previously, these definitions place a specific emphasis on one's various social groups in helping that individual establish a sense of self. This can, however, theoretically be achieved in different ways. The desire to achieve reference group goals more closely aligns with social identity motivations discussed by Allport (1954) and Brewer (1991; 1999). Achieving reference group goals (assuming those goals do not specifically involve denigration of the out-group) is more internal to the group, suggesting in-group affiliation and affinity building may not depend

on specific out-group comparison. However, the idea of value being assigned to one's groups may fall more in-line with Tajfel (1974) and Tajfel and Turner's (1979) assertion that social identity is achieved primarily via out-group comparison. When assessing the value of the in-group, much like when assessing the value of self, comparison between groups, much like comparison to individual others, may become more salient. While the collective self-esteem scale (CSES) developed by Luhtanen and Crocker (1992) was originally designed to measure the self-esteem hypothesis set forth in SIT, it contains items capable of measuring self-esteem in relation to both of the above-mentioned interpretations of social identity. For the purpose of clarity, it is worth noting Luhtanen and Crocker (1992) concluded that scholars have addressed both social and collective identity as synonymous with one another dependent on research background, and as such the term "collective self-esteem" was chosen during the development of their collective self-esteem scale (CSES). Therefore, the present research uses the term collective self-esteem when referring to the assessment of self-esteem connected to social identity.

Taken together, research on the various dimensions of self-esteem demonstrates a need for researchers to clearly state their aim in researching this fairly ubiquitous term. Rubin and Hewstone (1998) further clarify these distinctions by showing how the previously defined dimensions can be integrated to help narrow terminology, offering combinations such as "global personal trait self-esteem – usually I feel good about myself" (p. 43) and "specific social state self-esteem – at the moment I feel good about my gender" (p. 43). Taken from Rubin and Hewstone's (1998) classifications for self-esteem, the present study focuses on *specific personal state self-esteem* and *specific collective (social) state self-esteem*, addressing the need for clarity when researching this complex and nuanced concept.

## **Social Identity and Public Commitment: The Missing Link**

Aside from a lack of specificity when addressing the self-esteem hypothesis, there are other shortcomings of SIT stemming from the minimal group research (e.g. Billig & Tajfel, 1973) on which SIT is partially built. Initially, in-group favoritism is not entirely indicative of out-group aggression (Brewer, 1999). Although minimal group research would indicate in-group members tend to naturally favor their own, research wherein in-group members were asked to allocate negative resources to or harm out-group members found no evidence that group membership alone was sufficient in prompting aggressive negative treatment of the out-group (for review see Brewer, 1999). Essentially, arbitrary group assignment does not appear to automatically activate aggression toward out-groups. When viewed through this lens, available research would again appear to indicate blatant and overtly negative treatment of certain out-groups is grounded in the normative behavior or ideals promoted by specific groups, not the result of “the mere mention of groups” (Billig & Tajfel, 1973, p. 48). While the invocation of groups does not appear to be sufficient for generating in-group aggression toward out-groups, even Brewer’s (1999) analysis would suggest it is capable of activating in-group favoritism. Hertel and Kerr (2001) offer one explanation for why this occurs.

Looking to better understand the psychological processes contributing to the outcomes of minimal group research, Hertel and Kerr (2001) conducted an experiment mirroring the inconsequential classification and resource allocation structure of previous minimal group research while also priming, or making more readily accessible, certain social scripts. In the first of two experimental conditions, participants were primed to value loyalty, and in the second experimental condition, participants were primed to value equality. During the allocation task, participants in the loyalty condition demonstrated much greater levels of favoritism toward their

in-group than participants in the equality condition. Hertel and Kerr (2001) explain these results support the conclusion that the in-group favoritism witnessed in minimal group research is reliant on the social scripts and norms to which individuals have access. Put another way, in-group favoritism, at its base, may not be motivated by one's adherence to the norms of a particular group, but by one's understanding of group norms as a general concept. If an individual is conditioned to prize and exemplify loyalty, they would perform loyalty behaviors regardless the group to which they were assigned, even if the assigned group was indifferent toward loyalty behaviors. Although Hertel and Kerr's (2001) priming occurred in a controlled experimental environment, it would be hard to deny that throughout the course of an individual's life they are primed, or more broadly, socially indoctrinated, by myriad examples of acceptable and unacceptable social behaviors. Simply put, when one becomes an in-group member, if their understanding of groups, as a whole, equates group membership with behaviors indicative of loyalty, then that individual is more likely to exhibit in-group favoritism. Identifying a pattern of in-group favoritism (Brewer, 1999) and examining the psychological processes potentially contributing to that pattern (Hertel & Kerr, 2001) validates Allport's (1954) proposition regarding the primacy of in-group affiliation over that of out-group competition as a foundation for social identity, offering a new direction for social identity research. Brewer (1999) states:

If we take Allport's insight about the primacy of in-group orientations seriously, we must first come to a better understanding of how and why in-groups are formed and why individuals exhibit in-group loyalty, identification, and attachment in the first place. (p. 432)

Brewer (1999) does not dismiss the value of social comparison, but explicates it is one of many processes which may help to explain the connection between in-group affiliation and hostility



toward out-groups. In order to more fully explain the development of in-group affiliation, social identity research would benefit from further investigation focused on the origin of group identification and the negotiation of that identity (Brewer, 1999).

Returning to Hertel and Kerr's (2001) experiment, participants in the study were asked to answer a series of scale items designed to measure their level of identification with the group to which they were assigned. Researchers found those in the loyalty condition more heavily identified as part of the group they were assigned than did those in the equality condition. Hertel and Kerr (2001) assert this indicates the salience and value of loyalty scripts has a demonstrable effect on one's level of identification with a given group. To be clear though, regardless of experimental condition, all participants included in the final analysis did show some level of identification with their assigned group. This is because, of the 56 participants in the study, four "failed to endorse their categorization" (Hertel & Kerr, 2001, p. 320), meaning they rated below the minimum threshold on identification measures and were thus excluded from the final analysis. Exclusion occurred on the grounds that group favoritism is shown to other in-group members "given that persons accept the group categorization" (p. 316). Assuming acceptance of group categorization as a given effectively allowed the researchers to examine one particular force influencing identification processes, but inspires the present research to question what might lead one to clearly identify with a particular group in the first place being as denial of categorization is clearly an option. Moreover, this question appears to be largely unaddressed at such a basic and foundational level in social identity research. Extant literature involving personal identity offers some guidance in how researchers might address this issue.

Tice (1992) conducted a series of experiments wishing to better understand how interpersonal interaction could affect personal identity formation. Tice (1992) argued that

internalization of an identity trait would be intensified by a public commitment to that identity compared to a private performance of or personal self-reflection on that trait. The results of these experiments supported Tice's (1992) claims by demonstrating the psychological primacy of identity traits which one had publicly performed compared to privately performed displays of the same identity traits. Additionally, this research found internalization of the trait was intensified, in an additive manner, when other interpersonal factors were manipulated to more heavily favor the salience of the publicly performed identity. For example, when a publicly performed identity was the choice of the participant, internalization of the performed identity was more intense than in conditions where participants were asked to publicly perform an identity chosen by the researchers. Basically, when a personal identity trait is performed in a public, interpersonal context, the individual performing that identity is more likely to internalize that performance, more fully incorporating that identity into their concept of self.

Adding to this line of research, Schlenker, Dlugoleki, and Doherty (1994) discovered public performance of personal identity traits was capable of creating lasting behavioral and perceptual changes in participants. The experiments conducted by Schlenker et al. (1994) also suggest the behavioral and perceptual changes created by these public performances were resistant to change via self-reflection. Even when asked to think of times when their behavior or perception might indicate they did not fit the publicly performed identity, participants were more likely to think of those instances as exceptions to rule, favoring the more recently internalized identity. Kelly and Rodriguez (2006) conducted an experiment whose results validated previous research while also discovering that internalization of publicly performed identities could be further intensified through increasing the extent to which participants believed they were publicly identifiable. The extent to which participants believed interpersonal feedback was likely

to occur and the extent to which feedback was anticipated to confirm the performance of identity also positively affected internalization (Kelly & Rodriguez, 2006).

While the studies conducted by Tice (1992), Schlenker et al. (1994), and Kelly and Rodriguez (2006) were conducted using personal identity traits, it is not unreasonable to assume the public performance of a social identity could be internalized through the same processes. By publicly committing to a group or social identity, the internalization of that identity may be intensified, making that identity harder to deny or reject. When considering the internalization of performed identities may be further enhanced in computer-mediated environments (Gonzalez & Hancock, 2009) and by the interpersonal interactions therein (Carr & Foreman, 2016, Walther et al., 2011), it is important that we explore computer-mediated interactions and their effect on the identity commitment process.

### **Interpersonal Interaction in CMC**

Walther (2011) notes, “computer-mediated communication (CMC) systems in a variety of forms, have become integral to the initiation, development, and maintenance of interpersonal relationships” (p. 443). As computer-mediated environments have evolved in their uses and affordances, so too have theories revolving around CMC. Initially, researchers approached CMC in a similar fashion to those forms of communication thought to be less capable of expressing the plethora of social cues present in face-to-face (FtF) interactions (e.g. Short, Williams, & Christie, 1976); but this quickly came under criticism as it did not account for observations indicating relational communication was occurring over computer-mediated channels despite their seemingly impersonal nature (see Walther & Parks, 2002). Looking to explain such contradictory results, Walther (1992) proposed what would become social information processing theory (SIPT). SIPT posits, given increased time to transmit information, CMC interactions can

eventually achieve a level of social and relational development similar to FtF interactions. However, Walther (1995) only found partial support for this hypothesis, noting that communication over CMC channels may be more complex than previously thought. This led to the development of the hyperpersonal model of CMC (Walther, 1996).

The hyperpersonal model of CMC was proposed by Walther (1996) as a means of explaining the instances uncovered by researchers in which CMC had proven preferable or more effective than similar FtF interactions in building interpersonal and group relationships. The model posits computer-mediated channels of communication are capable of facilitating “forms of interaction that exceed what we may accomplish FtF, in terms of our impression-generating and relational goals” (p. 28). This proposition was forwarded by Walther (1996) after an analysis of how the affordances unique to mediated communication, and more readily present in CMC, may augment key parts of a more traditional transactional communication model, namely “receivers, senders, characteristics of the channel, and feedback processes” (p. 17). These basic elements of transactional communication were analyzed with specific attention paid to how they functioned differently in a computer-mediated environment as opposed to how they may function in traditional FtF interactions.

### **Receivers**

Walther (1996) observed a tendency in CMC for those receiving messages to “inflate the perceptions they form about their partners” (p. 17). Receivers tend to create idealized mental impressions of their relational partners which is more likely to happen in reduced cue environments and over larger expanses where FtF interaction becomes untenable such as in CMC. When receivers are given fewer cues from which to generate impressions they tend to over-estimate the meaning of those cues and lack the ability or willingness to verify such over-

estimations. Walther (1996) identifies the findings of social-identity deindividuation theory (SIDE) researchers (Lea & Spears, 1992; Spears & Lea, 1992) as support for this claim. He notes in reduced cue environments when individuals perceive similarities between themselves and those with whom they are communicating they tend to more positively evaluate those individuals.

### **Senders**

Returning to Goffman's (1959) claims that senders constantly work to construct an outward performance of self for others, Walther (1996) proposed certain affordances unique to CMC are utilized by senders to develop and more selectively and/or strategically present such performances, compared to FtF interactions. Indeed, certain aspects of self can be manipulated in FtF interactions, some of them different from what is even present to be manipulated in CMC. For example, in FtF interaction, people can wear makeup, fix their hair, meticulously choose their outfits, and so on when constructing their presentation of self. But in FtF interaction the multitude of available and often unintentional cues available to the receiver can affect the interaction in ways undesired by the sender initiating the communication. However, in computer-mediated contexts, senders can carefully construct, edit, and refine messages to the point that those messages are likely to convey only the information the sender wishes to divulge. Additionally, the number of traditional verbal and nonverbal cues available to message receivers are limited in CMC, reducing the transmission of unintended information from the sender. This selective self-presentation occurs, in part, due to the asynchronous nature of some CMC. Even when CMC occurs in a more synchronous manner, Walther (1996) implies the sender can still take advantage of the limited cue nature of CMC to create the desired impression of themselves due to the reduction of unintentional cues.

## **Characteristics of Channel**

Although physical cues such as appearance are reduced in CMC channels, other cues grounded in information, expression, and the ability for acceptable asynchronous communication are used in CMC by senders to communicate desired presentations of self. Some users may rely on the lack of those cues present in FtF interaction to achieve a level of social interaction that may have otherwise been unavailable to them. Walther (1996) explicates that because computer-mediated contexts lack the traditional physical cues of FtF interactions, social and relational capital is accumulated through the use of language. In CMC, senders achieve selective self-presentation linguistically, and receivers, in turn, assigned greater meaning to the content of the message to develop impressions of the sender. Therefore, because of the nature of the channel itself, senders and receivers are likely to use the limited cues with which they are presented to inform their evaluation of their relationship with their communication partners.

## **Feedback**

Walther (1996) draws attention to the importance of feedback in interpersonal interactions and how it assists in a process known as *behavior confirmation*. When a sender displays a particular behavior or attitude, the receiver of that message has the ability to affirm that behavior through feedback. This behavioral confirmation indicates the receiver believes the performance of the sender, but it can also lead the sender to more concretely internalize the performed behavior as part of their own identity (Snyder & Swann, 1978). Walther (1996) then uses the findings of Snyder, Tanke, and Berscheid (1977) to explain how this behavioral confirmation process is magnified in the limited-cue environments created by mediated forms of communication similar to CMC. Snyder, Tanke, and Berscheid (1977) conducted an experiment where men were asked to hold telephone conversations with women. Prior to their conversation,

the male research participants were shown a photograph of either an attractive or an unattractive female and told it was a picture of the person with whom they were about to have a conversation. Those participants who were shown a photo of an attractive female treated their conversational partner in a more socially desirable manner than those individuals who were shown photos of unattractive females. Consequently, female participants who were treated as more socially desirable, despite their actual level of physical attractiveness, responded by acting in a more socially desirable manner than the female participants who were believed by male participants to be unattractive. By drawing attention to these findings, Walther (1996) demonstrates that in limited cue environments senders and receivers may affect perceptions of each other and themselves through reciprocal interaction where performed or perceived traits are initially developed via a limited amount of information.

Highlighting how general communication processes may be significantly altered in a computer-mediated environment, the hyperpersonal model offers a strong theoretical base to guide research on interpersonal interactions in dyadic and group oriented situations in CMC.

