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UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

GENERAL FAN PERCEPTIONS OF RIVAL TEAMS IN  
INTERCOLLEGIATE ATHLETICS

A Dissertation Submitted in Partial Fulfillment  
of the Requirements for the Degree of  
Doctor of Philosophy

Cody Thomson Havard

College of Natural and Health Sciences  
School of Sport and Exercise Science  
Sport Administration

August, 2011

This Dissertation by: Cody Thomson Havard

Entitled: *General Fan Perceptions of Rival Teams in Intercollegiate Athletics*

has been approved as meeting the requirement for the Degree of Philosophy in College of Natural and Health Sciences.

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## ABSTRACT

Cody Thomson Havard. *General fan perceptions of rival teams in intercollegiate athletics*. Published Doctor of Philosophy dissertation, University of Northern Colorado, 2011.

The purpose of the current investigation was to develop and validate a scale that empirically measures fan perceptions toward a rival sports team. Rivalry is talked about on an almost-daily basis, yet little research into the phenomenon exists. Previous research into sport rivalry tends to focus on fan behavior (Wann & Grieve, 2005), consumer behavior (Mahony & Moorman, 1999), and fan evaluations of teams and players (Wann et al., 2006). In the current study, two samples of intercollegiate athletics fans were used to develop and validate the Sport Rivalry Fan Perception Scale (SRFPS). The measure proved reliable and valid as a measure of fan perceptions toward a rival team. Additionally, the SRFPS was examined for any discernable differences between fans. In particular, differences were examined between fans who live in the same city and state as the favorite team and those who do not, and fans who received a degree and/or attended the university where the favorite team plays and those who did not. No significant differences were found among fans regarding the city, state, and degree/attended questions. Possible reasons for the lack of significance are discussed, along with the theoretical and practical implications of the SRFPS and areas for future study.

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## CHAPTER I

### INTRODUCTION

Sport plays an integral part in modern society, and has grown in popularity among people in the United States and around the world (Chelladurai, 2001). This popularity is illustrated by the sheer magnitude of world events such as the World Cup and the Olympics. For example, this past summer, 24.3 million people in the United States watched the 2010 World Cup in South Africa (Blum, 2010), and 190 million people viewed the 2010 Winter Olympics (Markovitz, 2010). Further, 211 million people in the United States and 4.7 billion people worldwide watched the 2008 Summer Olympics (Beijing Olympics, 2008). The amount of money generated from events is another indication of how prevalent sport is in the lives of people, and sport promoters have taken advantage of this. It is reported that television rights for the 2012 Summer Olympic Games in London have reached \$1.2 billion (Coakley, 2009).

Spectatorship of sports within the United States has grown as well. The 2010 Super Bowl attracted 106.5 million viewers, becoming the most watched television event in history (Huff, 2010), and sold 30-second advertisements for \$2.5 to \$2.8 million (Super Bowl ad, 2010). The 2010 BCS National Championship Game drew a rating of 17.17 (TV ratings, 2010), and in 2006, the BCS National Championship Game between

the Texas Longhorns and the Southern California Trojans drew an all-time high 21.7 rating (TV ratings, 2010).

Illustrated by the viewership and revenue figures, it is clear that spectator sport has become intertwined with the lives of millions of people in the United States and around the world. Sport spectatorship can provide people the opportunity to escape their everyday lives (Wann, 1995), associate with successful others (Cialdini et al., 1976), and increase self-esteem by having membership in groups of people with similar interests (Tajfel, 1978b). A major outlet for many sports fans in the United States is intercollegiate athletics, specifically football and basketball. Fans of college football identify with their favorite teams and universities and tend to passionately display loyalty to the team they support (Gibson, Willming, & Holdnak, 2002). The identification and consumption habits of college basketball fans have been examined in the literature (Wann, Haynes, McLean, & Pullen, 2003; Wann et al., 2006), and display strong identification with their favorite teams and institutions as well.

Following college football and basketball in the United States is currently a year-round expression for fans, with football contests beginning in August and basketball ending in early April. During the offseason, fans of college football and basketball flock to team-specific and general web sites to follow their team's pursuit of the latest and greatest recruiting classes for upcoming years. Following a team's offseason pursuits is so important that web sites such as ESPN and Rivals rank recruiting classes every year. Fans also stay active on team-specific message boards discussing the upcoming year's rosters and schedules.

The massive numbers of people attending games and capacities of campus stadiums needed to accommodate fans further illustrates the importance of college football and basketball in America. Currently, there are nine college football stadiums with capacities over 100,000 and five with over 90,000 (“100,000 +”, 2010). The University of Michigan stadium seats the most fans, with a capacity of 109,901, and is followed by Penn State University, The Ohio State University, the University of Tennessee, the University of Alabama, and The University of Texas at Austin. The schools on this list regularly sell out their home games, allowing thousands of fans to enjoy the spectacle of modern-day intercollegiate football. College basketball arenas also seat thousands of fans, and many times exceed the capacities found in professional basketball facilities. The reach of sports has also been expanded with the help of television, where millions of fans regularly tune in every game to watch their favorite teams and players compete. The immense importance of contests to fans illustrates how ubiquitous sport is in society, and the resulting attendance and television figures are very attractive to promoters.

It is erroneous to address sport participation and spectatorship without a discussion of the rivalry that occurs between teams, players, and fans. Rivalries are prevalent throughout sport and carry implications not only for the contestants themselves, but also for the fans, teams, organizations, and institutions that make up the relationship. Some of the most well known rivalries at the professional levels include the New York Yankees and Boston Red Sox, Dallas Cowboys and Washington Redskins, and the Manchester United and Liverpool football clubs. Specific to college football, Harvard/Yale is credited as the oldest rivalry (Corbett & Simpson, 2004), and actually

did not begin on the field. Rather, both schools helped bring churches to the new settlements in New England and competed for public attention and operating money (Corbett & Simpson, 2004). Further, the first intercollegiate athletic contest was a regatta between the two schools in August 1852 (Corbett & Simpson, 2004). The rivalry between the Oklahoma Sooners and Texas Longhorns has been played for over one hundred years, has cost numerous coaches their jobs (Shropshire, 2006), and is played at a neutral stadium that seats over 90,000 fans (Welcome to the Cotton Bowl Stadium, 2010). In college basketball, fans and students camp out for a week before the two contests between Duke University and the University of North Carolina, so that they can gain entrance to two of the season's most important games. Other examples of traditional rivalries with historical significance in college football include Kansas/Missouri and Texas/Texas A&M. The rivalry between the University of Kansas and the University of Missouri dates back to the Civil War, when pro-slave state Missouri attacked and ransacked the city of Lawrence, KS (Tucker, 2007). The adversarial relationship between The University of Texas at Austin and Texas A&M University dates to the founding of both universities by the state legislature and oil money received for drilling projects (Buckley, 2008). Interestingly, during the conference realignment talk over the summer of 2010, Texas A&M contemplated moving to the South Eastern Conference (SEC) because the administration did not think they needed to be associated with The University of Texas (Source: UT 3 others, 2010).

The relationships existing between rival teams in intercollegiate athletics extends beyond the field of play. Many people indicate being influenced by their parents as to who their favorite team was at an early age (Havard, 2010). This is consistent with prior

research regarding how people are introduced to sport (Coakley, 2004; deGroot & Robinson, 2008). Further, people tend to learn who their favorite team's rival is during childhood and the perceptions of rival teams can be influenced through family or college affiliations (Havard, 2010). It is the examination of rivalry in sport and the effects its existence has on fans that warrants further study by academics.

#### Statement of the Problem

The purpose of this study is to investigate the perceptions individuals have of rivalries in sport and what differences exist between various fans. Previous research has focused on why people consume sport (de Groot & Robinson, 2003), the level of identification fans feel toward their favorite team (Mahony, Madrigal, & Howard, 2000; Funk & James, 2001, 2006; Wann & Branscombe, 1993; Wann, 1995), and the effects team on-field performances and off-the-field indiscretions have on fans (Cialdini et al., 1976; Snyder, Lassegard, & Ford, 1986; Toma, 2003). One area that has received little attention in the consumer behavior literature however is rivalry and its importance to fans. Researchers have used rivalry as a variable to explain consumer behavior (Davies, Veloutsou, & Costa, 2006; Hilman, Cuthbert, Bradley, & Lang, 2004; Luellen & Wann, 2010; Mahony & Moorman, 1999; Sierra, Taute, & Heiser, 2010; Spaaij, 2008; Wann et al., 2003; Wann et al., 2006), but no research has been conducted to investigate what constitutes a rivalry to sport fans.

Without an understanding of what constitutes a sport rivalry, it is difficult for academics and practitioners to know what affects two teams have on each other and identified fan bases. For this reason, the purpose of this study is to develop a scale to measure the perceptions sport fans have toward of a rivalry. Fans of intercollegiate

athletics, in particular college football and basketball, will be asked to identify their perceptions of rival teams and the importance of the rival's presence on favorite team identification.

Lastly, this study will investigate the differences between fans' perceptions of their favorite team's rival. For example, it will be determined if fans living in the same city or state as the favorite team have stronger perceptions regarding the rival team than fans living outside of the city or state. Further, the differences between fans attending and/or receiving a degree from institution housing the favorite team and those that did not attend and/or receive a degree from the institution will be examined.

## Research Questions and Hypotheses

- Q1 What identifiable factors explain rivalry?
- Q2 Do the identifiable factor scores explaining rivalry differ significantly between those residing in the same city as their favorite intercollegiate team and those living in another city?
- H2.1 Fans living in the same city as their favorite college team will display stronger perceptions toward their favorite team's rival than fans living in a city different from their favorite team.
- Q3 Do the identifiable factor scores explaining rivalry differ significantly between fans residing in the same state as their favorite team and those living in another state?
- H3.1 Fans living in the same state as their favorite college team will display stronger perceptions toward their favorite team's rival than fans living in a state different from their favorite team.
- Q4 Do the identifiable factor scores explaining rivalry differ significantly between fans who received a degree from and/or attended the institution where their favorite team plays and fans that did not received a degree from and/or attend the institution where the favorite team plays?
- H4.1 Fans who received a degree from and/or attended the institution where their favorite team plays will display stronger perceptions toward their favorite team's rival than fans who did not receive a degree and/or attend that institution.

## Rationale for the Study

Understanding the phenomenon of rivalry in sport is important to academics and researchers for a multitude of reasons. First, from an academic viewpoint, there is an absence in the sport literature investigating rivalry. Presently, no theoretical definition exists explaining what a sport rivalry entails. Although researchers have used the presence of rivalry as a variable to study fan behavior, to date no one has investigated the meaning of rivalry in sport. Additionally, no literature exists on how individuals assess rivalry in sport, or how the phenomenon affects fan behavior and identification.

Although rivalry in sport is discussed on a daily basis, past research has neglected to investigate how fans feel about rivalry or the perceptions they have toward a rival team. Until a working definition of sport rivalry is developed, researchers do not have the theoretical basis to properly investigate the effects on fan behavior a rivalry possesses.

This lack of a theoretical base regarding rivalry is of concern because it leads to research that could be inadequately assessing fan behavior. For this reason, investigation into the psychological aspects that construct an individual's perception of rivalry is needed. The foundations of balance theory (Heider, 1958) and social identification theory (Tajfel, 1978b) can be utilized along with the in-group bias tendencies of fans to investigate the phenomenon. Additionally, further investigation to determine if the sport disposition theory (Zillmann & Cantor, 1989) applies to rivals when they are not playing an individual's favorite team could provide useful insight. The current study will attempt to lay the groundwork for such investigation. This is the beginning of investigation into an area of sport that has been relatively neglected by previous research.

Along with the implications the study of rivalry has for sport academics, understanding the phenomenon is also helpful to practitioners. First, from a marketing view, having the knowledge regarding rivalry could assist practitioners in providing a better service to their customers. For example, if a practitioner knows a certain rivalry is highly important to fans, they may be able to capitalize on the reflected success and failure of the rival team in terms of identification and consumption aimed toward the favorite team. Also of importance to practitioners is they understand how one should plan for contests between rivals. If practitioners can have concrete data to show the extent of a rivalry between two teams, they can better prepare for contests against a rival.



Intercollegiate football and basketball are specifically being investigated because of the strong identification these fans feel toward their favorite teams and institutions discussed previously. Additionally, as fan identification of professional teams tends to be contained to a particular region, intercollegiate athletics, specifically football and basketball, tend to reach fans nationwide (Toma, 2003). Perhaps the strong identification with intercollegiate teams is a result of a person's academic ties to the institution. For example, a person who received a degree from the University of Washington is likely to identify, at least to some degree, with the institution and its athletic teams throughout his life.

More importantly, from a societal view, the study of rivalry in sport adds to the literature describing how groups interact with each other. Research in sibling (Felson 1983; Mackey, Fromuth, & Kelly, 2010) and international relationships (Mitchell & Prinns, 2004; Goertz, Jones, & Diehl, 2005) illustrate that rival interactions are complex structures that warrant further investigation. In the same sense, investigation is needed regarding the phenomenon of rivalry in sport.