### **CMC and Social Groups**

Similar to Walther's (2011) statement that CMC systems have become an essential facet of interpersonal interaction, the same could be said about group communication given the body of work addressing task/work group communication in CMC (e.g. Lowry, Romano, Jenkins, & Guthrie, 2009; Walther, 1993, 1995, 1997; Walther & Bunz, 2005), social support groups in CMC (e.g. Lewandowski, Rosenberg, Parks, & Siegel, 2011; Rains, Brunner, Akers, Pavlich, & Tsetsi, 2016; Schiffrin, Edeman, Falkenstern, & Stewart, 2010; Turner, Grube, & Meyers, 2001; Walther & Boyd, 2002), and larger online communities (e.g. Baym, 1998). Despite this focus on group communication behavior and effects in CMC, little of this research focuses on groups

intended purely as a means of maintaining social connections amongst group members or groups formed offline that maintain communication by means of CMC. Such investigations would require greater attention to intragroup motivations for interaction in social groups, something that Wittenbaum and Moreland (2008) identified as somewhat of a scholarly blind-spot.

In a meta-analysis of highly accessible social psychology publications, Wittenbaum and Moreland (2008) discovered social psychology researchers disproportionately study intergroup interactions at the expense of studying intragroup interactions. Moreover, they assert as research investigating social dynamics between groups has received greater notoriety, opportunities for social psychology researchers to study the social dynamics within groups has declined due to a perceived lack of interest in such research by the field as a whole. Therefore, social psychologists wishing to study intragroup dynamics have taken positions in other disciplines, such as communication, hoping to pursue their interests (Wittenbaum & Moreland, 2008). However, from a communication standpoint, researching group dynamics appears to be relatively synonymous with shared task or goal oriented achievement. In a review of foundational group communication theories, Littlejohn and Foss (2011) note each theory in some way supports the statement that “effective group work accomplishes tasks and builds interpersonal relationships” (p. 286). Although this statement recognizes the presence of interpersonal relationships in groups, it assumes groups are task oriented, needing quality interpersonal relationships only in so far as they help accomplish the group’s true purpose. Perhaps then this lack of focus on the dynamics of social groups is because the study of these dynamics falls under the purview of interpersonal communication. However, O’Sullivan and Carr (in press) suggest one characteristic of traditionally defined interpersonal communication is that it involves “a very small number (usually two) of participants” (p. 2). With an emphasis on



understanding dyadic relationships, interpersonal communication theory does not directly address larger social groups, leaving a gap which appears to have received little attention from researchers.

To better illustrate the above claim, an example is offered, applying common perspectives in social psychology, group communication, and interpersonal communication to a social group composed of five graduate students from the same cohort. Research on intergroup dynamics could help to illuminate how this group of graduate students would interact with other graduate students at the same institution from a different cohort or how they might interact with graduate students from a different institution. Common perspectives in group communication theory could help to explain how this group might optimize their performance striking a balance between task and interpersonal orientations when collaborating on a paper, advocating for program policy changes, organizing a fund raiser, or leaning on each other for social support as they navigate the many challenges of graduate school. Interpersonal communication theories focused heavily on dyadic relationships, on the other hand, could help to explain any relationships between individual group members which might vary in level of partner intimacy. None of these common approaches, however, truly explore the social dynamic of this group should they simply want to maintain a group-wide personal connection by having dinner once a week, celebrating a holiday together, or openly and collectively socializing in a shared space.

Prompted by advancements in communication technologies, some studies have addressed these blurred areas of interaction. Hoping to better understand how social networks might help to build or maintain social capital, Ellison, Steinfield, and Lampe (2007) found college students used Facebook as a means of maintaining and creating ties to groups of individuals they had previously been acquainted with or had met offline. Building these ties also affected individual

feelings of self-esteem and connectedness in relation to the intensity of social network use, demonstrating personal and collective utility in maintaining at least a perceived connection with larger offline social groups (Ellison et al., 2007). Pointing to an academic divide between the fields of mass and interpersonal communication, O'Sullivan and Carr (in press) provide another potential means of studying more personal relationships shared with larger groups by forwarding the masspersonal communication model (MPCM). O'Sullivan and Carr (in press) advocate for eliminating this false partition between disciplines by offering a message centered model of communication wherein dimensions of perceived accessibility and personalization affect the extent to which a message is considered mass, interpersonal, or masspersonal communication. Although O'Sullivan and Carr (in press) do not specifically apply this approach to social groups, messages communicated therein can be defined via their proposed dimensions with group messages perceived as being specifically tailored to a certain group and accessible to a variety of audiences ranging from only a few group members to individuals outside of the group. As CMC becomes more ingrained in the daily lives of individuals at both the interpersonal and group levels, further investigation of social groups in CMC is justified. The present research looks to understand the intersection of individual and group concepts in CMC by examining why individuals commit to social groups and what consequences that commitment can have on perceptions of self.

The approach of the present research also differs from previous CMC research investigating social identity in that it looks to investigate the role of the group in helping to define the self rather than the group's role in suppressing the self. Originally developed by Lea and Spears (1991) the social identity model of de-individuation effects (SIDE) in CMC was initially used to address why CMC group were found to make more polarized decisions than FtF

groups. Postmes, Spears, and Lea (1998) explain that in many CMC scenarios the salience of a social identity is likely to override the salience of personal identity, creating a de-individuation effect, or a greater reliance on group identity when making decisions. Put differently, group connection, norms, and boundaries can ultimately dictate behavior more so than any individual psychological processes. This de-individuation effect appears to occur more prominently in CMC because of the potential for anonymity and the reduced cues available to accomplish identity expression/group connection (see Postmes et al., 1998). These findings align with those of SIT where group boundaries are used to compare, contrast, and discriminate based on in-group/out-group affiliation, showing such behaviors can be amplified in CMC. Continued research involving the SIDE model demonstrates how social identity cues can be used strategically to induce more steadfast group advocacy (Spears, Lea, Corneliessen, Postmes, & Ter Haar, 2002) and suggests the perceived level of difference between an in-group and an out-group may affect intergroup as well as interpersonal interaction (Carr, Vitak, & McLaughlin, 2011). The line of inquiry prompted by the SIDE model lends itself to studying intergroup processes. While it is important to understand intergroup interaction, as illuminated by the findings of SIT and SIDE research, focus is also needed on intragroup processes and how social identities are incorporated into a sense of self rather than overriding one's sense of individuality.

### **Identity Shift in CMC**

Building on psychological research suggesting public commitment to presentation of performed identities could influence self-perception and behavior (Kelly & Rodriguez, 2006; Schlenker, Dlugolecki, & Doherty, 1994; Tice, 1992), Gonzalez and Hancock (2008) posited that similar performances in CMC scenarios would yield similar results due to, at the very least, a perception of public accessibility regarding presented information, something they termed

*identity shift*. To test their concept, subjects were asked to present themselves as either introverted or extroverted. Participants were asked to carry out these displays either privately in a basic text document that would later be viewed by only a single psychology graduate student or in a post to a public blog which would be accessible via the internet so as to ensure ease of access for psychology graduate students. Participants in the publicly accessible experimental condition reported themselves to be more similar to the identities they were asked to perform than those in the private experimental condition, keeping with previous findings regarding publicly performed identities. These results not only confirm that individuals think of the internet as a public space, but also that, as a public space, the internet plays a role in solidifying the individual identities performed therein. Extending their work to situate identity shift research in the realm of CMC, Gonzalez and Hancock (2009) performed a follow-up study looking to understand if these online performances of identity had a greater impact on perceptions of self than did similar FtF interactions. Findings supported the occurrence of more dramatic identity shift in computer-mediated contexts. The researchers proposed stronger internalization of identity was due primarily to the affordances present in CMC, most specifically the ability to more deliberately present one's self in an environment where extra cognitive labor and revision are possible prior to public expression of identity. This reasoning makes sense as a more deliberate presentation of self can lead to hyperpersonal communication with others in CMC (Walther, 1996). If a more deliberately composed presentation of self has the ability to affect others' perception of an individual, it stands to reason such presentations would also affect that individual's perception of self. This is not the only way in which the hyperpersonal model (Walter, 1996) is useful in explaining the mechanisms by which identity shift may occur in CMC.

The internet is not a static place wherein communication occurs unidirectionally, nor is it a place where individuals manage only one facet of self at a given time. Rather, the internet is a dynamic, interactive space wherein messages and displays are available for public consumption and are open to commentary in the form of feedback. Thus, Walther et al. (2011) looked to assess what role, if any, feedback plays in the identity shift process. Again using introversion and extroversion as performed identity traits, participants were asked to outwardly express an assigned identity. This time, experimental conditions involved feedback about the performed identities from a source explicitly noted as being computer generated or from a source identified as another individual. Surprisingly, identity shift was found to occur in both conditions. In effect, these results demonstrated that feedback plays an important part in the identity shift process in CMC environments even if that feedback comes from a known computer-generated source. One possible explanation for this, according to Walther et al. (2011), is that there may be situations in which computer-generated feedback is seen as an objective measure of assessment. This may be caused by individuals believing that a computerized system can more objectively, and thus more accurately, confirm or disconfirm an enacted behavior (Walther et al., 2011).

The potential also exists for individuals to receive multiple forms of feedback at once in computer-mediated contexts. Returning to the dynamic nature of CMC, Jones (2004) notes that researchers must think in terms of individuals managing multiple ways of being present in various interactive channels. It is not enough then to think in terms of individuals receiving feedback from one source or another; researchers must also consider scenarios in which multi-channel feedback is present or where feedback is being presented from more than one source. Tong, Van Der Heide, Langwell, and Walther (2008) explicate that in certain online environments, cues from various sources are available which may provide information to

observers about an individual. These researchers used the social network site Facebook as a means of describing the different sources from which these cues may be generated, stating individuals can post information about themselves to their Facebook walls, but their friends and the system itself can also provide information about an individual via that same display. Tong et al. (2008) were specifically concerned with how a system-generated cue – number of Facebook friends – could affect individuals’ perceptions of the Facebook profile owner. Results of this study suggested that information gleaned from the system-generated number of Facebook friends cue significantly affected observers’ perceptions of social attractiveness and extraversion (Tong et al., 2008). Facebook is certainly not the only online environment where these different cues are available to provide information; from other social network sites to competitive game forums and online role-playing games, environments where interpersonal and system-generated feedback are enabled, and even encouraged, are prevalent in CMC. Other individuals are not the only ones who might use this information for impression formation either. Identity shift research provides reason to believe that impressions of self are also influenced by information provided by one’s self (Gonzalez & Hancock, 2008), others (Carr & Foreman, 2016; Walther et al., 2011), and a computer-generated or system based source (Walther, 2011). These findings warrant further research regarding the role of feedback and feedback source on identity shift in computer-mediated environments where one or more of these sources of feedback are presented simultaneously.

One study advancing this line of questioning comes from Carr and Foreman (2016) who examined the effects of feedback display and perceived relational closeness of dyadic interaction partners on the identity shift process. In an experimental design utilizing Facebook, participants were exposed to feedback information in either a public setting (wall post) or a private setting

(private message) that came from someone defined either as having a close personal relationship or a nonclose personal relationship with the participant. As hypothesized, feedback displayed publicly coming from a close personal relation most strongly activated identity shift. Bolstering the findings of Gonzalez and Hancock (2009) in that affordances present in CMC are capable of intensifying identity shift, this work provides evidence that the source of the feedback and the forum in which it is presented both affect the likelihood that such feedback will be internalized.

While the extant efforts examining identity shift have provided a great deal of insight as to the development and internalization of identity displayed through CMC, there are still many questions left unanswered. For example, all research to this point has involved the identity trait performance of introversion or extroversion (Carr & Foreman, 2016; Gonzalez & Hancock, 2008; Gonzalez & Hancock, 2009; Walther et al., 2011). Thus a question remains as to whether other personality traits or identities as presented online are affected by public presentation and subsequent feedback. Furthermore, identity shift research has currently been constrained to controlled laboratory experiments and requests to perform specific personality traits. Therefore, investigation of more naturally-occurring and voluntary self-presentation in online groups is needed. Additionally, while research has furthered our understanding of the role of other-generated feedback in identity formation in CMC (Carr & Foreman, 2016), more research investigating the role of system-generated feedback and its ability to affect perceptions of self (cf. Walther et al., 2011) is warranted. Computer-mediated environments where various levels of presentation and different sources of feedback are available could help with these pursuits.

### **Fantasy Sports Leagues**

With these theoretical underpinnings in mind, the present research capitalizes on fantasy sports leagues as a means of extending current CMC research. Boyan et al. (2016) contend

fantasy sports leagues are innately social contexts that “provide researchers with an opportunity to examine a variety of relationships as they play out in CMC” (p. 83). To better understand this claim, it is beneficial to first define fantasy sports and how they function in a computer-mediated environment. Although fantasy sports were founded on a pencil and paper medium, computer-based platforms are credited with their widespread increase in popularity and participation (Billings & Ruihley, 2013; Roy & Goss, 2007), so much so that current references to fantasy sports in the available literature assume a computer-mediated channel (e.g. Boyan et al., 2016; Roy & Goss, 2007).

Rainie (2005) explicates the make-up of fantasy sports teams and the basic premise of fantasy sports leagues, stating:

Fantasy sports teams are created by fans who “draft” individual professional athletes to be part of their team. The “team” is an artificial assembly of players from a variety of real teams. The basic statistics of those players are then aggregated after each real-world game to determine how well the team is doing. Fantasy leagues are organized either “rotisserie” style, meaning team standings are based on cumulative player statistics over the entire season, or “head-to-head,” meaning win-loss records based on point totals in individual game-day match-ups. (p.1)

Despite terminology like *teams* and *leagues* both being traditionally used to describe groups, in fantasy sports competition, as noted above, *team* is used to describe the fictitious roster of players created by an individual, and *league* is used to describe a group of individuals who have all compiled teams so as to compete against one another. Following this definition, the present study is concerned with fantasy sports leagues. Halverson and Halverson (2008) also offer a definition of fantasy sports as a form of “competitive fandom” (p. 286), meaning fantasy sports



promote broad elements of both fan culture and competitive gaming. Basically, fantasy sports are located at an intersection of practices intended to be unifying (fan culture) but also innately conflict-oriented (competitive gaming). Perhaps because of this unique position, there are a broad range of reasons participants report for engaging in fantasy sports and an even more diverse array of ways in which they can participate in fantasy competition culture.