In summary, the psychology of fan behavior is an area in need of further investigation to answer relevant questions, namely, the affects of rivalry on sport fans. Past research has provided academics and practitioners with important information required to successfully study and attract fans. The continued work of academics and practitioners will prove more helpful and uncover new ideas and areas of inquiry. The investigation into sport rivalry will prove helpful to both academics and practitioners. In the highly competitive environment of sport, it is important to obtain all relevant

knowledge to help enhance the sport experience. The study of rivalry and its effects on fan consumption, and more importantly, behavior warrants attention.

#### Delimitations

This study will examine intercollegiate athletics fans' identification with their favorite team and perceptions regarding their favorite team's rival. The participants are primarily fans of college football and basketball teams competing at the National Collegiate Athletic Association (NCAA) Division I level. For this reason, the assumption that these findings can be generalized to another competition level within the NCAA cannot be made. It also cannot be assumed that these findings can be generalized outside of intercollegiate football or basketball. For example, these findings may not be generalized to college baseball, or other revenue and non-revenue producing intercollegiate sports. It cannot be assumed that these findings can be generalized to sports outside of the collegiate realm (e.g., professional football, professional baseball, professional basketball, etc.). Finally, the findings from this study do not assert that the perceptions and feelings a person has regarding a rival explain all factors affecting fan behavior and consumption.

#### Limitations

1. To obtain data for the Exploratory Factor Analysis (EFA), the survey was administered at institutions with football and basketball teams competing at the NCAA Division I level. Further, these institutions are flagships within their states, and enjoy a history of support from alumni, fans, and students. If the instrument were administered at other institutions, it may have affected the amount and type of data received.

2. The survey was self-administered in nature. Participants will be asked to indicate their identification to their favorite team and perceptions of their favorite team's rival. It is reasonable to consider that participants may give socially desirable answers. This type of social desirability could affect the data and results of the study.
3. The findings from this study was quantitative in nature. The researcher conducted qualitative research to identify trends and statements related to rivalry; however, since the data were gathered quantitatively, findings may vary from qualitative investigations.
4. Regarding non-response, participants choosing not to respond to the quantitative measure may have differing opinions regarding their favorite team and favorite team's rival.

#### Definition of Terms

*Social Identity Theory*: “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 value and emotional significance attached to that membership” (Tajfel, 1981, p. 255). This helps to explain why people affiliate with others while attempting to enhance self-esteem or image.

*Balance Theory*: Explains things are somehow connected and how people interact with others in dyadic and triadic relationships in order to maintain a psychological balance in their lives (Heider, 1958).

*Basking In Reflected Glory (BIRGing)*: The act of a person identifying with a successful team or organization in an attempt to garner the positive public perceptions awarded to the team (Cialdini et al., 1976).

*Cutting Off Reflected Failure (CORFing)*: The act of a person choosing not to identify with a team or organization following a loss or during a prolonged period of perceived failure in order to protect ego and self-image (Snyder & Fromkin, 1980; Snyder et al., 1986).

*Disposition of Mirth Theory*: The phenomenon of a person rejoicing when an admired person is successful or rewarded and when a loathed person is unsuccessful or punished (Zillmann & Cantor, 1976).

*Sport Disposition Theory*: The phenomenon of a person rejoicing when his favorite team is successful and his most hated team is unsuccessful. Currently, this theory has only been tested in direct competitive settings (Zillmann, Bryant, & Sapolsky, 1989).

*Sport Rivalry*: A fluctuating adversarial relationship existing between two teams, players, or groups of fans, gaining significance through on-field competition, on-field or off-field incidents, proximity, demographic makeup, and/or historical occurrence(s).

*Traditional Rivalry*: A rivalry that has some historical significance that did not necessarily begin because of on-field/on-court events. e.g., Texas/Texas A&M, Missouri/Kansas, Harvard/Yale, Army/Navy, Ohio State/Michigan. Typically, a traditional rivalry can gain and wane in popularity and interest depending on the competitive level of the teams, but will remain through periods of dominance by one team.

*Competition Rivalry:* A rivalry that begins because of a specific on-field/on-court contest. These can sometimes be confused and infused with traditional rivalries in that people do not understand the historical significance after a period of time. e.g., Texas/USC, Boise State/TCU. Additionally, individual teams can have competition rivalries that are not recognized by other teams or the national media.

*Conference Rivalry:* A rivalry that exists/begins purely because two teams compete in the same athletic conference. These rivalries are susceptible to outside factors such as conference realignment. e.g., Florida/Vanderbilt, Texas/Oklahoma State.

*Event Rivalry:* A rivalry that exists because of an on-field altercation or incident separate from the contest outcome. e.g., Miami/Florida International. These rivalries can also exist because of interpersonal differences between two individuals. This helps to explain how the negative or positive feelings toward someone can affect a person's perceptions of a rival team. For example, if person A disliked person B, person A may foster stronger negative feelings toward person B's favorite team. Further, if person A likes person B, person A may foster stronger positive feelings toward person B's favorite team.

*Proximal Rivalry:* A rivalry that exists because of the demographic makeup of people, or geographical relationship with another team. This can include interstate and intrastate rivalries. Interstate Rivalry e.g., Illinois/Wisconsin. Intrastate Rivalry e.g., Kentucky/Louisville. Proximal rivalries may also be confused and infused with traditional rivalries because people may not understand the foundation of the rivalry.

*Created Rivalry*: A rivalry that exists because of national media coverage. Can begin because the media is looking to build an image with the general population. e.g., Boise State/TCU.

## CHAPTER II

### REVIEW OF LITERATURE

In sport, the word rivalry is used in abundance. It's used when one team is playing another from the same state, conference, or league. Further, individual players have their own rivalries in which they compete. An example of this is the relationship between Roger Federer and Rafael Nadal. The two superstars currently are the face of men's tennis, and many believe their relationship is one of the most intense rivalries in sport (Clarey, 2007). Sport rivalries exist on the international front as well. This is illustrated every four years in the Olympics, when nations of differing political structures compete in the sport arena. Many times, these nations use the games to push their political agendas, such as was the case between the United States and the USSR during the Cold War (Maraniss, 2008). It seems that a person cannot turn on the television or read a newspaper or web site without hearing or reading the word rivalry.

With the amount of times that rivalry appears in discussion of sport, it would seem there would be a plethora of literature concerning the topic. This is not the case however. In the sport literature, many researchers have used the concept of rivalry as a variable to investigate consumer and fan behavior (Davies et al., Costa, 2006; Hilman et al., 2004; Luellen & Wann, 2010; Mahony & Moorman, 1999; Sierra et al., 2010; Spaaij, 2008; Wann et al., 2003; Wann et al., 2006), but little research exists that explains what

makes up a rivalry to sport fans. The psychological theory disposition of mirth (Zillmann & Cantor, 1976) examines the oppositional relationship between two parties, and was later applied to fan behavior as an attempt to illustrate how fans feel about the success of one team and the failure of another (Zillmann et al., 1989). As Sloan (1979) points out, fans of sport often feel as though they belong to the team(s) they support and tend to take on the successes reflected on the field (Cialdini et al., 1976). Through the disposition of sport theory (Zillmann et al., 1989), fans enjoy seeing their disliked team perform poorly almost as much as they like seeing their favorite team perform well. The context of the disposition theory, however, has been when two teams are engaged in head-to-head competition. The question that remains is whether fans enjoy seeing their disliked, or rival team, perform poorly in all competitive settings? It has been proven, for instance, that fans of professional basketball teams are more likely to watch their rival team play when the team has a substantial chance of losing (Mahony & Moorman, 1999).

To better understand the effects a rivalry can have on sport fans, the psychology of fan behavior must first be examined. This will begin with an overview of sport fan behavior, followed by an examination of social identity. Next, fan identification will be examined, including the associative and dissociative tendencies of individuals, and an overview of existing fan identification scales will be discussed. The next portion of the discussion will examine the psychological foundations underlying the concept of rivalry. The concepts of motivation and self-efficacy will be examined, and competitive relations will be discussed as they apply to the sport fan. The processes that drive individuals to participate in gambling are similar to the antecedents that facilitate sport consumption. For this reason, such processes will be discussed. Possibly the clearest explanation of



how rivalries occur in sport seems to begin with in-group and out-group bias (Crocker & Luhtanen, 1990; Seta & Seta, 1996; Sherif, Harvey, White, Hood, & Sherif 1961). These behaviors will be examined, followed by a discussion of the disposition of mirth theory (Zillmann & Cantor, 1976) and the sport disposition theory (Zillmann et al., 1989). A brief review of the literature concerning rivalry in sport will also be presented. The conclusion will summarize the link between the psychological importance of fan consumption and rivalry in further understanding sport fan behavior.

### Psychology of Fan Consumption

Research shows that people are introduced to sport through family (Coakley, 2004; deGroot & Robinson, 2008), consume with friends (Dietz-Uhler, Harrick, End, & Jacquemotte, 2000), and tend to change consumption habits as they move through the life cycle (Funk, 2008). These are just a few examples of the information sport academics and practitioners need to understand when investigating or selling the sport experience. Robertson (1970) asserts that the discipline of consumer behavior draws from areas such as psychology, sociology, and the like. Further, Zaichkowsky (1985) proved that people perceive various products differently and that two individuals can view the same product in various ways. For these reasons, it is necessary to examine the psychological theories leading to fan consumption.

Sport fandom has been found to have relevance to a person's well-being (Wann, 2006a). Further, a person strives to maintain balance in life (Heider, 1958), dictating what types of relationships he has with others. This helps to explain how the affiliation and consumption habits of a fan can be affected by the on-field success or failure of a team (Cialdini et al., 1976; Snyder & Fromkin, 1980; Wann & Branscombe, 1990) along

with the off-field behavior of players, coaches, and team officials (Campbell, Aiken, & Kent, 2004; Toma, 2003).

Zaichkowsky (1985) developed the Personal Involvement Inventory (PII) to measure differences existing between individuals regarding perceptions of products. Initially a 20-item scale, the PII was later reduced to ten questions and provided researchers and advertisers with the ability to quickly assess the involvement consumers felt toward certain products (Zaichkowsky, 1994). In other words, two people may view the same product and develop opposing attitudes. Mowen (2004) asserts that some people consume products that are going to make them look better in the eyes of their contemporaries. Further, people may consume through the observation of others, and this can occur through the sport experience. This means that one person may observe a contest and be motivated toward consumption while another chooses not to engage in the purchase action. As a result, the sport experience can have varying effects on different people. For instance, the suspense of watching a close game can attract some people while causing others distress (Sloan, 1979; Gan, Tuggle, Mitrook, Coussement, & Zillmann, 1997). This is illustrated by findings from Wann and Branscombe (1992) that showed highly-affiliated or identified fans' emotional state could be affected simply by reading an article about a contest involving the favorite team. Further, the identification with a sport team can offer fans a socializing factor that may lessen the feelings of depression and alienation (Branscombe & Wann, 1991), thereby improving mental health (Wann, 2006a).

An individual's psychological motives stem from the needs created by their surrounding environments (Robertson, 1970). For this reason, a person is attracted and

will affiliate with others who reflect positively on himself (Cialdini et al., 1976). It is also important for individuals to view and describe themselves in a positive light compared to others (Cialdini & De Nicholas, 1989). For this reason, a fan of a particular team will choose to associate with other individuals who share similar interests and can enhance his self-image (Tajfel & Turner, 1979).

### *Social Identification*

“We need to postulate that, at least in our kinds of societies, an individual strives to achieve a satisfactory concept or image of himself” (Tajfel, 1978b, p. 61). This statement addresses an individual’s self concept, and helps to explain some of the reasons people affiliate with groups, whether for social, professional, or other reasons. Being favorably viewed by others is very important to individuals, since a person desires a positive social identity (Tajfel & Turner, 1979). In an attempt to enhance self-esteem, individuals will join groups containing others with similar characteristics (Tajfel & Turner, 1979). This is referred to as social identity theory (Tajfel, 1981), and can be defined 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 value and emotional significance attached to that membership” (p. 255). Further, social identification can be thought of as “any social categorization used by a person to define him- or herself and others.” (Turner, 1982, p. 18) By affiliating with a group, an individual is able to garner the positive attributes of the group, thereby enhancing the individual’s social identity. This is illustrated in a study conducted by Cameron (1999) that found a college student’s relationship between social identity and psychological well-being was mediated by the belief that membership in a group enabled desired possible selves. In sport, the identification with a team can

positively impact social psychological health because of the connections with others that the individual enjoys, thereby enhancing self-identity (Wann, 2006a; Wann, Brame, Clarkson, Brooks, & Waddill, 2008). Viewing a favorite team in a positive light is also important to individuals trying to maintain a positive social identity. Dietz-Uhler and Murrell (1999) illustrated an example of this phenomenon when they found that college students highly affiliated with their school's football team tended to describe the team more favorably as the season progressed. Further, this positive evaluation occurred regardless of wins or losses by the team.

According to the social identification theory, a social group can be defined, as “two or more people who share a common social identification of themselves, or, which is nearly the same thing, perceive themselves to be members of the same social category.” (Turner, 1982a, p. 43) Among sport fans, affiliation with a social group supporting the same team has been found to predict both game attendance and spreading team news via word-of-mouth (Swanson, Gwinner, Larson, & Janda, 2003). Along these lines, the group can take on an identity by which contrasts can be made between the members of the group and those outside of the group (Tajfel & Turner, 1979). This is known as collective identity, and occurs when members of the group form in support of a common goal (Ashmore, Deuax, & McLaughlin-Volpe, 2004). A discussion of fan identification with a favorite team is now needed to explain fan behavior and consumption.