Fantasy sports leagues today are rapidly growing in popularity. The Fantasy Sports Trade Association (FSTA; 2016) found 56.8 million individuals in the U.S. and Canada participated in fantasy sports in 2015, a rise of 15.3 million from 2014 alone. These participatory leagues have even started branching out into other non-sports areas. Possibly inspired by such non-sports fantasy competitions as Fantasy Supreme Court (Mears, 2009), the website Fantasizr takes the fantasy sports concept and allows users to create leagues for their favorite TV shows or anything else they can think to turn into a league-style competition (Armstrong, 2016). The site provides rules and access to large, previously developed leagues centered on T.V. shows like *The Walking Dead*, *The Bachelor*, and *RuPaul's Drag Race*. Additionally, it provides users with the tools needed to create their own leagues with only their imagination as the limit to competition guidelines (Fantasizr, 2017). Although no scholars appear to have expressed an interest in analyzing fantasy RuPaul's Drag Race, increased participation in fantasy sports leagues has been paralleled by considerable attention from the scholarly community (see Billings & Ruihley, 2013; Bowman, Spinda, & Sanderson, 2016).

Fantasy sports have been predominately studied through a mass communication lens, specifically the uses and gratifications approach (Brown, Billings, & Ruihley, 2012; Farquhar & Meeds, 2007; Ruihley & Billings, 2013). While uses and gratifications based research is helpful to communication scholars and the sports marketing industry alike, it only explains why people

might play fantasy sports. Despite some evidence that fantasy sports have the ability to bring participants closer together even going so far as to affect players' spouses and partners (Howie & Campbell, 2015), extant research has done little to fully investigate what effect, if any, fantasy sports have on the individuals who choose to play them. Considering that Billings and Ruihley (2013) argue fantasy sports fans report lower escape motivations (a desire to temporarily break from everyday life) than do traditional sports fans because they are likely to think of the social ramifications outside of the game itself, the dearth of information on individual effects is even more surprising and worth addressing. The scholarly exploration of fantasy sports leagues from a more theoretically driven perspective provides a unique environment for studying computer-mediated interaction (Boyan et al., 2016), understanding the intragroup interactions therein, and evaluating how such interactions affect players.

### **Social Interaction in Fantasy Sports Leagues**

Given the previously discussed propensity for interpersonal communication to influence perceptions of self, especially via computer-mediated channels, it is important to understand the social component of fantasy sports as a means of identifying how participation might affect players. That players participate in fantasy sports for the purpose of social interaction has been substantiated by multiple accounts (Lee, Seo, & Green, 2013; Roy & Goss, 2007; Schreindl, 2013; Spinda & Haridakis, 2008). Roy and Goss (2007) offer two classifications for fantasy sports leagues: *private leagues* (those leagues composed of closer social relations such as family, friends, and co-workers) and *public leagues* (those leagues composed of individuals who are not likely to be previously acquainted with one another). This distinction is useful when considering individuals may use online platforms differently when considering their motivations for using that platform (Smock, Ellison, Lampe, & Wohn, 2011).

Evidence exists suggesting the motivation to maintain and develop social connections actually outweighs motivations for sports consumption in private leagues (Roy & Goss, 2007). This means fantasy sports players in private leagues are actually more likely to participate in those leagues for social reasons than they are because of an actual interest in the sport around which their league is built. Similarly, Spinda and Haridakis (2008), without distinguishing between private and public leagues, reported social interaction was one of the four strongest motivations for playing fantasy sports. Likewise, Lee et al. (2013) found social interaction with other participants and bonding with friends and family to be strong motivators for participation in fantasy sports. The findings of Spinda and Haridakis (2008), as well as those of Lee et al. (2013), might indicate that social interaction is a motivation for fantasy sports participation even in groups of individuals that are not previously acquainted or that are composed of individuals who may be acquainted with some, but not all, individuals in the league. Unfortunately, there is no classification offered by Roy and Goss (2007) for these types of leagues. Thinking of these classifications, private and public, as the ends of a continuum might be apt for including such groups, with groups primarily composed of previously acquainted individuals closer to the private end of the continuum and groups composed mostly of unacquainted individuals closer to the public end of the continuum.

In any case, previous research broadly supports the claim by Boyan et al. (2016) that fantasy sports are inherently social in nature. Because researchers report social interaction as a more prevalent motivation for leagues that more closely mirror the definition of private leagues (Lee et al., 2013; Roy & Goss, 2007), leagues closer to that end of the previously proposed continuum function as the focus of the present research. While establishing the social nature of fantasy sports leagues helps develop an understanding of how studying fantasy sports may be

useful in understanding interpersonal communication processes, it is also necessary to provide context for how these scholarly pursuits may contribute to CMC research and intragroup interactions.

### **Situating Fantasy Sports in CMC Research**

Boyan et al. (2016) expound upon two theoretical perspectives for directly examining fantasy sports as CMC: social presence theory and the hyperpersonal model. They argue social presence, or “the feeling that other actors are jointly involved in communicative interactions” (Walther, 1992, p. 54), has resulted from interaction in lean media environments where fewer relational or communication cues are present compared to FtF interaction. Short et al. (1976) initially proposed that social presence is limited by characteristics of a medium, but more recent research has argued for a conceptualization of social presence as a psychological process (Nowak & Biocca, 2003) derived from the intersection of related concepts. This is to say that social presence is framed by Boyan et al. (2016) as a feeling that communication partners are psychologically engaged with one another and recognize each other as present in an interaction despite geographical distances. Therefore, simply participating in fantasy sports leagues might help individuals feel as though they are more connected to other league members despite geographic or environmental barriers. This may be especially true in fantasy sports leagues founded when members were geographically closer and continued as a means of staying in touch with old friends (Boyan et al., 2016). At the very least, minimal investment used to maintain long standing social contacts via fantasy sports participation might allow for the building of latent ties, or those ties which may be activated into weak ties in the event an individual was in need of support in some form (Ellison et al., 2007).

Mutual interest in fantasy sports could also function as a foundation for hyperpersonal interaction in fantasy sports leagues. Boyan et al. (2016) illustrate how elements essential for hyperpersonal interaction (selective self-presentation, idealization by receivers, and the potential for feedback) are present in fantasy sports leagues. While the role of selective self-presentation (choosing how you will play the game and interact socially) and idealization by receivers (skewed opinions formed due to perceived similarity in a limited cue environment) may be more directly hypothesized, understanding the role of feedback in fantasy sports could prove more difficult. Feedback in fantasy sports leagues might occur in the form of friendly relational dialogue or excessively negative communication designed to put down other individuals, colloquially referred to as *trash talk*, a term also adopted by scholars (Hickman & Ward, 2007; Vioda, Carpendale, & Greenberg, 2010). Currently, it is unclear if trash talk is likely to function as a relationship building mechanism or if might function as a form of hypernegative communication, an extension of the hyperpersonal model proposed by Walther and Parks (2002) suggesting the affordances of CMC may lead to the formation of overtly negative and hurtful relationships.

Trash talk itself is capable of performing different relational functions dependent on the situation in which it is used and the personal impetus for it. In situations where clear in-groups and out-groups exist, trash talk may be used to degrade the out-group until a point at which the out-group is simply seen as lesser than the in-group (Hickman & Ward, 2007). In this situation, the function of trash talk could be predicted by SIT: denigration of the out-group functions as a means of promoting in-group connection and boosting in-group status. However, as previously discussed, fantasy sports leagues are driven by in-group competition and are not reliant on direct out-group comparison as a means of establishing in-group affiliation. Social groups that compete

using a particular task as a means of furthering their relationship may instead use trash talk in a prosocial manner, strengthening their relationship (Vaida et al., 2010). Vaida et al. (2010) studied collocated groups who played video games together and found that those groups who engaged in trash talk reported having better relationships than those who did not. Though not guaranteed to be collocated, the social structure of fantasy leagues and the competitive gaming aspects of fantasy sports (Halverson & Halverson, 2008) more closely resemble the format of video games. It may then be reasonable to assume that in fantasy sports leagues, trash talk is thought of as more a prosocial, relationship building behavior.

Although Boyan et al. (2016) offer a base from which to start studying the intersection of fantasy sports and CMC, the present research does not adhere to their labeling of fantasy sports as task-oriented groups, opting instead for a classification of fantasy sports leagues as social groups. While fantasy sports leagues are concerned by the shared task of playing fantasy sports, what that task means is likely to vary from player to player. Unlike traditional task-oriented groups who were required to collaborate in order to complete a series of tasks (Walther & Burgoon, 1992), fantasy sports leagues accomplish the task of playing fantasy sports as an extension of their existence. The real “task” of a fantasy sports league is dependent upon the desires of its individual members, which in private fantasy sports leagues is likely rooted in social interaction. The intensity with which league members execute the task of playing fantasy sports (setting line-ups, making trades, selecting quality replacements from the waiver wire) in private leagues may stem from individual desires to be competitive or from group norms dictating an acceptable level of individual task completion, but this does not automatically dictate that fantasy sports leagues are task-oriented groups. Conceptualizing fantasy leagues as

social groups instead of task-oriented groups allows for a deeper analysis of social processes where task participation is only one facet of intragroup interaction.

### **Fantasy Sports: Collective Self-Esteem and Commitment to a Fantasy Sports Identity**

Relevant to social identity, private leagues may help facilitate deeper in-group affiliation without the need for explicit out-group comparison (Allport, 1954, Brewer, 1999). It is not common practice for fantasy sports leagues to compete against other fantasy sports leagues. Instead of intergroup competition, fantasy sports leagues promote intragroup competition, often pitting social acquaintances against one another in head-to-head matches where individual fantasy team statistics are compared to determine a winner each week. This creates a condition where league members most certainly constitute an in-group, but have no discernable out-group with which to compete for resources or status. As such, in-group affiliation is likely to be driven by intragroup interactions and feelings of connectedness. This affinity building should then translate to higher levels of collective self-esteem by satisfying individual needs for connection and bolstering positive evaluations of group membership.

Group affinity in fantasy sports leagues can be generated through various processes. First, task participation (setting line-ups, making trades, etc.) may demonstrate player commitment and mutual engagement in league activity increasing feelings of social presence (Boyan et al., 2016). Additionally, interpersonal exchanges with league members are likely to increase feelings of relational closeness between league members. The effects of these interactions are likely to be exacerbated by the potential for hyperpersonal communication in fantasy sports leagues. Ellison et al. (2007) found the intensity with which college students used Facebook largely determined the extent to which they reported the development of social capital and related psychological responses. The present research argues the intensity with which one engages in fantasy sports

competition will have a similar and direct effect on league participants' feelings of collective self-esteem. Although social capital and collective self-esteem are different concepts, the mechanism at work in Ellison et al.'s (2007) study, intensity of platform use, can vary in fantasy sports leagues, but the reason for platform use varies as well. Facebook may be used to maintain social connections for the purpose of activating social capital (Ellison et al., 2007), but fantasy sports are used by many to promote social interaction as a relationship/group building mechanism. Accounting for the established social nature of fantasy sports leagues, minimal participation should be met with minimal group interaction. Conversely, more active participation should lead to greater feelings of group connectedness and greater satisfaction of inclusion needs. Whether this connection building takes place through task participation, increased social interaction, cordial competitive dialogue, or encouraged trash talk between league members (Davis & Duncan, 2006; Farquhar & Meeds, 2007), the result of increased participation should result in greater feelings of collective self-esteem. Considering this information, the following hypotheses are proposed:

*H1a:* Task participation positively predicts collective self-esteem among fantasy sports participants.

*H1b:* Social interaction with other fantasy league members positively predicts collective self-esteem among fantasy sports participants.

Consistent with social identity research, this increase in collective self-esteem would affirm a player's identity as a member of their fantasy league or more broadly their identity as a fantasy sports player (Roy & Goss, 2007). However, computer-mediated environments allow for individuals to try out various identities before actually committing themselves to that identity (Turkle, 1994). One may choose to play fantasy sports, but if they fail to internalize that



participation, they are not likely to recognize fantasy sports participation, in their league or otherwise, as part of their identity. These individuals may knowingly exercise their ability to leave the league, or they may be removed from the league by league members not convinced of their commitment to fantasy sports. The present research contends that by increasing collective self-esteem players satisfy their need for acceptance (Brewer, 1991; Jenkins, 2008). As a result, individuals are more likely to publicly commit to their identity as a fantasy sports player after having been rewarded by the group for trying it, leading to the following hypothesis:

*H2: Increased collective self-esteem positively predicts public commitment to playing fantasy sports as part of one's chosen identity.*

### **Fantasy Sports: Social Identity and Identity Shift Investigation**

Once committed to the identity of a fantasy sports player, an individual's self-concept and behaviors may be consequently affected. The present research investigates two separate phenomena which may prompt behavioral changes or solidify the existing behavioral tendencies of fantasy sports league participants: social identity and identity shift in CMC environments. As will be demonstrated in the following section, participation in fantasy sports has been linked to certain behavioral changes, but the mechanism by which these changes may have occurred has yet to be further investigated.

Hogg and Reid (2006) note that group norms and normative behavior in a communicative setting are generated from perceptions of prototypical group members. In the case of fantasy sports, participation has been linked to increased media dependency (Schreindl, 2013), mass media consumption related to sports (Randle & Nyland, 2008) and increased sports viewership (Nesbit & King, 2010). Also, despite a natural proliferation of attention to multiple sports teams in order to monitor owned player performance, fantasy football participants who identified as

sports fans prior to joining their league reported a stronger level of affiliation with their favorite NFL team (Dwyer, 2011), suggesting fantasy sports are changing the way they interact with sports media (Schirato, 2012). Moreover, limited evidence exists that fantasy sports may convert individuals who previously had little to no interest in a particular sport into sports fans (Halverson & Halverson, 2008). This effect may be witnessed by individuals regardless their prior level of commitment to fantasy sports. Young and old players (Brown et al., 2012) as well as casual and skilled players (Farquhar & Meeds, 2007) all report surveillance behaviors (getting to keep up with more sports/better understand the game) as a motivation for playing fantasy sports. These findings suggest fantasy sports players, regardless of prior commitment or skill, may start to think of themselves more as sports fans and wish to engage in behaviors indicative of that persona. Taken together, these findings demonstrate the ability of fantasy sports to influence attitudinal and behavioral change not simply because of participation, but because of a player's commitment to the fantasy sports identity.

In addition to changes in media consumption behavior, Hiltner and Walker (1996) offer an instance in which different personality traits were publicly displayed during online social interaction resulting from fantasy sports participation. In the mid-90s, a service outage of Prodigy, a fantasy baseball platform, caused message boards to erupt with conflict between players. During this conflict, large groups formed and the more vocal members of these groups participated in abrasive banter. After Prodigy services were restored, a number of those actively involved in the conflict came to apologize for their actions. These individuals were commended for their honesty in admitting their wrong doings, prompting others to come forward with similar apologies. For some this might show the need to maintain internal and external consistency in terms of self-concept (Kelly & Rodriguez, 2006); for others, it could be seen as the desire to seek

social acceptance through displays of humility that had been previously rewarded. Either interpretation suggest a socially-motivated component prompting a shift in selective self-presentation.

If individuals believe that ideal group member, as defined by either explicit group statements or one's own perception of the group, should embody specific prototypical behaviors, those individuals are likely to exhibit such behaviors. So in Hiltner and Walker's (1996) example, civility may normally be prized in the Prodigy servers, and community members who violate norms of civility were quick to apologize. Therefore, when apologies were made and their acceptance was noted, other community members may have been compelled to apologize as well, aligning their behavior with that of exemplars. Today fantasy sports leagues are addressed as masculine gendered environments where competitiveness is more highly praised (Davis & Duncan, 2008) rather than civility and pleasant tones. There is at least anecdotal evidence suggesting behavioral changes driven by this expected identity performance in fantasy sports leagues. For example, women who engage regularly in fantasy sports have stated they actively fight being categorized as weak by taking up the mantle of fierce and informed competitors (Rubin, 2014). In addition to sports media consumption, adhering to group ideals of competitiveness encouraged in fantasy sports (Halverson & Halverson, 2008) would be important to those who have committed to their identity as fantasy sports players, prompting the following hypothesis:

*H3a: Public commitment to a fantasy sports player identity positively predicts the exhibition of prototypical behaviors associated with that identity.*

Conditions similar to those present in previous identity shift research are also present in private fantasy sports leagues. Public commitment to a performed identity in a computer-

mediated context (Gonzalez & Hancock, 2008) may be accomplished simply by participating in a private fantasy sports leagues as long as a fantasy sports player recognizes the league (generally composed of 8-16 members) as constituting a public with knowledge of their participation in fantasy sports. It is important then to consider players' perceptions of the size of the public that has been made aware of their fantasy sports identity. Because private fantasy sports league participants, either through their own actions or the actions of fellow league members, may perceive their commitment to participation in fantasy sports as having a greater public reach than the boundaries of their private fantasy sports league, in-line with the MPCM (O'Sullivan & Carr, in press), the following hypothesis is offered:

*H3b:* The relationship between public commitment and prototypical fantasy sports player behaviors will be moderated by the perceived size of the public aware of the identity commitment such that an increase in perceived size of public will prompt greater exhibition of prototypical behaviors.

Additionally, feedback about a player's success or failure at performing such an identity (Walther et al., 2011) is likely to be offered by other league members and is guaranteed to be offered by the fantasy sports software responsible for assessing wins and losses. This means players will be offered both other-generated and system-generated performative feedback simultaneously. To demonstrate, at the end of each week the online fantasy sports platform used by a league will display each player's score and how it compared to the score of their opponent for that week. This provides a system-generated, objective measure of success or failure related to participation and team creation abilities on a weekly basis. Other members of the league, being privy to the outcomes of each player's success or failure in a given week, can then offer other-generated feedback on the performance of league members through various channels. This

other-generated feedback may come privately or in league forums from individuals with whom private fantasy sports league participants have close relational ties (Carr & Foreman, 2016).

Considering the previously mentioned effects of this feedback on one's perception of self, the following hypotheses are offered:

*H4a:* Performative feedback from other fantasy league participants regarding one's abilities as a fantasy sports player positively predicts the display of prototypical behaviors in the direction of the valence of the feedback.

*H4b:* Performative feedback from the fantasy sports system regarding one's abilities as a fantasy sports player positively predicts the display of prototypical behaviors in the direction of the valence of the feedback.

Another common theme in the extant literature regarding fantasy sports is that individuals participate in fantasy sports as a means of boosting their self-esteem (Billings & Ruihley, 2013; Farquhar & Meeds, 2007; Lee et al., 2013). While the concept of tying one's self-esteem to the success of their favorite sports team is familiar to both fans and scholars (Cialdini et al., 1976; Bizman & Yinon, 2002), research indicates this self-esteem attachment is greater in fantasy sports participants potentially due to themes of team ownership (Billings & Ruihley, 2013). Fantasy sports leagues are predicated on the idea of each player acting as a franchise or team owner. Although this may motivate some to play fantasy sports (Lee, Seo, & Green, 2013), others who participate for social reasons have this role foisted upon them. Either way, fantasy sports participants are given control over their team's success, something they lack as mere spectators (Halverson & Halverson, 2008). One's psychological attachment to their fantasy team is further evidenced through studies reporting the prevalence of motivations for fantasy sports participation (Billings & Ruihley, 2013; Brown et al., 2012; Farquhar & Meeds, 2007). High

levels of agreement with survey measures such as “winning at fantasy sports improves my self-esteem” and “I feel like I have won when my fantasy team wins” (Brown et al., p. 338) as well as comments such as “Fantasy sports are addictive for the same reason gambling is: both create hope that victory is right around the corner” (Farquhar and Meeds, 2007, p. 1291) illustrates one’s happiness, well-being, and self-worth may be attached to their fantasy sports team. Moreover, if fantasy team success is psychologically linked to feelings of personal success, it may be reasonable to assume the opposite is also true. Unlike regular sports fans who can choose to distance themselves from the failure of their favorite team (Bizman & Yinon, 2002), due to team ownership, fantasy sports participants are not allowed the same luxury unless they wish to distance themselves from the league as well. Therefore, the failure of one’s fantasy team could potentially lead to feelings of personal failure.

This effect on participant self-esteem may be further exacerbated by the possible perception of fantasy sports as games of skill (Dwyer, 2011; Farquhar & Meeds, 2007; Roy & Goss, 2007). Fantasy sports are certainly marketed in this manner. In fact, legal arguments against classifying high-stakes, corporately-run fantasy sports competitions as gambling center around the idea that games of skill are not subject to such a classification (Holleman, 2008). Players who then believe fantasy sports to be games of skill are likely to experience the illusion of control (Langer, 1975) in a less than controllable environment. As fantasy sports competitions are based on the real life statistical performance of athletes, the potential exists for injuries, illness, and disqualification to drastically change the possible outcome of a fantasy team’s success. Still fantasy owners are given a means by which to mend broken teams in the form of trades and waiver wire pick-ups, perpetuating the idea that the team’s success or failure

ultimately relies on the skills of the team owner. In this way, a win or loss becomes a reinforcement of or an attack on a participant's ability to successfully perform a task.

However, individuals are likely only to experience these fluctuations in self-esteem if their success or failure occurs in relation to something they assign value (Rosenberg, 1979). For people who participate in fantasy sports predominately for the sport and competitive aspects, their success at fantasy sports having value seems like a matter of common sense. For those who participate for social motivations, however, the value they assign to success or failure in this particular arena is more likely a result of their feelings of attachment to fellow participants as significant others (Rosenberg, 1979). In line with the findings of extant self-esteem research, the following hypotheses are offered regarding participation in fantasy sports leagues:

*H5a:* Performative feedback positively predicts personal self-esteem in the direction of the valence of the feedback.

*H5b:* This relationship will be moderated by collective self-esteem such that higher collective self-esteem will increase the effect of performative feedback on personal self-esteem.

## CHAPTER III: METHODS

### **Participants**

A survey was conducted using a convenience sample composed of respondents ( $N = 94$ ) recruited via snowball sampling from a post to the researcher's social media accounts and fantasy sports league forums to which the researcher was able to gain access. Respondents represented both male ( $n = 79$ ) and female ( $n = 15$ ) fantasy league participants ranging in age from 19 to 64 ( $M = 32.81$ ,  $SD = 9.62$ ). Requirements for participation involved being a current or former fantasy sports player and being previously acquainted with at least one member of the league in which respondents participate/participated. This was done to establish the social nature of their involvement in said fantasy league.

### **Procedure**

Respondents were asked to recall their participation in a fantasy sports league and evaluate survey items regarding their fantasy sports league experience. If respondents participated in multiple fantasy sports leagues, they were instructed to focus on one league while answering survey questions. To ensure their focus remained on the league they chose during the recall process, respondents were asked to provide the name of their chosen fantasy sports league. Tools available in the survey software were used to insert the name of the league chosen into future questions regarding league participation and identification.

### **Measures**

Full item measures used in evaluating the subsequently listed variables can be found in Appendix A along with the response scales used to collect data from respondents. Reliability scores for each measure can be found in Appendix B (Table 1).



## **Task Participation**

While there exists a fantasy sports motivation index (Billings & Ruihley, 2013) to assess why individuals choose to play fantasy sports, there does not appear to be an established index of how individuals participate in fantasy sports or the intensity of that participation. Looking to previous research on social media usage (Ellison, 2007; Smock et al., 2011) as a guide, items about the usage of common task-related fantasy sports tools and features (setting line-up, proposing player trades, etc.) and items about players' perceptions of fantasy sports tasks as part of their everyday lives were generated. Participants were asked to respond to these items on a 7-point Likert-type scale where *1 = never* and *7 = constantly/always* or where *1 = strongly disagree* and *7 = strongly agree*, dependent on the nature of the question. The scale demonstrated good reliability,  $\alpha = .84$ .

## **Social Interaction**

Social interactions are not simple occurrences and generally involve a variety of behaviors, both verbal and nonverbal, that happen in a number of different contexts (Jaegher, Di Paolo, & Gallagher, 2010). It is perhaps because of this fact that there does not appear to be a generalizable scale for social interaction. To measure social interaction in the context of fantasy sports competition, respondents evaluated a series of statements regarding the use of specific social features (forum boards, private messages) available in fantasy sports leagues as well as other communication channels used to contact league members during the fantasy sports seasons (texts, phone calls, etc.). Participants were asked to answer these questions on a 7-point Likert-type scale where *1 = never* and *7 = constantly/always*. The scale demonstrated good reliability,  $\alpha = .83$ .

## **Collective Self-Esteem**

To measure collective self-esteem, the present study utilized Luhtanen and Crocker's (1992) collective self-esteem scale. The original scale was adapted to inquire about a specific social group instead of social groups in general, something that does not appear to compromise scale validity (Luhtanen & Crocker, 1992). Items were evaluated using a 7-point Likert-type scale where 1 = *strongly disagree* and 7 = *strongly agree*. The specific social group used in the present study was a respondents' fantasy sports league. The scale demonstrated good reliability,  $\alpha = .86$ .

## **Public Commitment and Size of Public**

Previous research regarding the role of public commitment in identity formation (Carr & Foreman, 2016; Gonzalez & Hancock, 2008; Kelly & Rodriguez, 2006; Schlenker et al., 1994; Tice, 1992, Walther et al., 2011) appears to exclusively involve the use of experimental design. In these experiments, public commitment was measured via participant perceptions of public identifiability or by inducing a commitment to either a public forum or the researcher administering the study. The present study breaks away from the experimental norm and seeks to gather information in a more naturally occurring situation. Additionally, breaking from previous research, the present study does not look to study a single personality construct (introversion/extraversion) but instead, looks to study an identity which may involve the performance of multiple personality traits and behaviors. Because of these variations, a different means of measuring the public commitment construct is required. To measure public commitment participants were asked to evaluate the statements such as "People are aware that I am a member of my fantasy sports league" and "I have in some way publicly discussed my

participation in fantasy sports” on a 7-point Likert-type scale where 1 = *strongly disagree* and 7 = *strongly agree*. The scale demonstrated good reliability,  $\alpha = .81$ .

To measure the extent of this commitment, or perceived size of public, respondents evaluated statements such as “Only other league members are aware that I play fantasy sports” and “I have discussed my participation in fantasy sports with people I do not consider friends or family members” using a 7-point Likert-type scale where 1 = *strongly disagree* and 7 = *strongly agree*. The scale demonstrated adequate reliability,  $\alpha = .73$ .

### **Prototypical Behavior**

In the present study, prototypical behaviors were defined as competitiveness and sports related media consumption. To measure *competitiveness*, Smither and Houston’s (1992) 20-item competitiveness index was utilized; respondents were asked to evaluate index items using a 7-point Likert-type scale where 1 = *strongly disagree* and 7 = *strongly agree*. The scale demonstrated high reliability,  $\alpha = .90$ . Measuring *sports related media consumption* was accomplished by using items adapted from Randle and Nyland (2008) such as using TV and radio to attend to sports media as well as attending live sporting events. Questions about TV and print media consumption in the present study included televised sporting events as well as programming and reporting related to sports and fantasy sports. Respondents were asked to evaluate index items using a 7-point Likert-type scale where 1 = *never* and 7 = *constantly/always*. The scale demonstrated high reliability,  $\alpha = .90$ .

### **Personal Self-Esteem**

Personal self-esteem was measure using and adapted version of Heatherton and Polivy’s (1991) State Self-Esteem Scale (SSES). Items were adapted to address fantasy sports prowess instead of academic abilities and intelligence. Scale items were evaluated by respondents using a

7-point Likert-type scale where 1 = *strongly disagree* and 7 = *strongly agree*. The scale demonstrated good reliability,  $\alpha = .86$ .

### **Performative Feedback**

Like public commitment, previous research involving performative feedback about identity (Carr & Foreman, 2016; Walther et al., 2011) was conducted using an experimental design where the valence of feedback could be manipulated. The present study does not allow for such manipulation, and as such, it requires an alternate means of evaluating the valence of performative feedback. To evaluate other-generated performative feedback, participants were asked to evaluate statements about the nature of interpersonal feedback regarding their performance on a 7-point Likert-type scale where 1 = *strongly disagree* and 7 = *strongly agree*. The scale demonstrated low reliability,  $\alpha = .46$ . In order to evaluate system-generated feedback players were asked about win-loss record, league standing, and fantasy sports points generated on a variety of 7-point scales generated to maintain consistency with previous survey item evaluations. The scale demonstrated good reliability,  $\alpha = .83$ .

## CHAPTER IV: RESULTS

Due to the number of statistical tests conducted using the present data set, a Bonferonni correction was used to establish an adjusted  $p$ -value *a priori* at which results were considered significant to reduce the risk of a Type I error. Given the six statistical tests conducted and reported below, results are considered significant at  $p \leq .008$ .

*H1a* predicts task participation in fantasy sports leagues will be positively related to the collective self-esteem of the participant, and *H1b* predicts social interaction with other league members will be positively related to the collective self-esteem of the participant. To test *H1a* and *H1b* an ordinary least-squares (OLS) multiple regression analysis was performed between the independent variables (task participation and social interaction), and the dependent variable (collective self-esteem). Results indicated the model significantly predicted the collective self-esteem of fantasy league participants,  $F(2,91) = 26.90, p < .001$ , with an effect size of  $R^2 = .37$ . When examining individual relationships between the independent variables and collective self-esteem ( $M = 5.24, SD = .74$ ), it was revealed task participation ( $M = 5.20, SD = .82$ ) positively and significantly predicted collective self-esteem ( $b^* = .59, p < .001$ ); but social interaction ( $M = 3.34, SD = .99$ ) did not significantly predict collective self-esteem ( $b^* = .05, p = .572$ ). Therefore, *H1a* was supported while *H1b* was not supported.