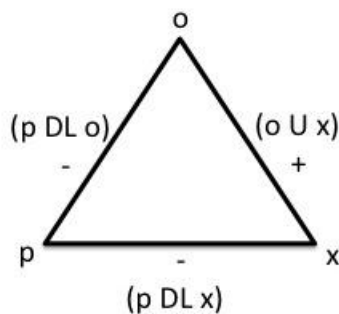
### *Fan Identification*

To help explain an individual's identification and relationship with a favorite team, it is important to first discuss the foundational theory used in early fan

identification research. Balance theory states that a person will associate with others in dyadic and triadic relationships in order to maintain a psychological balance in their life (Heider, 1958). This is based on perceived unit relations, which asserts that two things are in some way related. In a dyadic relationship, both people either have to like or dislike one another to achieve the balanced state both individuals are striving for. In other words, a person maintains a psychological balance when their relationship with another is reciprocated, either in the form of like or dislike between another individual. In a triadic relationship, a couple of scenarios can occur to cause a balanced state. One situation where this balance occurs is when all three individuals like each other, resulting in three positive relationships. This is a balanced state because each person likes the others in the relationship; therefore, each individual's feelings are reciprocated. Balance in a triadic relationship can also occur when two negative relationships and one positive relationship exist. In the words of Heider, "with respect to the case in which one positive and one negative relation is given, e.g. (p DL o) and (o U x), there is a tendency for the third to be negative, for only in this way can balance be obtained." (p. 206). In this example, p stands for person or object A, o stands for person or object B, and stands for person or object C. DL represents a negative relationship, and U represents a positive relationship. The relationship a fan has with a favorite and rival team is triadic in nature. This type of relationship is balanced because the relationship between the individual and favorite team is positive. Further, the relationship between the favorite team and the rival team is negative since they play each other. Finally, due to the relationship between the individual and the favorite team, the individual would have a negative relationship with

the rival team. Figure 1 further illustrates the triadic relationship present in a sport rivalry.

### Triadic Balanced Relationship



Heider, 1958, p. 208

If person o likes team x (+), and team x plays team p (-), person o will dislike team p (-)

*Figure 1* Triadic Balanced Relationship present in a Sport Rivalry

Using balance theory, and unit relations in particular, Cialdini et al., (1976) conducted a number of studies to examine the relationship between a sport team and individual fans. College students enrolled in introductory psychology classes at seven schools with prominent football teams were asked to participate in a study investigating fan behavior. At the beginning of the school year, students were asked to identify how affiliated or loyal they were to the school's football team. On subsequent Mondays during the football season, students were again asked to indicate how affiliated they were with the team. Further, the authors observed the type of clothing the students wore to

class and found that following a win an individual was more likely to wear official school and team apparel than following a loss or a tie. To further test the phenomenon, students were called and asked about the previous game's outcome by individuals they did not know. In situations where the football team was victorious, students tended to use associative words such as "we won". When the team had lost or tied the previous game, students tended to use distancing words such as "they lost", or "they gave it away" to describe the outcome. Through such observations, Cialdini and colleagues identified the tendency of participants to associate with successful others and distance from those that could hurt the individual's social identity. This phenomenon was coined Basking In Reflected Glory (BIRGing). Additionally, the authors theorized that individuals who highly identified with a team would rather derogate supporters of an opposing team than distance themselves from their favorite team following a loss. This term was referred to as "Blasting".

In a later study, Cialdini and Richardson (1980) tested the Blasting phenomenon on a group of college students and found that, when asked, participants tended to describe the academics and general setting at their university more favorably than their rival university. Although the researchers did not ask about the rival universities sports teams, the study demonstrated that people assigned positive attributes to the favorite institution and negative ones to the rival. Snyder and Fromkin (1980) coined the term Cutting Off Reflected Failure (CORFing), which refers to the distancing behavior of fans following a team loss. The CORFing phenomenon was also tested in a business group setting (Snyder et al., 1986). Study participants were instructed to work in small groups to produce a report that would be submitted to committee members for feedback. Three

groups received one of three different types of feedback in the study: positive, negative, or no feedback. The authors discovered that individuals in groups receiving positive feedback elected to present their report to the judging committee, whereas those in the group that received negative feedback chose not to do so, thereby distancing from the reflected failure of the group. Additionally, members in the groups that received negative or no feedback were less likely to wear a badge that identified them with the designated group. This confirmed the CORFing phenomenon and further explained the tendencies of people to associate and dissociate with others depending on the nature of how the relationship would affect their image.

A study of professional football fans found similar results regarding BIRGing and CORFing tendencies (Kimble & Cooper, 1992). In the study, fans of the Cleveland Browns and Cincinnati Bengals were invited to watch a game between the two teams at a disclosed location. Upon arrival, each fan was given the option of wearing an associative button of the preferred team, to which most fans agreed. To measure the BIRGing and CORFing tendencies of participants, the researchers took notice of which participants were still wearing the buttons when they left the watching party, which participants had filled out a questionnaire before their departure, if the individuals had signed their name alongside the preferred team, and what participants stayed until the end of the game. The data illustrated that more fans of the winning team filled out the questionnaire and signed their names beside the favorite team. Additionally, fans of the winning team were seemingly in better moods following the game because they were able to bask in the win whereas fans of the losing team tended to leave the event without too much mention of the game, further validating the BIRGing and CORFing trends. This is also consistent



with findings from Burger (1985) on college students' responses and memory following successful and unsuccessful performances. In the study, Burger found that college students were more likely to give dispositional responses following a successful rather than unsuccessful grade on a midterm exam. Further, a win by their school's basketball team in the previous game also yielded similar results. For example, if a student did well on the exam or the basketball team won the previous game, the student tended to give descriptions that explained how the success was a direct link to the individual performance. Students also seemed to remember the success of their exams or basketball team for longer periods of time than those who experienced failure either on the exam (personal) or through the basketball team (reflected).

The research on BIRGing and CORFing explains why a person associates and dissociates with a team following success or failure. Many times, these associative and distancing behaviors occur in order to protect the individual's ego or self worth. Specifically, BIRGing has been referred to as an ego-enhancing activity, while CORFing an ego-protection maneuver (Madrigal, 1995). Wann and Branscombe (1990) also observed these behaviors in a study of fans supporting the University of Kansas basketball team. The authors found that fans highly identified with the team were more likely to BIRG and less likely to CORF for long periods of time than people with low identification, adding to the Blasting tendency pointed out by Cialdini et al (1976). Contrary to Wann and Branscombe (1990), Bizman and Yinon (2002) found that immediately following a team loss high-identified fans were more likely to CORF than low-identified fans. The authors did suggest however that as time passed, highly identified fans possibly continue and increase support for their favorite team. Further,

college students highly identified with the football team tended to evaluate the team more favorably after a win than after a loss (Dietz-Uhler & Murrell, 1999).

The Bizman and Yinon (2002) findings, along with that of Dietz-Uhler and Murrell raises the question of what causes a highly identified individual to stay connected with a team following a loss or prolonged period of perceived failure? Campbell, Aiken, and Kent (2004) added two more considerations addressing this inquiry. Basking In spite of Reflected Failure (BIRFing) explains why an individual chooses to continue identification with a sport team during a prolonged period of failure. An example of BIRFing is the fan-base of the Chicago Cubs Baseball Club. Even though the Cubs have not won a World Series in over a century, the club continues to sell out its home ballpark, Wrigley Field. The authors cited one reason for this phenomenon is that these individuals do not wish to appear as fair-weather fans. Additionally, the association and identification with the team also connects fans with others containing similar interest in the club, thereby fulfilling the social needs of the individual (Festinger, 1954). The second phenomenon was coined Cutting Off Reflected Success (CORSing), and refers to a fan choosing to distance himself from a team during successful periods. For example, for fans that have followed a team or organization their whole life, they may choose to stop supporting the team because of business moves made by the front office, such as the acquisition of high-profile players or trading current players in an attempt to upgrade the roster. In this situation, fans may CORS because they desire to see the team perform without the star players, or prefer the previous management style of the club. This is not to say that these fans outwardly root against the team, they simply stop caring about their affiliation with the organization. Similar to BIRFing fans, individuals choosing to

CORS could do so because they too do not want to appear as fair-weather fans. An example presented by Campbell et al. (2004) was the Oakland Athletics baseball club, which have long preferred to develop talent in their farm system rather than trading for high-profile players. If the club began trading for high-profile talent instead of working with players in their farm system, they may experience a CORSing backlash from their fan base. A recent example of fans choosing to CORS were the Minnesota Vikings fans that chose who to support the acquisition of long-time Green Bay Packers quarterback Brett Favre. The CORSing reaction is similar to the feelings people have when a club or organization relocates (Foster & Hyatt, 2007). In this situation, the individual feels abandoned, and therefore begins to harbor ill feelings toward the team.

#### *Measures of Fan Identification*

A recent study of college students found that the private association with a team benefited their social well being more than the public involvement aspect of attending games (Wann et al., 2008). This assertion, along with others (Wann & Branscombe, 1990), displays that individuals can show their identification and affiliation with sport teams to varying degrees. In order to measure the extent to which fans identify with sport teams, researchers have worked to develop identification and affiliation scales. This section will discuss five such measures.

The first scale measuring fan identification was the Sport Spectator Involvement Scale (SSIS), developed by Wann and Branscombe (1993). The authors asserted that a lack of an identification/affiliation measure inhibited researchers trying to study distinctive fan behavior, and therefore introduced the scale to assist future research. The measure was developed and tested on two samples of undergraduates at the University of

Kansas. Participants were asked to fill out a seven-item questionnaire to assess their identification with the Kansas men's basketball team. Questions addressed the participant's amount of involvement with the team, attributions assigned for team accomplishments, amount of time and money invested in supporting the team, and biased evaluations of other team supporters. Sample questions included "How strongly do YOU see YOURSELF as a fan of the K.U. basketball team?" and "How important is being a fan of K.U. basketball to YOU?" The scale proved internally consistent, and participants who took the instrument one year later supported test-retest reliability. A second sample was used to successfully prove predictive validity. Once again, participants filled out the questionnaire and a tripartite split was used to develop three distinct groups of high, medium, and low identification. Differences in the four contributing areas to the measure were determined between the three identification levels, and gender. Results supported the predictive validity of the measure, as high identification fans differed significantly from the medium and low identification groups in involvement, attribution of success, investment of time and money, and biased evaluations (Wann & Branscombe, 1993). The SSIS has since been used to investigate in-group evaluations (Wann & Grieve, 2005) and physiological responses to team play (Hillman, Cuthbert, Bradley, & Lang, 2004), as well as a multitude of other fan behaviors.

Wann (1995) later developed the Sport Fan Motivation Scale (SFMS) in order to measure the psychological connection fans have toward a favored team. The SFMS consists of eight subscales: eustress, self-esteem, escape, entertainment, economic, aesthetic, group affiliation, and family. Wann initially tested the SFMS on two groups of sport fans and the scale was found to be internally consistent and normally distributed. In

a second test involving participant likelihood to watch various sports, the scale proved to possess test-retest reliability and criterion validity. Follow-up studies used the SFMS to measure fan involvement with success (Wann & Ensor, 1999; Wann, Schrader, & Wilson, 1999; Wann, Lane, Duncan, & Goodson, 1998), further illustrating the model to be a useful tool in determining fan motivation.

Mahony et al. (2000) developed the Psychological Commitment to Team (PCT) scale in an attempt to measure how identified fans were with a specified team. The scale was developed and tested on two samples from the University of Oklahoma and The Ohio State University to predict validity. The authors asserted that the PCT would help academics and practitioners identify how loyal a fan was to a particular team. A later investigation found that the PCT model was not a good fit for measuring fan loyalty (Kwon & Trail, 2003), however further research is needed to definitively prove whether the scale is an effective measure or not.

Another scale measuring fan and participant commitment and identification to a team or activity is the Psychological Continuum Model (PCM) (Funk & James, 2001). Originally developed to measure affiliation toward recreational events (Funk, Toohey, & Bruun, 2007), the model has also been used to determine the level of identification individuals have toward a sport team (deGroot & Robinson, 2008).

The PCM consists of four identification levels to which an individual can belong: Awareness, Attraction, Attachment, and Allegiance (Funk & James, 2001). The PCM works as an elevator that allows marketers to track participant's current affiliation in an attempt to increase their identification. People are said to belong in the Awareness category if they have been told of or know that the activity or team exists. People in this

stage tend to be aware of the team or activity because of family and friend connections (Funk, 2008). A person moves to the Attraction stage when he chooses to purchase or consume the product for personal or social reasons. Attachment is the third identification level, and individuals belonging to this group begin to take on a personal identity with the team or activity. The goal of any practitioner is to have participants or fans move through the PCM until they reach the Allegiance stage, where the brand and identity with the team or activity becomes more salient to individuals. This means that individuals will support the brand, team, or activity over an extended period of time. Further, fans and participants found in the Allegiance stage will continue their association even in times of prolonged failure.

Funk and James (2006) later revisited the PCM to clarify what input and output conditions contribute to an individual's move through the model. Additionally, Funk (2008) has asserted that fans and participants can move up and down the PCM model depending on events occurring in the life cycle such as relocation, family, or introduction of new teams and activities.

The Points of Attachment Index (PAI) was developed to identify the various attributes of sport that attract fans to identify with a team (Trail, Robinson, Dick, & Gillentine 2003). The PAI revealed seven factors that fans identify with: players, team, coach, community, sport, university, and level of sport. The Team Identification Index (TII) was used as a subscale in the PAI. The three-question scale can be used to measure the level of identification a person feels toward a team (Trail et al., 2003).

This section examined the psychological reasons a person consumes the sport product. This information is important for academics and practitioners alike in guiding

future investigation and theory concerning fan consumption and behavior. As noted by Zaichkowsky (1985), two individuals can view the same product, but form vastly different perceptions of that product. These perceptions can affect the quality and need for the product. For this reason, sport marketers have to be cognizant of the factors affecting individual's psychological processes regarding sport.

Social identification has a large impact on an individual's self worth. People will attach themselves to groups of others sharing similar interests in an attempt to enhance and protect social identity (Cameron, 1999). Further, the affiliation with a sport team has been linked to positive psychological health (Wann, 2006a), and individuals strive for a state of balance in relationships with others (Heider, 1958). In order to enhance and protect this balance, individuals will affiliate with successful teams (Cialdini et al., 1976) and distance from unsuccessful others (Snyder et al., 1986). This association with similar others is sometimes seen in in-group favoritism and out-group ostracism (Turner, 1978). The scales discussed have helped academics study sport fans at different levels of identification. The discussion will now examine the psychological foundations of a rivalry, which will be the focus of the next section.

### Psychology of Rivalry

The next section of this discussion will examine the underlying theories and tendencies that help to explain rivalry in sport. Since many forms of what fans see as sport rivalry occur within groups, the discussion will be focused around the bonding tendencies of the in-group. Since motivation and self-esteem, self-efficacy, and competition affect a rivalry, those concepts will also be discussed.

*Motivation and Self-esteem*

Motivation is an important starting place for a discussion of rivalry in sport because people can be motivated by various means. The presence of another person (Triplet, 1898) can motivate someone to act in a certain way, as well as the perception derived from a purchase (Mowen, 2004). Individuals wish to be perceived positively by others (Heider, 1958) and feel as though they are competent in completing an activity or task posed to them (Deci, 1975). In addition to mastery, people need to feel they have freedom and choice in deciding what activities in which they will participate. It is also inherently important for humans to strive for high self-esteem (Crocker & Park, 2004). For instance, college students who felt they were favored by their parents over their sibling(s), or indicated that no favoritism existed in their household had higher self-esteem than those who felt they were not the favored children (Zervas & Sherman, 1994). One way for an individual to increase self-esteem is through the approval of others (Campbell, Eisner, & Riggs, 2010.) For fans of sport, association with a successful team or support group can provide this level of approval from others.

One way to measure the self-esteem of a person is to consider what means they use to evaluate their accomplishments and failures. Cognitive evaluation theory states, “that any event relevant to the initiation or regulation of behavior can affect one’s intrinsic motivation insofar as it gratifies or thwarts one’s needs for self-determination and competence” (Deci & Olson, 1989, p. 85). Further, when a person is intrinsically motivated, he tends to strive for mastery in higher-order activities (Deci & Olson, 1989). In other words, people who are intrinsically motivated may participate in activities because they want to prove mastery to themselves, whereas individuals who are



extrinsically motivated may elect not to participate. As Bandura (1977) points out “self-motivation involves standards against which to evaluate performance” (p. 193). For this reason, individuals continue to perform a task until their a priori expectations are met. The topic of intrinsic motivation and personal evaluation leads to a discussion of self-efficacy.

### *Self-efficacy*

Self-efficacy asserts that individuals will participate in an activity and exert the amount of energy that they believe will result in successful completion (Bandura, 1977). Further, Bandura states that the type and amount of feedback a person receives affects his behavior. The expectations people have, whether internal or external, play a major role in determining in what activities they will participate. Further, it appears that individuals will work to remain consistent with the expectations made for them in an attempt to protect their self-efficacy when threatened (Bandura, 1977). Regarding a priori expectations, Feather and Simon (1971) conducted a study on high school male students in which they found individuals who had high expectations for a test score attributed success to internal factors and failure to external inhibitors. This can be found in sport when fans attribute a favorite team’s loss to external factors. Additionally, following negative feedback, individuals who made their expectations public were less likely to decrease those for a second task as opposed to participants who spoke privately of their expectations (Mischel, 1958). Concerning expectations stated by others, Ungar (1981) found that if individuals felt they should be knowledgeable about a topic or subject because of other’s expectations, they tended to fabricate their opinions to reflect such knowledge.

Self-efficacy can also be obtained through vicarious experience, as is the case of sport fans (Bandura, 1977). By taking on the identity of a successful team (Cialdini et al., 1976), sport fans themselves feel as though they can accomplish their personal goals. Stated differently, through vicarious experience, seeing another individual complete a task successfully can inspire one to work toward his goals. Additionally, because of vicarious experience, individuals may feel a safeguard between themselves and others (Bandura, 1977), helping to explain why a number of fans like to derogate players and supporters of their rival team(s). Intrinsic motivation and vicarious experience lead into the discussion of competition, which is presented in the next section.

### *Competition*

The type of motivation an individual possesses affects his self-esteem and self-efficacy. All of these intrapersonal traits can be found on display in competitive situations. As previously stated, it is important for individuals to feel that they have mastered an activity (Deci, 1975), and one way to display mastery is to compare oneself to another person or entity. Triplett (1898) described social facilitation as the presence of another attributing to the performance of an individual, as was the case with the cyclists in his investigation. In this manner, people will push themselves to prove they are better than another person.

Another aspect of sport fan consumption is that people can change their behavior throughout their life cycle (Funk, 2008). Similar to individuals who minimize their conflicts with their siblings as they age (Felson, 1983), some sport fans have also indicated their feelings toward their favorite team's rival change over time (Havard, 2010). These changes can occur because of moving away from the favorite team,

attending other institutions for advanced degrees, or other examples of changes in the life cycle (Funk, 2008). The concepts of comparison and competition will be referenced later, but first an examination of the processes driving individuals to participate in gambling will be discussed.

### *Gambling*

Gambling is an activity that possesses an unknown outcome, much like sports in general. Data from a longitudinal study on over 40,000 Internet sport gamblers reported that approximately four bets were placed each day during the testing period (LaBrie, LaPlante, Nelson, Schumann, & Shaffer, 2007). The authors indicated that this average might have been driven by the excessive habits of a small number of participants. Nonetheless, this figure illustrates how prevalent gambling activity is in society. Individuals are driven to play slot machines by the excitement, social, and self-esteem aspects of gambling (Fang & Mowen, 2009). Social contact and self-esteem also drive people to gamble on sport. McDaniel and Zuckerman (2003) found that impulsive sensation seeking caused individuals living in two metropolitan areas to participate in gambling behavior.

It is the thrill and hedonic nature of participation that is of interest to the current discussion. Just as the thrill, social and self-esteem aspects, and the unknown outcome of the activity attract participants to gambling, the same can also be said for fans of sport (Trail, Fink, & Anderson, 2003). Further, the thrill and exhilaration of watching a sporting contest attracts some people to consume sport (Gan et al., 1997).

### *In-group Bias*

With very few exceptions, fan rivalry in sport occurs between groups of individuals. These individuals band together in order to improve their social-identity (Tajfel, 1982) and personal (Vohs & Heatherton, 2001) as well as collective esteem (Crocker & Luhtanen, 1990). Further, individuals in groups tend to separate others into categories. Social categorization refers to “the ordering of social environment in terms of grouping of persons in a manner which makes sense to the individual” (Tajfel, 1978b, p. 61). Tajfel also asserted that individuals tend to evaluate the categories they are in either positively or negatively in comparison to other groups. This is illustrated by the tendencies of highly identified fans to derogate, or Blast, supporters of an opposing team that was discussed earlier (Cialdini & Richardson, 1980; Cialdini et al., 1976). This leads to the idea of in-group bias. Regarding in-group bias, Tajfel and Turner (1979) assert “the mere awareness of the presence of an out-group is sufficient to provoke intergroup competitive or discriminatory responses on the part of the in-group” (p. 38).

This action addresses the phenomenon of in-group favoritism and out-group ostracism, which, according to Dion (1979) “are sown with the perception of intergroup differentiation” (p. 213). To understand in-group favoritism, first we must consider what makes up a group. One way to consider groups is that they are “characterized by a *common fate* for their members” (Carron & Hausenblas, 1998, p. 11). Intergroup relations occur when two groups and their members interact. “Whenever individuals belonging to one group interact, collectively or individually, with another group or its members *in terms of their group identification*, we have an instance of intergroup behavior” (Sherif, 1966, p. 12, italics in the original). In sport, fan groups supporting

opposing teams would fit Sherif's definition of an intergroup relation. Where intergroup relations exist, individuals have been found to show favoritism to their in-group members over out-group members (Turner, 1978). This biased behavior, when unrestricted, can lead to fan aggression and violence (Lee, 1985).

One of the first examples of in-group bias was the Robbers Cave Experiment (Sherif et al., 1961). In the Robbers Cave Experiment, the authors selected a group of twelve-year-old boys to participate in a three-stage investigation of intergroup conflict and cooperation. The participants were told that they were attending a summer camp. The boys were divided into two groups and participants in one group were kept separate for a time period from those in the other group. The authors kept the groups separated to allow time for the boys to bond with other members in their group. After the groups had a chance to bond, the authors introduced the groups to each other. Additionally, a series of competitions were planned where the two groups participated against one another. Sherif and colleagues observed that during the competitive stage of the experiment, the boys tended to show in-group bias and out-group ostracism. The in-group bias was so intense, that many times the boys had to be restrained from physically confronting members of the out-group. House raids of the out-group were also a norm during the competition stage of the investigation. During stage three, the authors eliminated the group names and instructed that the boys work together on assigned tasks. At the conclusion of the experiment, the researchers reported that when placed in competitive or adversarial positions, members of an in-group would band together against those from an out-group. Once the adversarial relationship was eliminated, the participants attempted to work together to perform tasks. Much like the findings from Sherif et al. (1961) sport

fans often choose to welcome the presence of an in-group member to a social event, while showing bias against an individual from the out-group (i.e., fan of “my” team vs. fan of “their” team).

Individuals are motivated to describe their in-group positively to an out-group in an attempt to differentiate between the two groups (Brewer, 1979). For example, college students described their university more favorably than the university they considered to be a rival (Cialdini & Richardson, 1980). In a sport-specific study, fans evaluated the performance of a basketball recruit more favorably when they thought he was going to play for their favorite team than a rival team (Wann et al., 2006). The performance of a favorite team has also been evaluated in a biased manner (Wann & Thomas, 1994).

When the in-group is the minority, favorable traits of the group tend to be described with internal explanations (Klein & Licata, 2001). Further, when the in-group is successful and the out-group is unsuccessful, descriptions of the in-group tend to be exaggerated (Brewer, 1979). For example, much of the disparate coverage provided by ESPN of the Evert-Navratilova rivalry in tennis reflected the political differences between the United States and Czechoslovakia during the Cold War (Spencer, 2003), causing Evert to be portrayed as an all-American woman while Navratilova to be vilified.

Maass, Salvi, Arcuri, and Semin (1989) refer to this phenomenon as Linguistic Intergroup Bias (LIB) and assert that individuals tend to describe desirable in-group actions and undesirable out-group actions in abstract terms. To test their theory, the authors conducted an investigation with members of two separate towns during the time leading up to a competitive horse race. Participants were shown cartoon pictures of in-group and out-group members committing desirable and undesirable acts as an example.

First, the participants tended to describe the desirable in-group and undesirable out-group actions abstractly, while describing undesirable in-group and desirable out-group actions concretely. In other words, the participants were more likely to describe a desirable behavior of an in-group member as the norm, or something that would occur again, and an undesirable action of the same member as an occurrence, or one time mishap.

Additionally, the authors found that when the desirability of the actions increased, participants used more abstract language for in-group members and concrete language for out-group members. When describing the actions of an out-group member, individuals used the opposite language. It has been asserted that LIB is caused more by expectancy of stereotypes than in-group protection (Maass, Milesi, Zabbini, & Stahlberg, 1995), but “may prevail under different circumstances, such as when the subject’s social identity is threatened or when groups are in direct competition” (Maass & Arcuri, 1992, p. 139). This is consistent with research of in-group bias in sport, which found that individuals described the sportsfanship of in-group members more positively than out-group members (Wann & Dolan, 1994; Wann & Grieve, 2005).