*H2* predicts the collective self-esteem of a fantasy sports league participant will be directly and positively related to that participant's public commitment to a fantasy sports identity. To test *H2* an OLS regression analysis was performed between collective self-esteem (independent variable) and public commitment (dependent variable). Results indicated collective self-esteem ( $M = 5.24, SD = .74$ ) positively and significantly predicted public commitment ( $M = 6.26, SD = .82$ ),  $F(1,92) = 21.11, t = 4.60, p < .001, R^2 = .19$ . Therefore, *H2* was supported.

*H3a* predicts that one's public commitment to a fantasy sports player identity will be directly and positively related to that individual's display of prototypical fantasy sports player behaviors. Additionally, *H3b* predicts the previously mentioned relationship will be moderated by the perceived size of the public to which that commitment has been made. It should be mentioned here that the prototypical behaviors referenced in these hypotheses are defined in this study as competitiveness and sports media consumption. Tests involving each of these behaviors were conducted independently. First, a moderation analysis was conducted to test both the direct effect of public commitment on competitiveness and the moderating effect of the perceived size of public on that relationship. Hayes' (2013) PROCESS macro (model 1) was used to conduct the analysis. In this test, the dependent variable (competitiveness) was regressed on public commitment, perceived size of public, and their interaction term. The overall model was found to be statistically significant,  $F(3,89) = 4.63, p = .005, R^2 = .12$ . Further analysis revealed no direct effect of public commitment on competitiveness,  $b = .22, t = 1.12, p = .266$ , and confirmed no direct effect of perceived size of public on competitiveness,  $b = .18, t = 1.65, p = .103$ . When conducting tests using competitiveness as a prototypical behavior, *H3a* was not supported. However, the interaction term of the independent variable (public commitment) and the moderator (perceived size of public) was found to have a statistically significant effect on competitiveness,  $\Delta R^2 = .07, \Delta F = 10.83, b = .16, t = 3.29, p = .001$ . Analysis of the conditional effect of public commitment on competitiveness at different levels of perceived size of public revealed no statistically significant effects at the mean of the perceived size of public ( $M = 5.43$ ),  $b = .23, t = 1.12, p = .266$ , or within +/- one standard deviation ( $SD = 1.14$ ) of that mean,  $b = .39, t = 1.68, p = .097$ ; and  $b = .04, t = .25, p = .800$ , respectively. This indicates perceived size of public moderates the relationship between public commitment and competitiveness so as to

create a statistically significant difference in competitiveness only when perceived size of public deviates more drastically (greater than +/- one standard deviation) from the mean. While this suggests a more leptokurtic distribution curve, that distribution still occurs in the hypothesized manner. Therefore, when conducting tests using competitiveness as a prototypical behavior, *H3b* was supported. Next, a moderation analysis was conducted to test both the direct effect of public commitment on sports media consumption and the moderating effect of the perceived size of public on that relationship. Hayes' (2013) PROCESS macro (model 1) was used to conduct the analysis. In this test, the dependent variable (sports media consumption) was regressed on public commitment, perceived size of public, and their interaction term. The overall model was found to be statistically significant,  $F(3,89) = 4.41, p = .006, R^2 = .13$ . Further analysis revealed a statistically significant direct effect of public commitment on sports media consumption,  $b = .61, t = 2.46, p = .016^1$ , and confirmed no direct effect of perceived size of public on sports media consumption,  $b = .16, t = .91, p = .367$ . When conducting tests using sports media consumption as a prototypical behavior, *H3a* was supported. However, the interaction term of the independent variable (public commitment) and the moderator (perceived size of public) was not statistically significant,  $\Delta R^2 = .03, \Delta F = 1.43, b = .18, t = 1.20, p = .235$ . Therefore, when conducting tests using sports media consumption as a prototypical behavior, *H3b* was not supported. When taken together, the results of these independently run tests demonstrate partial support for both *H3a* and *H3b*.

To test *H4a* and *H4b* a general linear model analysis was performed using independent variables (other-generated performative feedback and system-generated performative feedback)

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<sup>1</sup> Given the overall level of significance for the model, the  $p$ -value of .016 was considered significant here although it did not meet the adjusted  $p$ -value of .008. This has been noted to express these results should be interpreted with caution.

and dependent variables (competitiveness and sports media consumption). As with H3a and H3b, it should be noted that H4a and H4b both reference prototypical behaviors as a dependent variable. For the purposes of this study, prototypical behaviors were defined as competitiveness and sports media consumption. Although these terms were collectively referred to as prototypical behaviors, they were tested independently. Results indicated the model did not significantly predict prototypical behaviors of competitiveness,  $F(75,17) = .40, p = .997$ , or sports media consumption,  $F(75,17) = 1.05, p = .485$ . More specifically, other-generated feedback ( $M = 4.92, SD = 1.02$ ) did not significantly predict competitiveness,  $F(20,17) = .41, p = .972$ , or sports media consumption,  $F(20,17) = 1.25, p = .322$ . Likewise, system-generated feedback ( $M = 4.83, SD = .90$ ) did not significantly predict competitiveness,  $F(18,17) = .71, p = .764$ , or sports media consumption  $F(18,17) = 1.22, p = .345$ . Therefore, *H4a* and *H4b* were not supported.

H5a predicts performative feedback will be directly and positively related to one's personal self-esteem. H5b predicts this relationship will be moderated by an individual's collective self-esteem such that higher collective self-esteem will exacerbate the effect of performative feedback on personal self-esteem. To test *H5a* and *H5b* an OLS multiple regression analysis was performed between the independent variables (performative feedback, collective self-esteem, and their interaction term), and the dependent variable (personal self-esteem). Results indicated the model significantly predicted the personal self-esteem of fantasy league participants,  $F(3,89) = 7.42, p < .001$ , with an effect size of  $R^2 = .20$ . When examining individual relationships between the independent variables and personal self-esteem ( $M = 5.80, SD = .92$ ), the test confirmed performative feedback ( $M = 4.86, SD = .84$ ) positively and significantly



predicted personal self-esteem ( $b^* = 1.63, p < .021^2$ ); and confirmed no significant direct relationship between collective self-esteem ( $M = 5.24, SD = .74$ ) and personal self-esteem ( $b^* = 1.18, p = .065$ ); but also confirmed the interaction term of performative feedback and collective self-esteem ( $M = 25.52, SD = 6.08$ ) did not significantly predict personal self-esteem ( $b^* = -1.80, p = .076$ ). To further test H5b with specific regard to higher levels of collective self-esteem, a median split was performed to create two groups labeled high collective self-esteem and low collective self-esteem. A scatter plot with fit lines for both groups was generated to represent the relationship between performative feedback and personal self-esteem at varying levels of collective self-esteem. This scatter plot can be found in Appendix B (Figure 1). This visual representation appeared to confirm the results of the H5 regression analysis in that there was no significant interaction effect of the independent variables on personal self-esteem for those with high collective self-esteem. However, the visual representation appeared to suggest there was a significant interaction effect of the independent variables on personal self-esteem for those with lower collective self-esteem. To confirm this interpretation of the visual representation, an OLS regression analysis was performed for each group (high collective self-esteem and low collective self-esteem) testing the effect of the interaction term (performative feedback and collective self-esteem) on personal self-esteem. The model for the high collective self-esteem group confirmed there was no significant interaction effect of the independent variables on personal self-esteem,  $F(1,46) = 1.98, b^* = .20, p = .166$ . The model for the low collective self-esteem group confirmed a significant and positive interaction effect of the independent variables on personal self-esteem,  $F(1,43) = 28.26, b^* = .63, p < .001$ . Therefore, H5a was supported and H5b was not

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<sup>2</sup> Given the overall level of significance for the model, the  $p$ -value of .021 was considered significant here although it did not meet the adjusted  $p$ -value of .008. This has been noted to express these results should be interpreted with caution.

supported. However, in conducting the statistical analysis for H5b, a relationship between the interaction term of the independent variables and personal self-esteem other than that which had been hypothesized was revealed.

## CHAPTER V: DISCUSSION

The present study used fantasy sports leagues to investigate the formation and expression of identity in online groups as well as the resultant impact on one's self-concept. Drawing on research from the fields of communication, psychology, and sociology, hypotheses were forwarded regarding the generation of collective self-esteem, public commitment to a group identity, and the ramifications of consequent feedback on an individual's behavior and sense of self-worth. Results of this study enhance our understanding of group affinity building, the development of and adherence to prototypical group behaviors, and the impact of group task performance on personal self-esteem. Additionally, the present research adds to a growing body of scholarly work centered on more fully understanding fantasy sports leagues and the group dynamics therein. These contributions are discussed here in greater detail by separately addressing each hypothesis, or paired hypotheses, and the related results.

*H1a* and *H1b* were formed around the idea that task participation and social interaction, though two distinct concepts, would both have an effect on respondents' collective self-esteem such that involved and frequent performance of each behavior would lead to increased group affinity and a more positive evaluation of one's station in the group. Task participation was believed to do this because league members, despite competing against each other, are all invested in a shared activity, fantasy sports. On the other hand, it was believed increased social interaction would strengthen perceived connections to an individual's fantasy sports league by effectively gratifying a commonly reported use for fantasy sports leagues (Lee, Seo, & Green, 2013; Roy & Goss, 2007; Schreindl, 2013; Spinda & Haridakis, 2008), especially considering the previously discussed potential for hyperpersonal communication in computer-mediated environments such as fantasy sports leagues. Using this logic, task participation and social

interaction were treated as complementary processes, each having a similar effect on collective self-esteem albeit via different mechanisms. Only *H1a*, predicting a positive relationship between task participation and collective self-esteem, was supported. Support for *H1a* and the lack of support for *H1b* suggests fantasy leagues, although allowing for mutual task engagement and interpersonal interaction via various online channels, are primarily task-oriented groups and that generating collective self-esteem in such groups can occur even in the absence of traditional interpersonal interaction between group members.

Initially, the model testing *H1a* and *H1b* accounted for approximately 37% of the variance in respondents' collective self-esteem scores. As task participation was the only predictor variable found to be statistically significant in this model, Boyan et al.'s (2016) labeling of fantasy sports leagues as task-oriented groups is confirmed. If conversation oriented socializing was, in general, the main impetus for the formation or perpetuation of fantasy sports leagues, increased interaction through interpersonal engagement with fellow group members would lead to increases in collective self-esteem in reference to the group; but this supposition was not supported by the present data. The label of fantasy sports leagues as task oriented groups is additionally appropriate given, on average, task participation ( $M = 5.20$ ,  $SD = .82$ ) was significantly higher than social interaction ( $M = 3.34$ ,  $SD = .99$ ) in the sample population as indicated by the results of a paired-samples *t*-test,  $t(93) = 17.93$ ,  $p < .001$ . The lack of overt social interaction with other league members can be further demonstrated by conducting a more individual evaluation of social interaction scale items. For the social interaction measures used in the present study, mean scores for almost all scale items indicated an average response of 'rarely' or 'very rarely'. Social interaction scale items respondents reported partaking in 'rarely' or 'very rarely' included posting to league forum boards ( $M = 2.89$ ,  $SD = 1.43$ ), responding to others'

comments on league forum boards ( $M = 3.06, SD = 1.54$ ), calling other league members to discuss fantasy sports ( $M = 2.66, SD = 1.63$ ), and using fantasy sports software based private messaging ( $M = 2.32, SD = 1.59$ ) or a league specific social media page ( $M = 3.10, SD = 2.06$ ) to privately communicate with other league members. Only three social interaction scale items, “I text other league members to discuss fantasy sports” ( $M = 4.14, SD = 1.74$ ), “I text other league members to discuss things unrelated to fantasy sports” ( $M = 4.57, SD = 1.76$ ), and “I regularly interact with other league members face to face” ( $M = 4.40, SD = 1.66$ ) were, on average, implicated as occurring ‘sometimes’ or ‘often’ rather than ‘rarely’ or ‘very. Although some leagues may be formed for the purpose of maintaining or building social ties (Boyan et al., 2016), it would appear that fantasy leagues, when not controlling for the individualized goals of certain leagues, may be most appropriately considered as task-oriented groups.

However, considering fantasy sports leagues as task-oriented groups, supported here, does not entirely dismiss socialization as a concomitant and common purpose for fantasy sports league participation. Indeed, findings offer insight as to how socialization might occur or is perceived to occur. In the present study, increased task participation led to increased collective self-esteem. This relationship confirms fantasy sports leagues are capable of fulfilling psychological needs for inclusion and, when considered with previous literature, explanations can be formulated for how this phenomenon occurs in the relative absence of social exchange.

First, previous research indicates that individuals play fantasy sports for what they believe to be social purposes (Lee, Seo, & Green, 2013; Roy & Goss, 2007; Schreindl, 2013; Spinda & Haridakis, 2008), but the results of the present research suggest this socialization is not occurring overtly. One explanation for these seemingly contradictory results is that the shared task-orientation of fantasy sports is creating perceptions of social presence in fantasy sports

leagues. Nowak and Biocca (2003) forwarded the idea that social presence is actually driven more by psychological processes and less so by the richness of a medium as originally proposed by Short et al. (1976). Boyan et al. (2016) explicate if such claims are true, mutual levels of task participation in fantasy sports leagues would likely lead to players feeling engaged and present with other league members despite physical separation or lack of opportunity for direct interaction. In the present study, heavy task participants reported greater connection to their fantasy sports leagues even though they chose to use the fantasy sports medium in a way which limited its potential richness, expressly exemplifying the predictions of Boyan et al. (2016). This supports Nowak and Biocca's (2003) proposition that social presence is primarily psychological in nature.

Moreover, scholars have employed critical theory and qualitative methods to label fantasy sports leagues as masculine environments (Davis & Duncan, 2006) and the results found here regarding task participation and collective self-esteem empirically validate these claims. Previous research addressing closeness and relationship building from a masculine communication orientation broadly supports the primary role of shared activities in generating interpersonal closeness (for review see Wood & Inman, 1993). As this perspective on masculine communication was developed via studying male interaction, it is not unreasonable to believe predominately male groups would exhibit a masculine communication orientation. As is the case with fantasy sport participants in general (FSTA, 2016), the majority (84%) of respondents in this study were male ( $n = 79$ ). Given a scholarly consensus for shared tasks promoting closeness in masculine communication scenarios (Wood & Inman, 1993), if a group were masculine in nature, it could be expected that increased task participation would lead to greater collective self-esteem, or closeness to the group – results present in this study. Not only does this validate Davis

and Duncan's (2006) claim that fantasy sports leagues are masculine environments, but it also provides reason to consider task participation a form of socialization in those environments. It is not clear from these results, however, if fantasy leagues are masculine environments as a consequence of their common gender makeup or if they encourage a masculine style of communication regardless of league gender composition. Making such a determination would require further, targeted research investigating the masculine nature of fantasy sports leagues.