It appears that membership within a group affects the way an individual describes a member of the out-group. Data from Noel, Wann, and Brascombe (1995) support the assertion that peripheral members of a group will describe out-group members more negatively if they feel their descriptions will increase their in-group acceptance. The first study was conducted using students in an introductory psychology class. All participants were told they were peripheral members of the created in-group. The students were then instructed to rate the behaviors of out-group members on a questionnaire. Half of the participants were told their responses would be kept private, while half were told their

responses would be made public to other members of the in-group. The authors found that the participants who believed their responses would be made public rated out-group members more negatively than those whose responses were to remain private. To test this finding in a naturally occurring group, the authors replicated the study on a collection of fraternity and sorority members and pledges. The second experiment yielded the same findings. The authors asserted that even though out-group derogation may not naturally occur within the person, peripheral individuals were more likely to derogate out-group members if they felt other in-group members would hear of their descriptions (Noel et al., 1995). This helps to explain why some individuals may degrade players, coaches, and fans of an opposing team publicly, while privately respecting their efforts and successes.

In-group favoritism not only exists between two groups descriptions of one another. To test the phenomenon in a physical setting, Tajfel (1981) conducted a study on junior high school boys and their likelihood to commit in-group favoritism. Subjects were split into two groups based on their ability to count rapidly appearing dots in clusters or their preference between two paintings. To identify the two groups, participants in the same group were assigned similar numbers, thereby ensuring that subjects did not know the personal identity of the individuals in their in-group. Through this procedure, children from the same class, whom possessed a social relationship, could be designated to separate groups. The subjects were then given the opportunity to work in separate cubicles in assigning money to two other children. Since the individuals' identities were unknown to the participants, the only way they could distinguish between groups was by viewing the assigned numbers. Knowing which numbers were assigned to the in-group and out-group, the subjects were more likely to give money to members of



their in-group than the out-group. Further, if assigning money between two members of the in-group, the subjects tended to give approximately equal amounts more so than when assigning the money to two members of the out-group. While explaining the findings, Tajfel asserted “inter-individual similarities, even when they are fairly trivial, do lead the subjects in constricted experimental situations to ‘prefer’ those who are more ‘like’ them” (pp. 271-272). The correlate to this in sport is the inclusion of an individual supporting the favorite team and exclusion of someone supporting the rival. In-group bias leads to the relationship between fans of a favored and rival team. The next section discusses the adversarial relationship between individuals, addressing the disposition of mirth theory and the sport disposition theory, along with previous work addressing rivalry in sport.

*Disposition of Mirth and Sport Disposition Theory*

Zillmann and Cantor (1976) studied the enjoyment individuals derive from seeing the success and failure of others. Based on the human condition to show superiority over others, the authors found that participants felt different levels of satisfaction to the failure of others depending on their disposition of the individual involved in the action.

Participants looking at pictures of people whom they did not like engaged in acts of failure indicated more satisfaction than when viewing someone they liked engaged in the same action. The opposite was also true; individuals did not want to see someone whom they disliked engaged in successful actions. In explaining this phenomenon, the authors coined the theory the Disposition Model of Mirth. They made two propositions concerning the Disposition of Mirth:

Mirth deriving from witnessing the debasement of an agent or object increases with negative sentiments and decreases with positive sentiments toward the debased agent or object. Mirth derived from witnessing an agent or object accrue benefits

decreases with negative sentiments and increases with positive sentiments toward the beneficiary. (p. 112)

This proposition explains viewing another person acting as the beneficiary in a setting whereas the second addresses the same person acting as the agent in a similar scenario. “Mirth deriving from witnessing an agent debase or benefit another entity increases with positive sentiment and decreases with negative sentiment toward this agent” (Zillmann & Cantor, 1976, p. 113). This is similar to the German word *schadenfreude*, which means to take pleasure in someone else’s demise (Kahle & Close, 2011)

Specific to in-group bias in sport, the principles were converted to formulate the Sport Disposition Theory (Zillmann et al., 1989), which states that fans of a team get satisfaction out of seeing a disliked team fail. This is consistent with the assertion that Mahony and Howard (1998) made concerning fan behavior. They indicated that fans get eustress, or positive stress, both from the victory of a favored team and from the defeat of a rival team. One limitation to the Sport Disposition Theory however, is that it has only been tested in situations where two teams are engaged in direct competition. It stands to reason that a fan would want his team to be successful and rival to fail when the two teams are playing each other. The question that remains is will fans cheer against their favorite team’s rival in other competitive settings, thus showing tendencies found in the Sport Disposition Theory? One study of professional basketball fans found that participants indicated they would watch their favorite team’s rival if they were a threat to their favorite team or if the rival was likely to lose the game (Mahony & Moorman, 1999). The following sport studies used the phenomenon of rivalry as a variable to help explain fan behavior.

*Rivalry in Sport*

Hillman et al. (2004) tested fans' physiological reactions to viewing pictures of their favorite team beating and losing to their rival team. Study participants, identified fans of either the University of Florida or Florida State University were showed pictures depicting a game between the two schools. Pictures were of successful and failed plays of the favorite and rival teams. Physiological measures, including eye blink and skin conductance were measured while the participants viewed the pictures. Results showed that the participants' physiological responses were different depending on whether their favorite team was depicted as successful or unsuccessful in the pictures.

A study of rival soccer fans found that individuals were more likely to help in-group than out-group members in emergency situations (Levine, Prosser, Evans, & Reicher, 2005). Participants, fans of Manchester United and Liverpool clubs, were invited by researchers to attend a meeting where they would discuss the meaning of being a football fan. Once participants met with a researcher, they were instructed to walk to another building on campus in a timely manner where they would watch a video of their favorite team. The path between the two buildings deliberately passed through a parking lot alongside a riding trail. On the way to the second building, the participants encountered an individual that fell off a bike in the participant's view. At the time of the encounter, the individual in distress was dressed in apparel of either the participant's favorite, rival, or neither team. Upon arriving at the second building, another researcher asked participants if they had noticed anything on their walk. Participants that reported seeing a stranger fall off the bike were more likely to show compassion for the individual if the individual was wearing the apparel of their favorite team as opposed to the rival

team. Additionally, participants were significantly more likely to assist the individual if the individual was wearing the apparel of their identified favorite team. Another study on fans of European soccer found that individuals strongly identified with their favorite team did not want a joint sponsorship between their favorite and rival teams (Davies et al., 2006).

Wann (2006a) asserts that if a rival team is known, or made salient, fans should display increased identification toward their favorite team. A series of studies found that making a rival team salient would increase identification with a favorite team if the rival team were made relevant (Luellen & Wann, 2010). Luellen and Wann conducted three studies to investigate the hypotheses that rival salience would increase identification. Rival salience is the acknowledgement that a team is the out-group, thereby reinforcing an individual's membership with an in-group (Ashforth & Mael, 1989). In the first study, participants viewed a video of a team identified as a rival to the University of Kentucky. Results showed that when the rival team was made salient, fans identified with the favorite team more than when the rival was not made salient. The second study investigated the affects of an interviewer wearing a shirt of the rival team when speaking to participants. The authors found that this type of exposure did not make the rival salient to the participants. The third study followed the results of study two, when the rival was not made salient by showing participants a video of campus life around the rival school compared to a neutral school. The authors assert that a rival can be made salient if they are viewed as relevant to a fan. However, perhaps one explanation for the authors not finding support for their hypotheses in studies two and three was the selection of the identified rival team, Duke University. The University of Kentucky and Duke University

have not played each other since 2001 (Kentucky basketball, 2010), therefore many people may not identify Duke University as a rival of the University of Kentucky.

Results may have been different if the researchers wore shirts from Louisville, or another team within the SEC, which Kentucky has membership (Luellan & Wann, 2010).

Possibly a better approach would have been to have participants identify their favorite and perceived rival team before administering survey questions, which was a method used by Sierra et al., (2010), and Havard (2010).

Members of an in-group tend to band together in the presence of threat, such as was the case with the participants that described fellow students at their college as similar to themselves before a rivalry game (Smith & Schwartz, 2003). To this end, Lee (1985) asserts that rivalries in sport have the ability to foster positive in-group and negative out-group feelings that potentially could lead to hostility among fans. This is the case with highly identified fans of international soccer, sometimes referred to as soccer hooligans (Spaaij, 2008). However, Donahue and Wann (2009) found that level of fan dysfunction instead of team identification had a positive relationship with an individual's perception of the appropriateness of fan aggression. The authors did note however that the findings were possibly affected by social desirability. In the study, participants were asked about their perceptions, and not actual behavior. This could have lead to participants wanting to give the desirable and socially accepted answer. A study of Australian sports fans also found that level of team identification did not increase aggression (Dimmock & Grove, 2010), however highly identified fans reported they were less able to control their behavior during a contest than low or moderate fans. Lewis (2007) reported that sport rioters tend to be young, white males celebrating a victory of an important game.

Additionally, he found that the traditional rivalry does not seem to affect fan rioting as much as importance of the contest. The problem with this assertion however, is the distinction between a traditional rivalry and important game is unclear. For example, most games between traditional rivals in college football are played toward the end of the season, when bowl game or championship aspirations typically depend on the outcome of the game. So it is difficult to tell if the “rivalry” or importance of the game would cause fan aggression. To further illustrate this point, Lewis even alludes to this by using the example of Michigan and Ohio State football fans to illustrate the number of individuals who would be willing to participate in fan aggression. The Michigan/Ohio State game is one that is played at the end of the year, when both teams are usually vying for a bowl appearance. For this reason, further investigation into fan aggression in the presence of a rivalry is warranted.

Nevertheless, fan aggression and deviant behavior are areas of concern in sport. Acts of aggression during childhood can predict levels of fan dysfunction as an adult (Courtney & Wann, 2010). Wann, Fahl, Erdmann, and Littleton (1999) found that sport fans were not significantly different from non-sport individuals in trait aggression. However, in a study of college basketball fans, participants were asked their likelihood to commit a violent act against the coach or star player from the favorite team’s rival (Wann et al., 2003). In the study, college students were asked if there was no way they could be punished for the action, would they consider tripping, breaking the leg, or murdering the star player or coach from the rival team. Results showed that the more identified individuals were with their favorite team; the more likely it was that they would consider committing acts of violence against participants on the rival team. The likelihood to

commit such violent acts decreased as the severity of the act increased. Alarmingly however, three percent of respondents indicated they would be willing to consider murdering the star player of the rival team, and four percent indicated the same regarding the rival coach. This is consistent with prior research addressing fan identification and likelihood to commit anonymous acts of violence (Wann, Peterson, Cothran, & Dykes, 1999). Three and four percent may not seem significant, but the fact that any fan would consider murdering a player or coach of a rival team raises major concern. Further, Raney and Kinally (2009) found that fans tended to rate games against a rival as more violent than ones against a non-rival. The scary truth is that sport fans can react very irrationally “in the heat of competition”, and sport practitioners have to plan accordingly.

### Conclusion

The author’s interest concerning fan behavior and consumption addresses the effects of a rival on fan consumption, in which social identity theory, balance theory, group evaluations, the BIRGing/CORFing behaviors, Disposition of Mirth, and Sport Disposition Theory seem appropriate foundations to guide research in this area. In other words, does an individual consume sport more frequently, and passionately when his favorite team is playing an identified rival? Will that individual watch a game involving the rival when the favorite team is not playing? Will fans consume their favorite team to a greater or lesser degree depending on the perceptions assigned to the team’s rival? These questions all can be investigated using the theories of social identity, balance, in-group favoritism, and the BIRGing and CORFing behaviors. This discussion is merely the beginning of many attempts to shed light on an area of research that has received little attention.

## CHAPTER III

### METHODOLOGY

The primary purpose of this study was to develop and validate a scale that will measure perceptions of rivalry in intercollegiate athletics and the effects of its presence on fans. Previous research indicates that highly identified fans will Blast, or derogate another team in the presence of failure (Cialdini et al., 1976; Cialdini & Richardson, 1980), show favoritism to a member of the in-group compared to a member of the out-group (Sherif et al., 1961; Turner, 1978), describe the actions and on-field pursuits of a favorite team and supporting fans more favorably than a rival team (Wann & Dolan, 1994; Wann & Grieve, 2005), and evaluate performances of teams and players for a favorite team more favorably than for a rival team (Wann & Dolan, 1994; Wann et al., 2006). Fans of intercollegiate athletics were chosen for the current study because they show strong attachment to their favorite institutions and teams (Gibson et al., 2002), and garner the benefits of on and off-field successes and failures of the team (Toma, 2003).

Research addressing rival teams in sport has found that fans are more likely to watch a rival team play if they believe the rival team is a threat to their favorite team or the rival team has a substantial chance of losing (Mahony & Moorman, 1999). Fans are also more likely to help supporters of a favorite team rather than a rival team (Levine et al., 2005). Further, Luellen and Wann (2010) investigated the salience of a rival team



and found that fans exposed to a rival team identify that team as a rival only if the favorite team has been established and made salient.

This chapter will be divided into the following sections: (1) sample, (2), instrument, (3) design and procedures, and (4) statistical analyses. The sample includes the sample population, target sample, and sample size. The second section will discuss the different types of questions that will be assessed in the instrument. Since the purpose of this study is to develop and test a scale, the design and procedures section will examine the steps used to do so following Churchill's (1979) technique, along with the distribution methods that will be used. Lastly, the fourth section will discuss the types of statistical analyses that will be utilized to test the reliability and validity of the scale and answer the research questions. A pilot study was conducted over the summer of 2010 using the instrument on a sample of intercollegiate sport fans. The primary purpose of the pilot study was to identify initial factors informing the rivalry construct and evaluate the instrument and distribution method used. Findings and conclusions from the pilot study will be discussed throughout the chapter as warranted.

### Sample

#### *Population*

The sampling population for the current study was fans of intercollegiate athletics, in particular, fans of football and basketball teams competing at the NCAA Division I level. These fans can be found attending games of the favorite team, attending gatherings surrounding the favorite team's contests, or following their favorite teams online. In order to reach a broad spectrum of intercollegiate sport fans, the survey was distributed using two methods. First, the instrument was distributed using an intercept technique to

fans attending a game of their favorite team. Second, an online survey protocol was used in order to reach fans that may not be able to attend a game of their favorite team yet want to follow the team's progress. Online sites used in this study included team-specific sites where fans are able to gain information and voice their opinions regarding their favorite teams. More information regarding the sampling sites to be used will be discussed in the distribution section of this chapter.

*Accessible Population.* The accessible population, or survey population for this study included fans attending games of their favorite teams and fans following the progress of their favorite teams online. There does exist overlap between the two accessible populations, as a fan attending a favorite team's game may also follow its progress online. In order to protect against multiple responses, participants were asked to take the survey only once and multiple responses were blocked through the online distribution site utilized.

*Sampling Frame.* The sampling frame for the current study were fans of intercollegiate athletics 18 years of age or older. During the intercept distribution, participants were asked their age before they were administered the survey. If prospective respondents indicate that they were younger than 18 years of age, they were thanked for their time and not allowed to take the survey.

Since it is more difficult to monitor whether a person of proper age is taking the survey online, the online distribution utilized a different approach. Participants in the online distribution wishing to take the survey were directed to a page that detailed the procedures and purpose of the study, and asked to provide consent before being allowed to see the instrument questions. On the consent page, participants were required to

indicate whether they were at least 18 years of age. If a person indicated that he was 18 years of age or older, he was directed to the first page of the online survey. If a person indicated he was not 18 years of age or older, he was directed to a page that thanked him for his time and not allowed to take the survey.

It is important to note that previous research indicates that differences in response rate and non-response bias exist between paper-and-pencil intercept and online methods of distribution. Online survey distribution results in a lower response rate (Kaplowitz, Hadlock, & Levine, 2004; Porter & Whitcomb, 2003; Sax, Gilmartin, & Bryant, 2003), but allows a researcher to reach more potential participants than the paper-and-pencil intercept method (Birnbaum, 2004; Couper, 2000). Further, Andrews, Nonnecke, and Preece (2003) assert that researchers can expect a lower response rate when using online distribution and attribute this to “lurkers” intrusion of the online survey and lack of salience among the sample. Sheehan and McMillan (1999) assert that the understanding of the audience will help a researcher better predict response rate.

Research addressing online methodology asserts that multiple notifications preceding and during distribution can increase response rate (Kaplowitz et al., 2004). For this reason, participants received an initial notification of the survey via the team-specific web site announcement at the beginning of the distribution. Halfway through the collection periods, a second notification was posted on the web sites to give participants that did not respond during the first collection period a chance to do so.

*Sample Size.* The sample size for the current study was determined by the statistical tests used to analyze data. Data from the first sample of participants were analyzed through Exploratory Factor Analysis (EFA). Guadagnoli and Velicer (1988)

assert that components with strong factor loadings can be justified with a sample size as small as 150 subjects to show model fit. Findings from the pilot study indicate that item loadings exceed the cutoff identified by Guadagnoli and Velicer. When Mahony et al. (2000) developed the Psychological Commitment to Team (PCT), they used samples of 100 and 150 participants. The Sport Fan Motivation Scale (SFMS) was developed using a sample size of 262 and the Points of Attachment Index (PAI) had a sample size of 861 (Wann, 1995; Trail et al., 2003). For the current study, a moderate to large sample was desired, but the lowest acceptable size for the first sample was at least 200.

Data from the second sample was analyzed using Confirmatory Factor Analysis (CFA), as well as MANOVA. The sample size in MANOVA is affected by the number of dependent variable's present (Tabachnick & Fidell, 2007). However, the sample size for MANOVA is by far smaller than required for factor analysis. For this reason, the minimum size for the second sample was at least 200 respondents.

#### Instrumentation

The purpose of the current study was to develop and validate an instrument that will be used to measure rival perceptions in intercollegiate athletics. Therefore, the instrument was refined throughout the investigation by members of the expert panel and the researcher. In addition to the statements addressing rivalry in intercollegiate athletics, the first sample instrument contained demographic information (3 questions), favorite team information (7 questions), favorite team identification information (3 questions), and rival team information (2 questions).

The demographic questions asked participants to identify their age, gender, and geographic distance from favorite team. Previous research indicates that people change

their identification and consumption of a favorite team or physical activity as they progress through the life cycle (Funk, 2008), and that gender may affect their reasons for consuming sport (Gan et al., 1997). In the current study, it was believed that a fan living outside of the city or state of the favorite team will display different identification toward the favorite team and perceptions of the rival team. The zip code question acts as a way to check the team questions regarding distance from team, and along with gender information, may be used in future data analysis.

The favorite team information questions first asked participants to identify their favorite team. Then, following a method utilized by Mano and Oliver (1993), participants were asked to use their favorite team to answer five questions about the identified team. Participants were asked if they ever received a degree from and/or attended the university where their identified favorite team plays. Participants were also asked if they were currently attending the institution where their favorite team plays, since some respondents may have still been college students. Data from the degree/attended question were used in analysis to compare differences in perceptions of the rival team between participants. Participants were asked to indicate if they currently live in the same city and state where their identified favorite team plays. These questions were also used to identify differences between participant responses. The final two questions regarding the favorite team asked participants to indicate how many games they attended and watched on television or the Internet the previous season. These questions can be used to further differentiate between participants responses in future study. It is important to note that participants were asked to indicate how many games they attended and/or watched the previous season because data collection occurred during and after the

current competitive seasons. For example, a football fan may have completed the survey after the conclusion of the season while a basketball fan may have answered the survey mid season. Asking participants to indicate how many games they have attended in the current season could negatively affect results if some answer during the season while others answer after the season.

Participants were asked to indicate their level of identification with the identified favorite team to assist in validation of the instrument being developed. In order to show fan affiliation toward the favorite team, participants were administered the three-question Team Involvement Inventory (TII) (Trail et al., 2003). The TII measures how identified fans are with their favorite team. The questions from the instrument used asks participants to indicate their level of agreement with the questions: “I consider myself to be a ‘real’ fan of the (favorite) team.”; “I would experience a loss if I had to stop being a fan of the (favorite) team”; and “Being a fan of the (favorite) team is very important to me.” The TII is a subscale of the PAI, which was developed on a sample of intercollegiate fans (Trail et al., 2003). Kwon and Trail (2005) compared the methodology of using a single-item measure compared with the TII to illustrate fan involvement and found that in some cases single-item measures could be utilized with success. However, in the current study since validity of a new instrument was being tested, it was more beneficial to use the three-question format of the TII.

In order to properly answer the instrument questions, participants were asked to indicate who they believe their favorite team’s biggest rival to be. Then similar to the questions regarding the favorite team and the method used by Mano and Oliver (1993), participants were instructed to use the identified rival team to answer the remaining

questions on the survey. It is important to note that one specific team was not identified as a rival for the participant to use while answering the survey. Contrary to prior research where a rival was identified a priori (Wann et al., 2006), the current study measured participants' perceptions of the team they identify as the favorite team's rival. This is a similar approach used by Sierra et al., (2010), and this method of rival identification was used because some participants may believe different teams are rivals to the favorite team. Participants were also asked to indicate the outcome of the previous season's contest between their favorite and rival teams. This question will allow for measurement of differences in perceptions of rivals depending on the previous year's outcome, and may be used in future analysis. Again, participants were asked to identify the outcome of the previous season's game(s) because the instrument was being distributed during and after the current season(s).

During the pilot study, the instrument was administered to participants using an online intercept survey distribution method. Specifically, the instrument was administered to personal contacts and fans of college sport on the popular online social networking site Facebook. The survey was constructed using the survey site formsite.com. Building the survey using this service allowed for questions to be split into multiple pages for the sake of clarity. Additionally, formsite.com allows answers to be plugged into future questions in the survey. This function was used in the pilot study to remind participants of the teams they identified as their favorite and rival. The first page of the online survey asked participants to identify their favorite and rival team. Then, the answers were piped into future questions in the survey to allow for clarity in reading the questions. For example, if a participant identified the Michigan Wolverines as their rival

team, the words Michigan Wolverines were piped into future questions to make the statements more relevant to participants. This approach was also used in the online protocol aspect of the current study.

One focus of the pilot study was to allow participants to provide feedback regarding the survey. The feedback most frequently received concerned the length of the instrument and wording of statements. Participants indicated that the survey length seemed long and questions tended to be similarly worded. In the creation of any psychological scale, it is the purpose of the first instrument distributed to contain more questions than subsequent surveys, and have similarly worded items. Therefore, this feedback and recommendation was noted for future consideration.

As a result of the pilot study an open-ended question at the end of the survey was added to allow participants to further explain their feelings toward the rival team. In the pilot study, it was found that some participants took the opportunity to identify their rival team on the survey in derogatory ways. For example, one participant who identified the University of Colorado Buffaloes as the rival team entered the team name on the survey as the “Colorado Fluffaloes”. Thus, an open-ended question addressing the rival team was added at the end of the survey instrument.

Participants were then asked to indicate their level of agreement with statements addressing their favorite team’s rival on a 7-point Likert-type scale (1 – Strongly Disagree, 3 – Neutral, 7 – Strongly Agree). There are differing opinions regarding the usage of odd-numbered and even-numbered scales. Some academics choose to use even-numbered scales when measuring fan behavior and psychological attachment to a team because they want to force a directional response while others use an odd-numbered scale



in order to provide participants with a neutral option (Dillman, 2000). Further, if a neutral option is provided, the placement of this choice can make a difference on the likelihood of participants picking that option (Fink, 1995). An odd-numbered scale was chosen for this study for two reasons. First, with the exception of a few scales (Wann & Branscombe, 1993; Wann, 1995), most measurements used in sport administration employ odd-numbered scales (Mahony et al., 2000, Funk & James, 2001; Trail & James, 2001; Trail et al., 2003). Second, using an odd-numbered scale allows participants to indicate they have neutral feelings toward a particular survey question. Using an even-numbered scale that forces directional responses could deter participants from indicating their true feelings and perceptions, and could result in some participants choosing not to answer questions or cease completing the survey all together. For these reasons, the survey questions were measured on a 7-point Likert-type scale.

### Design and Procedures

#### *Design*

This study was non-experimental in nature, and two different statistical methodologies were used to answer the research questions. Research Question 1 addressed the identifiable factors that affect the phenomenon of rivalry. Research Question 2, Research Question 3, and Research Question 4 assessed the differences existing between various groups of fans regarding the identified factors.

Research Question 2 addressed the differences in identification toward favorite team and perceptions of rival team depending on the proximity of fans to the favorite team, specifically fans living in the same city as the identified favorite team and those living in another city. Research Question 3 also assessed differences in identification

toward favorite team and perceptions of rival team depending on proximity to the favorite team, specifically fans living in the same state as the favorite team and fans living in another state. Research Question 4 assessed the difference in identification with favorite team and perceptions of rival team between fans that received a degree and/or attended the institution where the identified favorite team plays and those that did not receive a degree and or/attend the institution.

### *Procedures*

Due to the lack of research addressing the meaning of a rivalry to sport fans, the current study sought to construct an instrument that will measure the perceptions of rivalry that fans of intercollegiate athletics possess. The method of developing marketing measures identified by Churchill (1979) was the methodological framework used in the current study. Using Churchill's approach requires the researcher to: 1) specify the construct(s) that is/are being studied, 2) generate sample items, 3) collect data to initially test items, 4) purify the measure, and 5) collect data to assess reliability and validity.

*Specify Construct.* A construct is an attribute that cannot be measured on its own because it is too general in scope (Creswell, 2005). It is something that must be measured using attributes that explain how it is constructed. The construct in the current study was rivalry in sport and attributes or characteristics of this are helping to explain the phenomenon. To specify the construct of rivalry in intercollegiate sport, the researcher conducted a review of the sport literature regarding fan behavior and team identification. Using balance theory (Heider, 1958) and the works of Cialdini et al., (1976) and Snyder and Fromkin (1980), a preliminary framework was developed explaining how individuals react to the on-field success and failure of their favorite team,

and the on-field success and failure of their favorite team's rival. Further, using social identity theory (Tajfel, 1978b) and the tendencies of people to display in-group bias and out-group derogation (Sherif et al., 1961; Tajfel, 1978c), general questions were developed that were administered to participants qualitatively to measure their perceptions of their favorite team's rival.