Additionally, within the present data, increased collective self-esteem was positively related to intragroup interaction, specifically intragroup competition, consistent with the theorized directional relationship. This provides a novel alternative to prior assertions that intergroup competition is essential to positive evaluations of collective self-esteem (e.g., Tajfel, 1974; Tajfel & Turner, 1979). This relationship between intragroup interaction and collective self-esteem, not only provides evidence of something other than intergroup comparison boosting collective self-esteem, it does so in groups which have no clearly defined out-group with which to compete. That this relationship is present in the relative absence of opportunity for intergroup comparison further challenges claims that such comparison is needed to promote collective self-esteem by providing an example of in-group primacy. Brewer (1999) suggested if we are to believe in the primacy of in-groups when it comes to the formation of social identity, we need to understand why individuals join groups and more specifically "why individuals exhibit in-group loyalty, identification, and attachment in the first place" (p. 432). Although support for *H1a* does not suggest why individuals join fantasy leagues, excepting needs for inclusion, it does offer task participation and, in relation to the studied group, intragroup competition as possible explanations for increased group affinity in some groups.

*H2*, positing collective self-esteem is directly and positively related to an individual's public commitment to a fantasy sports identity, was offered as a novel approach to understanding the role of collective self-esteem in the social identity process. Because SIT research has suggested multiple roles for collective self-esteem in the social identity process (e.g., motivation for joining a group, bolstering perceived group status) with little in the way of effectively discerning what conditions lend themselves to those various roles, theoretical perspectives from psychology and communication were integrated in hopes of building a foundation for clarity on this issue. Support for *H2* highlights a previously unrecognized function of collective self-esteem in that it can indicate one's willingness, or lack thereof, to publicly commit to a group or social identity.

This newly recognized role of collective self-esteem demonstrates the utility of bridging two previously disparate lines of research. Previous research involving SIT (e.g., Tajfel & Turner, 1979), SIT's self-esteem hypothesis (e.g., Rubin & Hewstone, 1998), and related research involving the minimal group paradigm (e.g., Hertel & Kerr, 2001) all point to group behaviors designed to (a) favor the in-group, (b) denigrate the out-group, or (c) both as a means of building collective self-esteem through social comparison and similar processes. However, if collective self-esteem (i.e., the satisfaction of needs for inclusion) is the reason for joining a group, why would an individual not leave a group which fails to satisfy those needs? Minimal group research claims to, in part, answer this question by demonstrating even arbitrary assignment to a relatively meaningless group activates the need for boosting collective self-esteem via promotion of one's own group (Billig & Tajfel, 1973). This research has induced or examined only group conditions where groups compete for status and resources or, at minimum, where between group differences were explicated or implied (Bigler, Jones, & Lobliner, 1997).



Minimal groups research has failed to include participants who do not acknowledge arbitrary group classification, and does not address why or even how group members could increase perceptions of group status in the absence of an opportunity for competition or comparison. Conversely, research examining the effect of public commitment to performed individual identities in the fields of psychology (Kelly & Rodriguez, 2006; Schlenker et al., 1994; Tice 1992) and CMC (Carr & Foreman, 2016; Gonzalez & Hancock, 2009; Walther et al., 2011) has produced evidence which helps explain adherence to or a shift toward those identities, labeled identity shift. Only recently have researchers started to explore identity shift as it relates to more complex identities, or those identities which are amalgamations of multiple personality traits and behavioral patterns (Carr & Hayes, 2017). The majority of public commitment research and the resulting research on identity shift has opted instead to study the individual personality trait of introversion/extroversion. By demonstrating the existence of the proposed link between collective self-esteem and public commitment, the present research offers those studying social identity an opportunity to more clearly define the role of collective self-esteem at different points in the social identification process. And for those studying public commitment and identity shift, these results create a foundation from which to justify and conduct research involving more complex identities than those previously studied.

Specifically addressing the contribution to social identity research, these findings offer a resolution to one of the more contentious claims of SIT, its self-esteem hypothesis (see Rubin & Hewstone, 1988), and allow for expansion of social identity research involving groups which have no discernable out-group (Allport, 1954; Brewer, 1991;1999). SIT's self-esteem hypothesis suggests self-esteem plays a role in why individuals join groups. But it also uses self-esteem to explain why group members then discriminate against out-groups, or, at the very least, promote

their own group at the expense of an out-group, suggesting such actions are performed as a means of self-enhancement via downward comparison (Tajfel & Turner, 1979). However, after a detailed review of SIT research, Rubin and Hewstone (1988) concluded “it would seem as if intergroup discrimination leads to an increase in self-esteem but is not motivated by a need for self-esteem” (p. 56). This would suggest seeking collective self-esteem and boosting collective self-esteem are two related yet distinct processes, both of which may be aided by group affiliation but are not causally linked, indicating they are not as intertwined as SIT originally proposed. The link between collective self-esteem and public commitment found in the present work could represent a clearer point of delineation between fulfilling needs for inclusion through building group affiliation and other behaviors. Before public commitment to a group, group members may be focused on intragroup activity as a means of developing an attachment to the group and finding value in their member status. After making a public commitment to the group, other mean of boosting collective self-esteem may be explored such as between group comparison if a clearly defined out-group were present. Applying this idea to minimal group research underscores the importance of considering participants who do not accept their arbitrary group assignment. Accepting a group assignment in these experimental conditions could represent a bypass of the affinity building process and constitute a direct move to public commitment, something which may be perceived to some degree even in private experimental conditions (Kelly & Rodriguez, 2007; Tetlock & Manstead, 1985; Tice, 1992). This would explain why individuals who accept arbitrary group assignment, if they hold social scripts of group loyalty (Hertel & Kerr, 2001), would seek to promote their in-group, even at the expense of a simulated out-group (see Tanis, 2003).

Moreover, it is possible for an individual to publicly commit to a group-based identity in the absence of a competing or comparative out-group, as seen here with public commitment to a fantasy sports player identity. Making a public commitment to a group identity in the absence of intergroup competition scenarios would only require fulfillment of needs for belonging and a perceived sense of group worth, both of which can be satisfied via intragroup interaction mechanisms like shared task completion, as demonstrated in the present research. Public commitment resulting from collective self-esteem generation should then solidify the salience of one's group identity as part of their personal identity. By investigating group processes which contribute to collective self-esteem or, more directly, to public commitment, researchers can answer Brewer's (1999) call for investigation into why in-group primacy is formed. Taken summarily, applying the link identified between collective self-esteem and public commitment to SIT and social identity research at large shows its utility as a means for investigating why an individual may begin to lose a sense of self to a group identity (Hornsey, 2008; Tajfel & Turner, 1979) and why an individual may accept a social identity into their larger sense of self (Brewer, 1991).

The findings of the present study related to *H2* also demonstrate the value of research which moves beyond the controlled conditions of laboratory experiments to test variables in a more naturally occurring environment, such as a non-controlled fantasy sports leagues. Studying the exploration of identity in a computer-mediated environment that is not experimentally controlled may allow us to more accurately establish the boundaries of what individuals perceive to be a public commitment in such environments (Turkle, 1994). A criticism continually discussed in public commitment research using private/public laboratory induced conditions is that the private condition cannot be entirely private due to the presence of the researcher or the

subjects' awareness that they are participating in a research study (Kelly & Rodriguez, 2007; Tetlock & Manstead, 1985; Tice, 1992). This criticism may be diminished if a contained display of commitment is demonstrated to be considered non-public by the individual producing the display. Fantasy sports leagues, in which participants may have known each other prior to playing in the league, do not exactly offer anonymity. However, some survey respondents did not see themselves as having made a public commitment to fantasy sports despite 7-15 other individuals knowing they played fantasy sports at one time. Specifically, three respondents reported they 'agree' or 'somewhat agree' with the statement "No one knows I play fantasy sports." Another respondent reported they 'neither agree nor disagree' with the same statement, and another seven claimed they only 'somewhat disagree' with the statement. When asked to evaluate the statement "People know I play fantasy sports," two respondents reported they 'disagree' or 'somewhat disagree', another two respondents reported they 'neither agree nor disagree', and an additional twelve respondents reported they only 'somewhat agree' with the statement. Additionally, when asked to evaluate the statement "I have in some way publicly discussed my participation in fantasy sports," one respondent reported they 'strongly disagree', two more reported they 'somewhat disagree', and another eleven reported they only 'somewhat agree' with that statement. Although this is far from a unanimous rejection of constrained commitment to fantasy sports constituting a public commitment, it does lend credence to the notion that constrained displays of identity are not always perceived to be public. Therefore, by researching public commitment outside of controlled experimental conditions, the present research creates an opportunity to mitigate criticisms of public/private experiments which claim a single individual (the researcher) may be perceived as a point of public commitment. Future

research should look to more thoroughly examine what is perceived to be a public commitment and what situations may augment that perception.

Moving past simply establishing a link between collective self-esteem and public commitment, *H3a* tested the predicted positive relationship between public commitment and prototypical behaviors observed with individual personality traits (Gonzalez & Hancock, 2008; Kelly & Rodriguez, 2007; Tice, 1992) to see if public commitment would have the same effect on a complex social identity. Additionally, *H3b* was forwarded to establish if the perceived size of the public to which a commitment was made has a moderating effect on the relationship proposed by *H3a*. The most parsimonious explanation of the results would be to state both *H3a* and *H3b* received mixed support, indicating public commitment can lead to the internalization of more complex identities and, in certain instances, that shift is moderated by the perceived size of the public to which the commitment was made. Unpacking the results of the *H3a* and *H3b* analysis suggests the contribution of public commitment to internalization of a social identity is more complicated than the relationship found between public commitment and individual personality traits.

Previous research on public commitment (Tice, 1992; Schlenker et al., 1994; Kelly & Rodriguez, 2006) suggests internalization of a performed individual identity trait is directly affected by public commitment; but is also exacerbated in an additive manner by the inclusion of more interpersonal factors such as performance choice and public identifiability. However, when it comes to social identity displays, public commitment's direct effect on displays of prototypical behavior and any moderating effect of additional interpersonal factors appears dependent on the underlying nature of each component, or facet, of the larger, more complex identity. In the present research, public commitment to a fantasy sports identity was directly related to an

individual's level of sports media consumption, but not on measured levels of competitiveness, providing mixed support for *H3a*. Additionally, perceived size of public moderated competitiveness, but had no significant interaction with sports media consumption—both facets of one's social identity as a fantasy league member, revealing mixed support for *H3b*. Specifically, perceived size of public created a significant effect for public commitment on levels of competitiveness, but only when perceived size of public was much higher or much lower than the reported mean. In other words, a public commitment to a fantasy sports identity leads to larger increases in competitiveness as the perceived size of the audience to which that commitment is made increases.

Explaining the complexity of this relationship requires considering the nature of the facets of the social identity (fantasy league member) explored in the present work. One facet, sports media consumption, may be an artifact of increased participation in one's fantasy league. One does not need to consume sports media to play fantasy sports, but it would stand to reason an increased commitment to one's role as a fantasy sports league member would result in increased sports media consumption. Sports media can also be consumed with other individuals, but this consumption is not inherently a social activity. Watching a game, reading a magazine article, or listening to a sports-based podcast can all be accomplished in one's own time and in the comfort of one's own surroundings. Simply put, consuming sports media as a prototypical behavior is likely done more for the benefit of the individual and her/his own personal sense of attachment to their league and the activity in general. As a less interpersonally driven behavior, an interpersonal factor such as perceived size of public would not have a statistically significant effect on the relationship between public commitment and sports media consumption. However, an additional factor of the fantasy sports identity considered—competitiveness—is an internal

and personally perceived identity trait, but the actual competition of fantasy sports cannot occur without the presence or social presence of others. Moreover, public commitment to a fantasy sports identity does not automatically imply that public commitment entails regular conversations about one's fantasy league and their performance in that league with individuals outside of that league. Size of public in this study was measured by questions gauging the extent to which respondents communicated with concentrically larger groups of individuals about fantasy sports. Increases in the number of interactions could quite easily lead to more regular statements of how well one is performing at any given time in their league. The more regularly and widely one discusses fantasy sports, and perhaps by extension their personal fantasy league performance, it may become increasingly important for that individual to report they are doing well in their league, increasing their desire to be competitive.

Partial support for *H3a* and *H3b* also helps to further establish what it means to be a fantasy sports player. In the current body of research, there is no definitive operationalization constituting the "identity of a fantasy sports player," despite Roy and Goss's (2007) use of the term. The two variables under investigation in the present study, competitiveness and sports media consumption, were chosen based on prominent assertions in the limited research available. The percentages of variance explain by the tested models for competitiveness (12%) and sports media consumption (13%) and partial support for the hypothesized relationship of variables provide reason for considering both dependent variables to be part of a fantasy sports player identity. This contributes to a better understanding of what it means to be a fantasy league member and offers a model by which other suspected identity traits can be linked to the fantasy sports player identity. Future research can use this model to help determine if other traits studied

using fantasy sports participation, such as engaging in risk-taking behaviors like gambling (Martin & Nelson, 2014), are actually part of a fantasy sports identity.

*H4a* and *H4b*, predicting performative feedback—both from other fantasy leaguers and system-generated—is positively related to prototypical behaviors in the direction of the valence of the feedback, were not supported. Considering the computer-mediated nature of modern fantasy sports leagues and previous research demonstrating feedback’s effect on self-perceptions (e.g., Gonzales & Hancock, 2009; Walther et al., 2011), the lack of support for these hypotheses was somewhat surprising.

One explanation why other-generated feedback may not have significantly impacted prototypical fantasy sports behaviors is the somewhat nebulous nature of the meaning of performative feedback in fantasy sports environments. For example, a common form of feedback in fantasy sports leagues, trash talk, could be considered negatively valenced performative feedback or it could be considered a relationship building device. Evidence exists supporting both of these uses for trash talk (Hickman & Ward, 2007; Vaida et al., 2010). Hickman and Ward (2007) demonstrated how trash talk is used and perceived as negatively valenced communication in marketing and brand identification, an area where groups may use trash talk to intentionally put down those who do not agree with their choices. Conversely, Vaida et al. (2010) showed how collocated groups use trash talk as a prosocial tool during intragroup gaming competitions. Even though trash talk is used differently in both instances, these conflicting results are enough to cast doubt on definitively claiming trash talk functions as a relationship damaging or relationship building form of interpersonal interaction. The role of trash talk is further muddied by the results of the present research. On average, respondents reported ‘rarely’ instigating trash talk ( $M = 3.47, SD = 1.85$ ) or being trash talked by others ( $M = 3.49, SD =$



1.76). However, on average, respondents ‘somewhat agreed’ with scale items such as “other league members often criticized my competitive performance” ( $M = 5.66, SD = 1.59$ ) and “other league members have expressed that I am no good at fantasy sports” ( $M = 5.88, SD = 1.50$ ). These results suggest negatively valenced feedback occurs in fantasy leagues but is only sometimes perceived as trash talk. Even in instances where negatively valenced feedback was perceived as trash talk, the present results are incapable of assessing if the trash talk was perceived as prosocial or derogatory. Should negatively valenced feedback be perceived as prosocial, it could easily be dismissed as a joke or, at the very least be dismissed as non-serious feedback. The normativity of trash talk may have also played a role in the lack of significance for positively valenced performative feedback. To the researcher’s knowledge, there is no research addressing the regularity of positively valenced performative feedback in fantasy sports leagues. Put another way, the intragroup competitive nature of fantasy sports league may not predispose itself to congratulatory revelry. Much in the same way that trash talk can contextually be considered a prosocial intragroup behavior (Vaida et al., 2010), complements on one’s performance may be contextualized or viewed as sarcastic quips.