*Generation of Sample Items.* Fifteen semi-structured interviews over a period of one calendar year were conducted in which the researcher asked fans to speak about their relationship with their favorite team and their favorite team's identified biggest rival, perceptions of favorite and rival teams' on-field success and failure, and feelings toward a rival team's on-field success or failure in indirect competitive situations (Harvard, 2010). The qualitative study utilized the constructivist viewpoint (Crotty, 1998), which asserts that an individual makes meaning of the surrounding world through personal experiences and opinions. Since the phenomenon of rivalry in sport had not been investigated qualitatively, ground theory was used to guide the study (Creswell, 2007). Grounded theory uses the experiences and responses from participants to build on existing constructs, while addressing a new theory or phenomenon.

The participants in the qualitative study indicated the team they believed was their favorite team's biggest rival instead of an a priori team being identified. This method of identification was used so that participants could talk about the team *they* considered to be the biggest rival to their favorite team. As previously mentioned, other studies of rivalry in sport have identified an a priori rival to the favorite team (Leullen & Wann, 2010; Wann et al., 2003). It was important however, for participants to identify their own

perceived rival because some fans may disagree on which team is the biggest rival to their favorite team.

Using the interview transcripts, the researcher identified trends addressing the participants' perceptions of their favorite team's relationship with the rival, the rival teams on and off-field prestige, and the rival team's on-field successes and failures in direct and indirect competitive situations. The trends, along with limited questions from the literature were used to generate sample items that were administered in the pilot study. During the pilot study, two experts in the field of sport management were consulted to obtain feedback regarding the items. One expert assessed the list of items for inclusion of relevant constructs, and another assisted in the deletion and clarification of statements. Using the pilot expert panel, the original list of 112 initial statements was narrowed to 58 items that were subsequently administered to the sample.

It was required that an expert panel be utilized in the current study. The experts for the current study were five academics studying sport management. All panelists in the current study are considered experts in the area of fan identification, consumption, and behavior. Additionally, four of the five panelists have published identification scales that have been used in numerous sport and participation studies.

*Initial Item Testing.* Following the item creation, the instrument was administered to a sample of participants in order to provide initial testing of the items. Once responses were collected, the data were analyzed using an Exploratory Factor Analysis (EFA) in SPSS 18 to determine which items loaded together and explained similar factors. The identified factors were examined and labeled regarding which dimensions of the rivalry construct they explain.

The EFA using promax rotation in the pilot study identified six initial factors consisting of 37 items, which explained 72.08% of the variance. Factors were identified using the Kaiser Criteria, which identifies eigenvalues greater than 1. Items were identified by factor loadings larger than .40 and not double loaded greater than .50. The factors were labeled 1) Out-group Indirect Competition, 2) Out-group Consumption, 3) Competition, 4) Out-group Linguistic Bias, 5) Out-group Academic Prestige, and 6) Vicarious Achievement. The factors addressing Competition and Vicarious Achievement were combined and similarly worded items were combined. Additionally, the first factor was split to address derogation and support for the rival team. The resulting proposed scale identified five factors consisting of 37 items. Table 1 illustrates the factors identified in the EFA with definitions.

Table 1

*Factors identified in Pilot EFA with definitions.*

Factors	Definitions
Out-group Indirect Competition - Derogation (OICD)	- Likelihood that a fan will get satisfaction out of the defeat of the rival team in indirect competition
- Support (OICS)	- Likelihood that a fan will support the athletic efforts of his rival team in indirect competition.
Out-group Consumption (OC)	- Likelihood that a fan will watch the rival team in indirect competition.
Competition/Vicarious Achievement (CVA)	- The satisfaction a fan gets when his favorite team defeats his rival team.
Out-group Linguistic Bias (OLB)	- The perceptions of fan and team sportsmanship of the rival team.
Out-group Academic Prestige	- The amount of respect a fan has of the academic prestige of the institution where the rival team plays.

*Note. Factor names and definitions may change during the expert panel phases of the study*

*Purify the Measure.* Once data were collected and analyzed using an EFA, the expert panel reviewed the results from the first sample and instrument a second time. In this stage, statements were refined further for instrument clarity. Items and factors may also be deleted for parsimony during the second expert panel review. This portion of the study was not conducted during the pilot study.

*Collect data to test reliability and validity.* Following the second expert panel, the instrument was administered to a second sample and data gathered regarding the rivalry construct. The data gathered during the second sample was analyzed for reliability and validity to evaluate the instrument and determine its usability. This step

was also not conducted during the pilot study and the specific statistical analyses will be discussed in the data analyses section of this chapter.

### Distribution

The instrument was distributed in two phases. The first phase used an online intercept survey distributed to fans following their favorite teams through team-specific web sites. The second phase will utilize an online methodology and Self-Administered Questionnaire (SAQ) to collect participant responses similar to the protocol used in the pilot study. The SAQ was distributed to fans attending live games of their favorite team.

SAQ was used because it allows for participants to be chosen by the researcher and can be employed with large groups of people. Also, SAQ's allow participants to take the survey without the assistance of the researcher, thereby giving them more freedom to respond to questions in the manner they choose (de Leeuw & Hox, 2008). For the purpose of gathering data for the current study, in-person administration was utilized. In-person administration has been found to greatly affect the coverage issues in sampling (Lohr, 2008).

Using solely in-person paper-and-pencil surveys for distribution excludes fans of intercollegiate athletics that are unable to attend live contests. For this reason, an online method was also utilized in the current study. Using an online method has several advantages, such as allowing a wider range of potential participants to be reached in a cost-effective manner (Gaiser & Schreiner, 2009). The particular method that utilized in the current study is the online intercept survey protocol. The intercept survey is a probability web survey that is used to reach visitors to a specific site (Manfreda & Vehovar, 2008). The sample reached through an intercept survey should be

representative of the target population. In the current study, the target population was fans of intercollegiate athletics. For this reason, the survey was administered using team-specific web sites and chat rooms (e.g., netbuffs.com, burntorangenation.com, volnation.com, gobruins.com, etc.).

Non-response error occurs when not all potential participants choose to answer the survey and bias can affect results when the answers of non-respondents differs from respondents (de Leeuw, Hox, & Dillman, 2008). Two forms of non-response error exist; item non-response and unit non-response. Item non-response occurs when a single item is skipped or purposefully not answered by a participant, whereas unit non-response occurs when one or multiple participants do not answer whole sections of the instrument.

One cause of non-response error is the length of the survey instrument. Since the length of the final instrument could not be determined a priori, non-response reduction was utilized in both the SAQ paper-and-pencil and online intercept survey methods. Non-response reduction is an attempt to “reduce the number of noncontacts and refusals” (Leeuw, Hox, & Dillman, 2008, p. 10), and helped to control for error and bias in the current study. Distributing the SAQ at various times and locations before the events helped to reduce non-response error and bias. Regarding non-response reduction in the online distribution, announcements on the web sites were posted for potential participants midway through the collection period. Additionally, a raffle was used as an incentive during the distribution of the survey in an attempt to increase response rate. Eight VISA gift cards worth \$25 each were raffled following data collection.

Addressing missing data, mean value imputation was utilized in the coding procedures of the current study. Imputation is the process of replacing missing data with



an estimated answer before the data are analyzed. Further, mean value imputation estimates the mean of the responses for a specific item, and imputes that value where missing data may exist (Groves et al., 2009).

Another focus of the pilot study was to assess the functionality of the distribution method used. Regarding the distribution method, the researcher found that reaching participants online using Facebook was a viable option with a few exceptions. One exception was the salience of the group. Perhaps, people participated in the pilot study because they were personal contacts with the researcher on the site. This may have resulted in some participants not having the same amount of knowledge regarding their favorite team than other, more salient participants may have. Another exception with using Facebook as a distribution method was that many participants that were originally sent the instrument forwarded the survey to their online contacts, resembling an online snowball sample. Response in a snowball sample depends on participants' willingness to take part in the study and pass along the information to other people that may be interested in participation (Faugier & Sargeant, 1997). An advantage of using a snowball sample is that people may be reached that usually would not be reached during more traditional sampling methods; however, the method relies on social contacts of the researcher and participants (Brown, 2005). For this reason, more salient populations were used in the current study as identified in the sample section of this discussion.

### Statistical Analyses

There were two samples used to collect and analyze data in the current study. Both samples were analyzed to answer Research Question 1, and Research Question 2, Research Question 3, and Research Question 4 utilized the data from the second sample.

The following section will detail the statistical analyses that were used to answer each question. Research Question 2, Research Question 3, and Research Question 4, will be discussed separately, but the analysis used to answer the questions will be described together.

### *Research Question 1*

To answer Research Question 1, the instrument was sent to an expert panel for feedback regarding factor identification, item selection, and clarity of the survey. Once this step was completed, the instrument was administered to the first sample of participants. The data gathered during the first sample was analyzed using Exploratory Factor Analysis (EFA) with promax and varimax rotations in SPSS 18. Prior to the EFA, the frequencies and descriptive characteristics of the data were checked for data normality. “The goal of EFA is to extract maximum variance from the data set with each component” (Tabachnick & Fidell, 2007, p. 635). Additionally, EFA is used when a researcher wants to reduce a large number of factors to a smaller number of components. For example, in the current study numerous items exist that explain the construct of rivalry. By analyzing the data through EFA, it is clear which items help to explain the same factor by showing the items that load closely together. Once the items were loaded together, the researcher then labeled the factors that help explain the construct. The researcher used both promax and varimax rotations to allow for comparisons, as promax rotation allows for correlations among variables and varimax rotation forces items to be loaded to one factor (Tabachnick & Fidell, 2007). Additionally, using promax rotation in EFA is an inexpensive and efficient way to examine where items load (Tabachnick & Fidell, 2007). Factors were identified using the Kaiser criteria, which recognizes

eigenvalues greater than one. An eigenvalue is the amount of variance present, and eigenvalues greater than one tend to explain more of the variance than those less than one (Tabachnick & Fidell, 2007). Items were identified by loadings greater than .40 and no double loadings greater than .50. Factor loadings of .40 have been found to be salient to a component (Guadagnoli & Velicer, 1988).

Following the EFA and identification of relevant factors explaining the construct of rivalry, the subsequent data and instrument was sent back to the expert panel for a second review. During this process, the expert panel again determined if any items needed to be deleted or added, or modifications in verbiage needed to be made.

Once the instrument underwent review from the second expert panel, the survey was administered to a second round of participants attending live games of their favorite teams and from the online team and chat room sites in order to measure the validity and reliability of the proposed scale. The data from the second sample was analyzed through Confirmatory Factor Analysis (CFA) in LISREL 8.8. Similar in theory to EFA, CFA is meant to confirm a hypothesized theory of latent variables (Tabachnick & Fidell, 2007). Further, EFA is used to construct or develop theories whereas CFA is used to test and confirm theories.

To test goodness of fit, chi square scores were examined. Chi square scores can help to determine if correlation exists between factors (Glass & Hopkins, 1996). The Non-Normed Fit Index (NNFI) was evaluated to determine the fit of the model. The NNFI takes degrees of freedom into consideration when evaluating the model fit (Tabachnick & Fidell, 2007). Comparative Fit Index (CFI) is another method used to evaluate the fit of the model, and was analyzed in the current study. According to Hu and

Bentler (1999), CFI values of .95 and greater are considered to be indicators of good model fit. The Standardized Root Mean Square Residual (SRMR) evaluates the average differences between variance and covariance in the sample (Tabachnick & Fidell, 2007). An SRMR value of .08 or lower indicates a model has good fit (Hu & Bentler, 1999). Lastly, the Root Mean Square Error of Approximation (RMSEA) measures the lack of fit within a model (Tabachnick & Fidell, 2007), and was used to assess the instrument.

To test the reliability of the factors identified in the instrument, Cronbach's  $\alpha$ 's and inter-item correlations were calculated. The Average Variance Explained (AVE) scores were examined to determine the validity of the instrument. Throughout this process, items and factors that do not demonstrate good model fit were eliminated from the model, resulting in a parsimonious final measurement.

### *Research Question 2*

Once the instrument was developed and tested for validity and reliability, the next stage in the current study was determining where significant differences existed among respondents. Research Question 2 investigates if differences exist in the identifiable factors explaining rivalry dependent upon proximity to the favorite team. Previous research states that people tend to change their identification and feelings toward their favorite team or activity if they live in another city than the favorite team or activity (Funk, 2008). For this reason, the current research question investigated if significant differences existed between fans that lived in the same city as their favorite team and people that no longer lived in the same city. The question used in analysis was categorical in nature, and required participants to answer yes or no.

*Research Question 3*

Extending the research addressing fans living in different cities than their favorite teams (Funk, 2008), Research Question 3 assessed if significant differences in perceptions of the rival team existed between fans living in the same state or different state of the favorite team. The item used to answer Research Question 3 was also categorical in nature, and participants answered the question either affirmatively or negatively.

*Research Question 4*

Interview participants indicated that they learned of their favorite team's rival through family members and friends (Havard, 2010). Further, they were inundated with information regarding their rival team while they were attending college. Those who participated in the interviews also tended to indicate that their feelings and perceptions toward their favorite team's rival changed when they graduated from college and further diminished the longer they had been out of school. For these reasons, Research Question 4 assessed if differences existed between fans that received a degree from and/or attended the institution where the favorite team plays and fans that did not receive a degree from and/or attend the institution. The item used in Research Question 4 was categorical in nature, and required respondents to answer yes or no to the question.