In the case of system-generated feedback, players might not see such feedback as credible or meaningful, and therefore fail to incorporate the feedback into their self-concept as a fantasy sport player. How fantasy sports players view system-generated feedback may be unique to each player given their efficacy as a fantasy sports player and/or their opinions of the plausibility of consistent success in fantasy sports competitions, neither of which were assessed in the present study. Players vary in their consideration of fantasy sports as games of either chance or skill (Dwyer, 2011; Farquhar & Meeds, 2007; Roy & Goss, 2007). Players who believe fantasy sports to be games of skill are likely to experience the illusion of control (Langer, 1975) in a less than

controllable environment. It might then be assumed that those with this predisposition would take system-generated feedback more seriously. Such an assumption may not be accurate, though, considering those who maintain the illusion of control are likely to display increased levels of confidence (Langer, 1975; Roy & Goss, 2007) which may counter the effect of negatively valenced system-generated feedback. Individuals who see themselves as relatively efficacious players may also exhibit a confirmation bias wherein they are only likely to internalize feedback which is consistent with their personally perceived abilities as a fantasy sports player. On the other hand, those who feel fantasy sports are games of chance may dismiss negatively valenced system-generated feedback as simply having an unlucky week or even an unlucky season. The lack of support for *H4a* and *H4b*, suggests further research is needed regarding performative feedback in fantasy sports leagues.

*H5a* posits performative feedback has a direct effect on personal self-esteem such that negatively valenced performative feedback will lead to lower levels of personal self-esteem while positively valenced performative feedback will lead to higher levels of personal self-esteem. This direct relationship was supported in the present research. This finding elucidates an interesting consequence of joining groups to satisfy one's need for inclusion in that one's performance in their chosen group may compromise their personal evaluations of self-worth. *H1a* demonstrates fantasy sports leagues as task-oriented groups are capable of satisfying inclusion needs through the development of collective self-esteem. However, satisfying those psychological needs may come at the expense of one's personal feelings of self-worth should they fail to adequately perform the group's task.

*H5b* predicted the relationship between performative feedback and personal self-esteem would be moderated by reported levels of collective self-esteem such that higher levels of

collective self-esteem would increase the effect of performative feedback on personal self-esteem. This hypothesis was based on the idea that personal self-esteem is more vulnerable to fluctuation when feedback is provided by significant others, especially in those areas to which individuals assign greater levels of meaning (Rosenberg, 1979, Rosenberg et al., 1995). *H5b* was not supported. Because the present research considered fantasy sports leagues as highly social groups, greater attachment to such groups, expressed by higher levels of collective self-esteem, was expected to lead to an intensified relationship between performative feedback and personal self-esteem. Essentially, a psychological catch-22 would be created whereby developing greater collective self-esteem could put participants at risk of a greater negative impact on their personal feelings of worth should they receive negative performative feedback. This relationship was not observed. Although *H1a* and *H1b*, promote the labeling of fantasy leagues as task-oriented groups, further analysis indicated that task participation in fantasy sports leagues may be functioning as a social tool. As such, the social ties developed in fantasy sports leagues may be latent or weak ties (see Ellison et al., 2007; Smock et al., 2011). Latent ties represent possible connections to other individuals but do not necessarily require direct social interaction to be built or maintained, and weak ties are those connections which serve a social purpose other than emotional support (Ellison et al., 2007). Such ties may fall short of designation as significant others, those more likely to affect feelings of personal self-esteem (Rosenberg, 1979). In this way, lack of support for *H5b* also suggests levels of collective self-esteem regarding a particular group affiliation may not always function adequately as a measure for determining what groups of people qualify as significant others.

During *H5b* analysis, an interesting and unexpected observation was made which indicated the relationship hypothesized in *H5b* occurs, not for those with higher collective self-

esteem, but for those with lower levels of collective self-esteem. This means lower levels of collective self-esteem actually appear to exacerbate the effect of performative feedback on personal self-esteem. It is not clear why this occurred, but some possible explanations are offered here. The intensified effect of negative performative feedback may be the consequence of an individual simultaneously feeling low levels of attachment to a group they wish to be a part of and being shown they are not specifically good at what that group does. Basically, the individual may be experiencing failure in an additive manner. On the other hand, this intensified effect may not be seen in those with higher collective self-esteem as their collective self-esteem may be acting as a buffer to the effects of performative feedback on personal self-esteem. Additionally, while higher collective self-esteem may not add to feelings of success, lower collective self-esteem may be doing so by allowing an individual to feel prouder of their achievement as an individual who is not dependent on the group for validation. Although not the hypothesized interaction effect, the interaction effect revealed here offers a unique observation which deserves further investigation.

Considered holistically, the results of the present study illuminate the need for a more comprehensive approach to social identity research inclusive of group identities which achieve salience void of direct intergroup comparison. Fantasy sports leagues were chosen as a means of investigating such claims because by nature they promote intragroup competition and offer limited chances for out-group comparison. Surprisingly, despite decades of scholarly work directed at understanding social identity, certain concepts have been ignored while others have received attention without consideration of all the mechanisms at work in the social identity process. By highlighting a means of group affinity building that is isolated to intragroup interaction and intimating the link between collective self-esteem and public commitment to

group identities, the present research exposes systems at work in the social identity process that have gone previously unnoticed or understudied. This provides a foundation for future researchers to both validate the existence of these systems and apply them to various social identity construction scenarios and environments.

The research utility of fantasy sports is also illustrated by the results discussed here. There is much to be learned by looking past the activity itself and even common motivations for playing. The bulk of scholarly work addressing fantasy sports has focused primarily on why people play them and, to an extent, who is playing them. How people are playing fantasy sports and the impact participation might have on a player's behavior and self-concept have only recently been addressed. The present research contributes to the latter line of inquiry and offers suggestions for what research is needed to better understand the fantasy sports identity and the variety of interactions possible in fantasy sports leagues. Moving past the act of playing fantasy sports, the social processes at work in fantasy sports leagues demonstrated here allow for the expansion of research regarding social presence, computer mediated-communication, and social identity.

### **Limitations**

Although the present research makes valuable contributions to the scholarly understanding of communication, social identity, and fantasy sports, it is constrained by several limitations to be discussed here.

First, given the number of variables under investigation, a larger sample size would have been ideal to safeguard against low statistical power. The sample size appears to have been partially restricted by the number of variables measured or the number of scales employed to measure them. Attrition rates for the survey were high, with 110 respondents starting the survey

but not reaching acceptable rates of completion. The length of the survey was not the only item hindering completion as 70 respondents failed to proceed beyond the initial prompt to identify the fantasy league they would be referencing during the evaluation of survey items. The choice to have respondents input the name of their fantasy league was made to ensure their attention during recall would be focused expressly on a single fantasy league during survey completion as it is not uncommon for individuals to participate in multiple leagues. The answer to the league name prompt was used to populate certain items throughout the survey to guarantee a respondent's attention stayed fixed on that specific fantasy league. Therefore, a forced response measure was employed to prevent respondents from continuing if they chose to avoid answering the prompt. Despite assurances that personally identifiable information would be deleted upon the collection of survey data to maintain confidentiality of responses, the insistence that respondents enter the name of their fantasy league could have created a sense of unease among some. An additional note about the purpose of the league name prompt might have helped reduce any resistance the prompt created.

Response rates being limited due to survey length and league name prompt highlight how involved respondents may have believed the survey to be. Although not measured in the present study, this perception of involvement is assumed here due to the previously mentioned attrition rates and the explanation offered for their cause. If accurate, this assumption might suggest those only casually involved in fantasy sports are less likely to have completed the survey. Given the nature of the relationships tested, it was important to gather data from individuals at all levels of involvement and commitment to fantasy sports. While the present data suggest this occurred to an extent, the nature of the survey appears to have limited the response rate from those who failed to maintain their tenure as fantasy sports players or who continue to play despite minimal

satisfaction with the activity, indicating a possible non-response bias. Unsolicited qualitative feedback from one respondent aides this interpretation. After one instance where the researcher posted a call for participation to his Facebook page, one social media acquaintance posted to the comment section, “I tried to do this but I care so little about fantasy sports I didn’t make it past the third page.” This individual, at once, exemplifies a subset of the fantasy sports population whose responses are required and provides rationale for why that subset may be under-represented here. Although this individual’s response is the sole exemplar of this attitude existing among survey respondents, the impact such an attitude can have on survey completion should not be ignored.

The sample population in the present study was also not entirely representative of the fantasy sports population on variables of gender and age. The number of female fantasy sports players has risen in recent years, and now 34% of all players are women (FSTA, 2016), a substantially larger percentage than the 16% of survey respondents who identified as female. In both the general fantasy sports player population and the sample population, the majority of players are male. However, given the more heavily skewed male majority in the sample population, it is worth noting the masculine communication orientation of fantasy sports supported by *H1a* may be an artifact of the sample population. Additionally, the mean age of the sample population ( $M = 32.81$ ,  $SD = 9.62$ ) is slightly lower than the average reported age of the fantasy sports playing population, 38.6 (FSTA, 2016). A one-sample t-test revealed this difference to be statistically significant,  $t(92) = -5.806$ ,  $p \leq .001$ . While none of the conclusions drawn in the above discussion were reliant on the age of participants, this difference could limit the generalizability of claims made directly regarding fantasy sports.

Another limitation to the present study is when the data were collected. Collection did not take place during the peak fantasy participation times for any of the three major professional American sports (football, baseball, basketball). Due to time constraints imposed on the study, this was largely unavoidable. However, the recall and respond nature of the survey did not require that respondents be actively engaged in fantasy sports. While active participation was not a requirement, it may have led to more vivid recall and increased validity of scale item evaluation. Moreover, if this study were to be conducted during an active sports season, such as the upcoming football season, it may have been easier to recruit respondents, helping achieve a greater sample size. Future research examining the fantasy sports dynamics studied here would benefit from data collection during peak times in the professional sports cycle.

Even though there was demonstrable utility in employing survey collection methods in the present study, a number of the above limitations could be corrected by employing the use of experimental design in future research. Aside from allowing researchers greater control in constructing a representative sample population, experimental design would help to more concretely explore the complicated relationship between public commitment and social identity formation found here. The survey methods used in the present study allowed for a broad observation of relationships among variables. To understand these relationships in greater detail, narrowing the scope of research to address individual relationships between variables is required.

Finally, it is worth noting a number of scale items used here were constructed specifically for use in the present study. While many of these scales proved reliable, scale validity was not rigorously tested prior to implementing the constructed scales. Further research may look to assess the validity of scales items. This is especially true of scales which perform a recognizable, yet currently unmet, function. For example, fantasy sports have been studied on many occasions



utilizing a uses and gratifications approach. This focus has left fantasy sports researchers with a stronger understanding of why people play fantasy sports, but little understanding as to how they play fantasy sports. Refinement of the task participation and social interaction scales in reference to fantasy sports would give future researchers established scales to use when pursuing new lines of research investigating the impact of how fantasy sports are played.

### **Conclusion**

By using fantasy sports leagues to investigate various group processes, the present study draws attention to the research potential of this unique communicative environment. Despite a great deal of research on social identity, questions still exist about why individuals join groups, what role collective self-esteem plays in the social identification process, and how individuals develop group affinity especially in the absence of traditional out-groups. Looking to answer these questions, concepts from psychology and communication were integrated more completely into the social identity narrative and used to form hypotheses about the relationship between group member interaction, collective self-esteem, public commitment, displays of prototypical behavior, and evaluations of personal self-worth. By investigating these hypotheses, the present study provided insight on the relationships between the studied variables, some of which was foundational in nature and deserves further investigation. This includes evidence of a direct relationship between collective self-esteem and public commitment and the ability of public commitment to affect the internalization of complex identities.

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## APPENDIX A: SCALES

### **Task Participation Index**

(Created using common online fantasy sports league tools, and using some items adapted from Ellison et al.'s, 2007 Facebook use intensity measure)

Initial survey items measured using a 7-point Likert-type scale where 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neutral, 5 = somewhat agree, 6 = agree, and 7 = strongly agree.

- Maintaining my fantasy sports team has become part of my daily routine
- I feel out of touch when I haven't logged onto my fantasy sports league for awhile
- I would be sorry if my fantasy sports league shut down.

The following survey items were measured using a 7-point Likert-type scale where 1 = Never, 2 = Very Rarely, 3 = Rarely, 4 = Occasionally, 5 = Frequently, 6 = Very Frequently, 7 = Constantly/Always

- I adjust my fantasy team lineup.
- I monitor the active/injured status of my fantasy team players.
- I propose trades with other members of my fantasy league.
- Other members of my fantasy league propose trades to me.
- I monitor the waiver wire.
- I use the waiver wire to acquire players I did not draft.
- I monitor projected scores (e.g.: monitoring individual player statistics, evaluating starting line-up potential for players).
- I check the score of my fantasy team during competition
- I check my opponent's fantasy team score during competition.

## Social Interaction Index

(Created using social interaction tools commonly available in fantasy sports leagues and other electronic communication likely to be employed by fantasy league members)

The following survey items were measured using a 7-point Likert-type scale where 1 = Never, 2 = Very Rarely, 3 = Rarely, 4 = Occasionally, 5 = Frequently, 6 = Very Frequently, 7 = Constantly/Always

- I post comments to my league's forum board (built in to fantasy sports software).
- Other league members post comments about me in my league's forum board.
- I respond to other league members' posts to the league forum board.
- I attempt to engage other league members using trash talk.
- Other league members attempt to engage me in trash talk.
- I use private messaging (built in to the fantasy sports software) to communicate with other league members.
- I call other league members to discuss fantasy sports.
- I call other league members to discuss things unrelated to fantasy sports.
- I text other league members to discuss fantasy sports.
- I text other league members to discuss things unrelated to fantasy sports.
- I use an alternate means of communication set up by my fantasy league (i.e.: a league Facebook page or website) to privately interact with other league members.
- I use an alternate means of communication set up by my fantasy league (i.e.: a league Facebook page or website) to publicly interact with other league members.
- I regularly interact with other league members face-to-face.

## Collective Self-Esteem Scale

(Adapted from Luhtanen & Crocker, 1992)

Survey items were measured using a 7-point Likert-type scale where 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neutral, 5 = somewhat agree, 6 = agree, and 7 = strongly agree. (R) indicates a reverse coded item.

### Membership

- I am a worthy member of my fantasy league.
- I feel I don't have much to offer to the fantasy league I belong to. (R)
- I am a cooperative participant in my fantasy league.
- I often feel I'm a useless member of my fantasy league. (R)

### Private

- I often regret that I belong to my fantasy league. (R)
- In general, I'm glad to be a member of the fantasy league I belong to.
- Overall, I often feel that the fantasy league I am a member of is not worthwhile. (R)
- I feel good about the fantasy league I belong

### Public

- Overall, my fantasy league is considered good by others.
- Most people consider my fantasy league to be more ineffective than other fantasy leagues. (R)
- In general, others respect the fantasy league that I am a member of.
- In general, others think that the fantasy league I am a member of is unworthy. (R)

### Identity

- Overall, my fantasy league membership has very little to do with how I feel about myself. (R)
- The fantasy league I belong to is an important reflection of who I am.
- The fantasy league I belong to is unimportant to my sense of what kind of person I am. (R)
- In general, belonging to my fantasy league is an important part of my self-image.



### **Public Commitment**

(Created to assess perceptions of public commitment to both a respondent's individual fantasy sports league, and commitment to the identity of being a fantasy sports player)

Survey items were measured using a 7-point Likert-type scale where 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neutral, 5 = somewhat agree, 6 = agree, and 7 = strongly agree.

- No one knows I am a member of my fantasy league. (R)
- No one knows I play fantasy sports. (R)
- People are aware that I am a member of my fantasy sports league.
- People know I play fantasy sports.
- I have in some way publicly discussed my membership in my fantasy sports league.
- I have in some way publicly discussed my participation in fantasy sports.

### **Perceived Size of Public**

(Created to assess a respondent's perception of how many people are aware of their participation in fantasy sports)

Survey items were measured using a 7-point Likert-type scale where 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neutral, 5 = somewhat agree, 6 = agree, and 7 = strongly agree.

- Only other league members are aware that I play fantasy sports
- Family members outside of my fantasy sports league are aware that I play fantasy sports
- Friends outside of my fantasy sports league are aware I play fantasy sports
- I have discussed my participation in fantasy sports with people I do not consider friends or family members.
- I have discussed my participation in fantasy sports with people I did not know previous to discussing fantasy sports with them.

## State Self-Esteem Scale

(Used to evaluate personal self-esteem, adapted from Heatherton & Polivy, 1991, specifically subscales related to *performance* and *social* measures of self-esteem)

Survey items were measured using a 7-point Likert-type scale where 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neutral, 5 = somewhat agree, 6 = agree, and 7 = strongly agree. (R) indicates a reverse coded item.

### Performance

- I feel confident about my fantasy sports abilities.
- I feel frustrated or rattled about my performance in my fantasy sports league. (R)
- I have trouble understanding the fantasy sports statistics presented to me.
- I feel as smart as other league members
- I feel confident that I understand fantasy sports.
- I feel that I have less fantasy sports ability than other league members. (R)
- I feel like I'm not doing well in my fantasy sports league (R)

### Social

- I am worried about whether I am regarded as a success or failure in my league. (R)
- I feel self-conscious in my league. (R)
- I feel displeased with myself. (R)
- I am worried about what other league members think of me (R)
- I feel inferior to other league members. (R)
- I feel concerned about the impression I am making. (R)
- I am worried about looking foolish. (R)

## Competitiveness Index

(Used as one part of the measure for prototypical behaviors, taken from Smither & Houston, 1992.)

Survey items were measured using a 7-point Likert-type scale where 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neutral, 5 = somewhat agree, 6 = agree, and 7 = strongly agree.

- I like competition.
- I find competitive situations unpleasant. (R)
- I don't like competing against other people. (R)
- I enjoy competing against an opponent.
- I try to avoid competing with others. (R)
- I get satisfaction from competing with others
- I dread competing against other people (R)
- I am a competitive individual
- Competition destroys friendships (R)
- I will do almost anything to avoid an argument (R)
- I try to avoid arguments (R)
- I often remain quiet rather than risk hurting another person's feelings. (R)
- In general, I will go along with the group rather than create conflict. (R)
- I don't enjoy challenging others even when I think they're wrong. (R)
- I would like to be on a debating team.
- Games that have no clear-cut winner are boring.
- It's usually not important to me to be the best. (R)
- I often try to outperform others.
- When I play a game, I like to keep score.
- I don't like games that are winner-take-all. (R)

## **Sports Media Consumption Index**

(Items below were created to measure frequency of sports media consumption as part of prototypical fantasy sports player behaviors, with some items adapted from Ellison et al.'s (2007) Facebook use intensity scale)

The following survey items were measured using a 7-point Likert-type scale where 1 = Never, 2 = Very Rarely, 3 = Rarely, 4 = Occasionally, 5 = Frequently, 6 = Very Frequently, 7 = Constantly/Always

- I watch televised sporting events.
- I consume sports specific news (e.g. Sports Center, newspaper sports page).
- I listen to sports related podcasts or radio shows.
- I attend live sporting events.
- I subscribe to a sports entertainment package through my cable or internet provider or alternate source.
- I seek out media programming related to fantasy sports

The following survey items were measured using a 7-point Likert-type scale where 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neutral, 5 = somewhat agree, 6 = agree, and 7 = strongly agree.

- I feel out of touch when I have not consumed sports media for a while
- Sports related media programming has become part of my everyday life.

## **Performative Feedback**

(both system-generated and other-generated feedback items were created and phrased so as to remain consistent with other survey measures).

### **System-generated feedback**

- Players were asked to describe their fantasy sports team record using the following scale  
1 = I never won/only lost, 2 = I lost far more often than I won, 3 = I lost more than I won, but only slightly, 4 = I had an even record (as many wins as losses), 5 = I won more than I lost, but only slightly, 6 = I won far more often than I lost, 7 = I was undefeated

The following survey items were measured using a 7-point Likert-type scale where 1 = Never, 2 = Very Rarely, 3 = Rarely, 4 = Occasionally, 5 = Frequently, 6 = Very Frequently, 7 = Constantly/Always

- When losing, I lost by large point margins. (R)
- When winning, I won by large point margins.
- My fantasy team generated a large number of points.
  
- Players were asked to evaluate “Based on your team statistics, how would you say you did competitively compared to other members of your fantasy sports league” using a polarized scale of ‘much worse’ to ‘much better’. 7 scale points were used to maintain consistency with other scales.

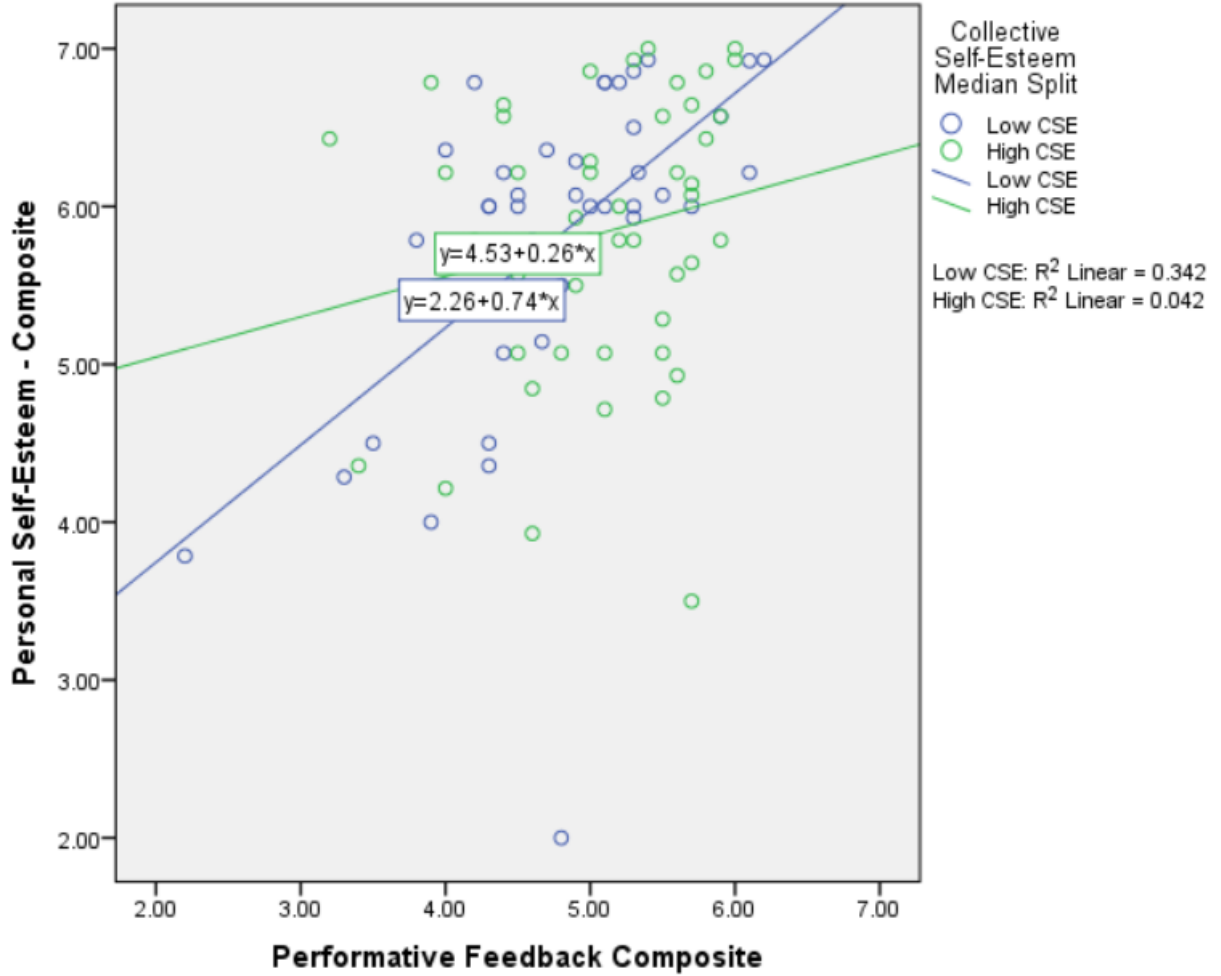
### **Other-generated Feedback**

The following survey items were measured using a 7-point Likert-type scale where 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neutral, 5 = somewhat agree, 6 = agree, and 7 = strongly agree.

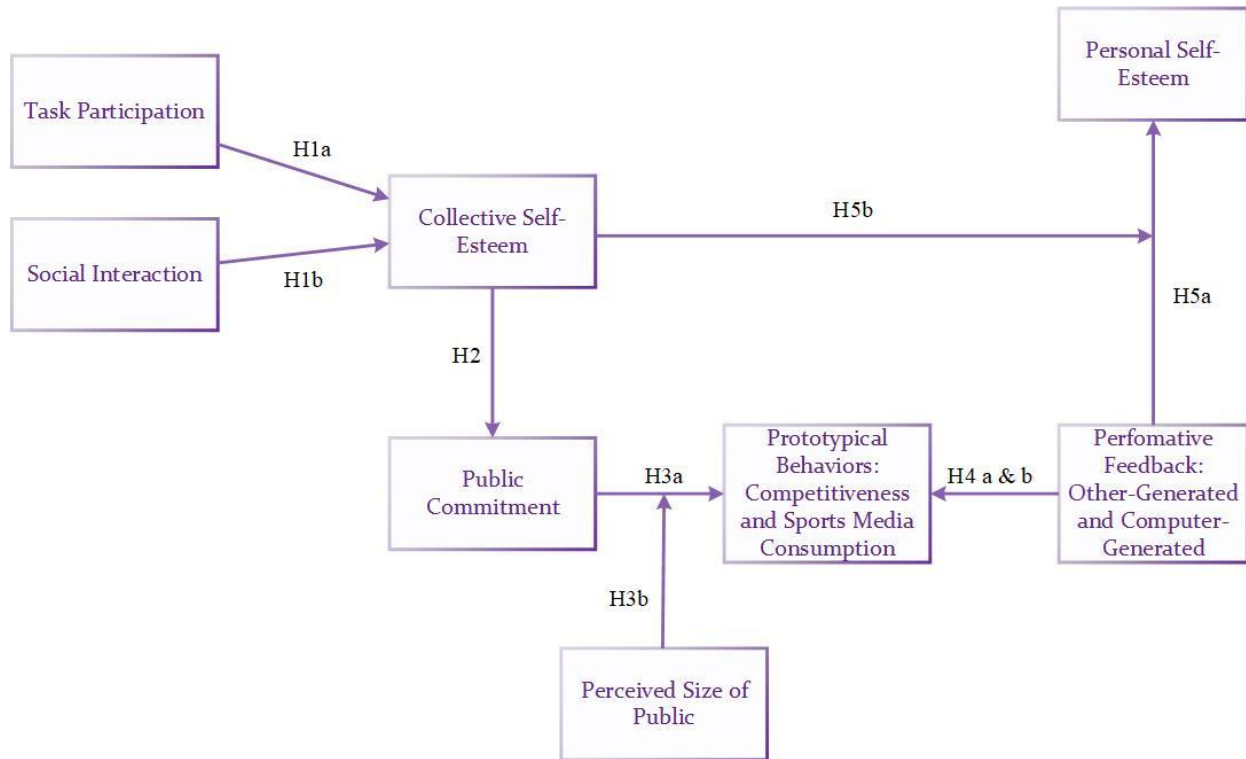
- Other league members often criticized my competitive performance. (R)
- I was often congratulated on my competitive success.
- I have been told by other league members that I am good at fantasy sports.
- Other league members have expressed that I am no good at fantasy sports. (R)
- I have been told by other league members that my competitive performance is fairly average.

APPENDIX B: FIGURES AND TABLES

Figure 1: Median Split



**Figure 2: Visual Map of Hypotheses**



**Table 1: Variable Descriptives****Table 1.** Descriptives for measured variables

Variable	Reliability Coefficient ( $\alpha$ )	Mean ( $M$ )	Standard Deviation ( $SD$ )
Task Participation	.844	5.20	.82
Social Interaction	.831	3.34	.99
Collective Self-Esteem	.861	5.24	.74
Public Commitment	.814	6.26	.82
Perceived Size of Public	.727	5.43	1.13
Competitiveness	.899	5.32	.88
Sports Media Consumption	.904	4.72	1.43
Other-Generated Feedback	.462	4.92	1.02
System-Generated Feedback	.834	4.83	.90
Performative Feedback (Composite)	.697	4.86	.84
Personal Self-Esteem	.861	5.80	.92