Research Question 2, Research Question 3, and Research Question 4 were answered using the data from the second sample of participants. First, frequency and descriptive data were examined for data normality. Then, one-factor Multivariate Analysis of Variance (MANOVA) was used to determine if significant differences existed among the independent variables for Research Question 2, Research Question 3,

and Research Question 4. A MANOVA determines if significant differences exist between dependent variables where two or more independent variables are present (Tabachnick & Fidell, 2007). The independent variable for Research Question 2 was the response from participants indicating whether they live in the same city as the favorite team or not. The independent variable for Research Question 3 was the response to the question whether fans live inside or outside the same state as the favorite team. The independent variable for Research Question 4 were the responses to the question addressing if participants received a degree from and/or attended institution where the favorite team plays. The dependent variable(s) used in the analysis for all three questions were the factors identified in the CFA. It was determine that he Scheffe technique would be used for post-hoc comparisons if necessary, as it is appropriate for MANOVA (Tabachnick & Fidell, 2007).

## CHAPTER IV

### DEVELOPMENT AND VALIDATION OF THE SPORT RIVALRY FAN PERCEPTION SCALE (SRFPS)

#### Abstract

Rivalry plays an integral part in the allure and excitement of following sport and favorite teams. The Disposition of Mirth Theory (Zillmann & Cantor, 1976) states that persons will experience joy if someone they admire is successful and someone they loathe is unsuccessful. Additionally, the Sport Disposition Theory (Zillmann et al., 1989) asserts that fans will cheer when their team is successful and their team's opponent is unsuccessful when in direct competition. However, little research exists measuring what rivalry means to sport fans, how they perceive teams identified as a rival, or how they feel about the success and failure of a rival team in indirect competition. Previous research has used rivalry as a variable to explain fan behavior, but has not investigated the phenomenon by itself. For this reason, the current study's goal was to develop and validate the Sport Rivalry Fan Perception Scale (SRFPS). The scale was tested on two samples of 457 and 374 intercollegiate basketball and football fans and proved to be reliable and valid as a measure of fan perceptions toward a favorite team's rival. The resulting SRFPS consists of four factors and 12 items, and can be used by both academics and practitioners. Implications for both are discussed along with directions for future study.

## Introduction

Sport plays an integral part in many peoples' lives, as illustrated by the number of people that follow a favorite team and watch international events in the United States and around the world (Chelladurai, 2001). In college sport, fans dedicate large amounts of resources, including time and money to show their affiliation with their favorite teams and schools (Gibson et al., 2002). Every year, fans pour into stadiums and arenas around the nation to watch their favorite teams in intercollegiate competition. Currently, nine college football stadia have capacities over 100,000 ("100,000 +", 2010), and thousands of fans crowd into collegiate basketball arenas to watch contests while students camp out for hours, even days to get tickets to high-profile games. Additionally, fans now have the ability to follow their teams during the off-season, where they can get a wealth of team and player related information including recruiting efforts and practice schedules. Today, following a favorite team has definitely become a year-round endeavor.

An important aspect of sport is the relationship teams, and their respective fans, share with those identified as their rivals. This relationship, often times adversarial, adds to the excitement of following and cheering on a favorite team and watching a favorite sport. For this reason, it is short sighted to address sport spectatorship without a discussion of the rivalries that occur between teams, players, and fans. At the collegiate level, rivalries fill out season schedules, make for entertaining contests, and add fervor to the competitive nature of sport. For example, the Harvard/Yale rivalry is known as the oldest rivalry in college football, dating back to when both schools were competing for public attention and operational funding (Corbett & Simpson, 2004). The rivalry between the Texas Longhorns and the Oklahoma Sooners dates over one hundred years,



and has cost many head coaches their jobs (Shropshire, 2006). The rivalry between the University of Kansas and University of Missouri dates back to the adversarial relationship between the two states during the Civil War (Tucker, 2007).

The relationships that exist between teams identified as rivals have effects that reach far beyond the playing field. Many fans will follow the progress of their favorite team and their favorite team's rival in an effort to gain information on the athletic efforts of both teams and to gain what they perceive to be a competitive edge by knowing the names, stats, and any other player information that could possibly be used by the fan as a distraction to the rival team during a contest. Many fans are socialized at an early age by family members as to which team(s) represent rivals and are further reinforced of the phenomenon as they attend college (Havard, 2010).

The problem currently facing the study of rivalry in sport, and fan behavior in particular, is that little research exists explaining what makes up a sport rivalry, or how the phenomenon affects fans. As matter of fact, no operational definition of sport rivalry currently exists in the sport or consumer behavior literature. For this reason, the current study sought to address the lack of empirical investigation into the phenomenon of sport rivalry by identifying factors that explain fan perceptions of teams identified as their favorite team's rival. Further, a scale measuring fan perceptions of rival teams was psychometrically tested and is presented. The following research question guided the study:

Q1 What identifiable factors explain rivalry?

It is important for sport academics and practitioners to understand how fans perceive teams identified as a rival because it allows for further understanding of

intergroup relations, as it is necessary to understand how fans of rival teams interact with each other. This will help practitioners find ways to better market contests between rival teams and prepare for any confrontations that may arise surrounding the event(s).

Further, having an enhanced understanding of rivalry in sport will allow practitioners to better understand fans and implement relevant strategies when marketing their teams and conferences. The current scale was developed employing two groups of college sports fans during the 2010 football and 2010-2011 basketball seasons. In support of the theoretical foundations for studying rivalry, a brief review of the literature addressing fan identification, intergroup relations, and existing studies of rivalry in sport is presented. The procedures utilized in the study will be discussed, along with results, conclusions, and directions for future study.

#### Review of Literature

The psychology of fan and consumer behavior is an area that has received considerable attention by academics over the past two decades. Zaichkowsky (1985) proved with the Personal Involvement Inventory (PII) that two people could perceive the same product differently. In sport, people tend to be introduced to sport through family (Coakley, 2004; deGroot & Robinson, 2008) and consume with friends sharing similar team or activity interests (Dietz-Uhler et al., 2000). Fan identification with a team can offer individuals opportunities to fulfill socialization needs that can lead to increased mental health (Brascombe & Wann, 1991; Wann, 2006a). People tend to identify with others to enhance their social-identity (Tajfel & Turner, 1979) and perceptions of others. One way for a fan to do this is to identify with a sport team (Wann et al., 2008). For this reason, literature addressing social and fan identification begin the discussion.

### *Social Identification*

“We need to postulate that, at least in our kinds of societies, an individual strives to achieve a satisfactory concept or image of himself” (Tajfel, 1978b, p. 61). Social identity explains how a person’s self-concept affects the types of people and groups an individual affiliates with. Further, being favorably viewed by others can have beneficial effects on a person, as one human desire is to achieve a positive social identity (Tajfel & Turner, 1979). Tajfel (1981) identified social identity theory, and defined it as “that *part* of an individual’s self-concept which derives from his knowledge of his membership of social group (or groups) together with the value and emotional significance attached to that membership” (p. 255).

People will join with others who share similar characteristics in an attempt to increase their self-esteem and self-identification (Tajfel & Turner, 1979). When people with similar interests join together, they form social groups, which has been defined as “two or more people who share a common social identification of themselves, or, which is nearly the same thing, perceive themselves to be members of the same social category” (Turner, 1982b, p.43). These groups tend to identify members within and outside the group according to the common goal shared by the group, which is known as collective identity (Ashmore et al., 2004).

### *Fan Identification*

The associations with sports teams that fans enjoy can lead to a healthier lifestyle, which can lead to the attainment of happiness and pleasure in life (Branscombe & Wann, 1991; Wann, 2006a). Heider (1958) introduced balance theory to help explain how and why individuals interact with others. Through unit relations, the theory states that things

are connected in some way and that people will associate with others in dyadic and triadic relationships in order to maintain a balanced state of being. These relationships occur in either positive or negative ways between individuals. For example, if person A likes person B, balance is attained in a dyadic relationship if that feeling is reciprocated (i.e., B likes A). In a triadic relationship, a balance state is attained if all three people like each other or if two negative relationships and one positive relationship are present. Regarding triadic relationships, Heider stated, “with respect to the case in which one positive and one negative relationship is given, there is a tendency for the third to be negative, for only in this way can balance be obtained” (Heider, 1958, p. 206). This triadic relationship is of interest in the study of sport rivalry, as it helps to explain the adversarial relationship fans often have with their favorite team’s rival. For example, according to Heider a person will have a positive relationship with his favorite team, and his favorite team will have a competitive, or negative relationship with a team identified as a rival. Due to the positive relationship the fan has with his favorite team, the fan’s relationship with his favorite team’s rival will be negative.

Cialdini et al. (1976) used Balance Theory, and unit relations in particular, to explain how fan association and identification with favorite teams is affected by a team’s on-field performance. The authors conducted a study at seven schools with prominent college football programs, in which fans indicated how identified they were with their favorite team. Each Monday during the football season, participants were monitored for the types of clothing they wore to classes and again asked how much they identified with their favorite teams. The results showed that people were more likely to wear team apparel and use associative words following a win than a non-win. The tendency of fans

to associate with teams following success was coined Basking In Reflected Glory (BIRGing). Further, Cialdini and colleagues asserted that individuals highly identified with their favorite team would rather derogate, or “Blast” the opposing team than distance themselves from the favorite team when faced with failure. The Blasting phenomenon was further validated on a group of college students, who when asked about their rival university tended to describe their respective school more favorably (Cialdini & Richardson, 1980).

In a similar vein, the term Cutting Off Reflected Failure (CORFing) was coined by Snyder and Fromkin (1980) as the tendency of fans to distance themselves from the perceived failure of a team following poor on-field performance. Snyder et al., (1986) found that three groups which had submitted a collective project to judges tended to identify with the group if the feedback was positive or distance if the feedback was negative. Regarding highly identified sports fans, Wann and Branscombe (1990) found that fans possessing a strong identification with their favorite team were more likely to BIRG and less likely to CORF for long periods of time as compared to fans possessing a weak identification with their favorite team. Contrary to Wann and Branscombe (1990), Bizman and Yinon (2002) found that highly identified fans were more likely to CORF than low identified fans immediately following a loss. However, the authors stated that highly identified fans might continue, and even increase their involvement with the favorite team after allowing the feelings associated with the loss to dissolve over time. Fans identified with a team often interact with fans from another team when supporting their favorite team. Next, a review of intergroup relations is needed to explain how people and groups interact with each other.

### *Intergroup Relations*

The mere presence of another can motivate an individual to act in a certain way or purchase a product to compare favorably with someone else (Triplet, 1898; Mowen, 2004). Further, it is an inherent attribute of humans to strive for high self-esteem (Crocker & Park, 2004). A person can attain a higher degree of self-esteem the more successful they are perceived to be in some area of their lives. For this reason, people will participate in activities where they can exhibit a level of mastery (Deci, 1975) or self-efficacy (Bandura, 1977). One way for a person to achieve self-efficacy is through the vicarious experience, or the successes of another. By BIRGing, sport fans feel as though they are part of the successful team, and that they can achieve personal goals (Cialdini, et al., 1976).

When groups form, and share a collective identity, they tend to display favoritism toward members of their in-group and ostracism toward members of an out-group. This tendency is known as in-group bias, and has received much attention in the academy. Regarding in-group bias, Tajfel and Turner (1979) assert regarding in-group bias, “the mere awareness of the presence of an out-group is sufficient to provoke intergroup competitive or discriminatory responses on the part of the in-group” (p. 38). The Robbers Cave Experiment (Sherif et al., 1961) is one of the first studies of in-group bias. Participants in the study were grade school boys in a summer camp setting split into two teams and given the opportunity to compete against the other group. During the competitive phase of the study, the teams displayed in-group bias and out-group ostracism to the point that the researchers had to separate the boys on multiple occasions.

In-group bias is also present in the descriptions individuals give of other people (Brewer, 1979). This is known as Linguistic Intergroup Bias (LIB), and asserts that individuals tend to describe in-group actions more favorably and abstractly than out-group actions (Maass et al., 1989). Linguistic Intergroup Bias is present in sport in the way fans evaluate team and player performance (Wann & Thomas, 1994). Regarding out-group, or rival fans, studies have shown that people will describe the sportsmanship of in-group members more favorably than out-group members (Wann & Dolan, 1994; Wann & Grieve, 2005).

The Disposition of Mirth Theory may help to explain a level of in-group bias in intergroup relationships. The theory states that a person will feel joy if someone they like is successful and displeasure if that person experiences failure and vice versa (Zillmann & Cantor, 1976). This is similar to the German term *schadenfreude*, which refers to an individual taking pleasure in the demise of another (Kahle & Close, 2011). Particular to sport, the Sport Disposition Theory has shown that fans cheer when their favorite team is successful and the favorite team's opponent is unsuccessful when the teams are in direct competition (Zillmann et al., 1989). This theory helps to explain the relationship between fans and the team identified as their favorite team's rival. Currently, the Sport Disposition Theory has only been tested in direct competitive situations, however; qualitative evidence suggests the principles of the theory exist in indirect competitive situations as well (Havard, 2010).

Regarding in-group bias and sport rivalry, Lee (1985) asserts that rivalries have the ability to strengthen in-group bias and result in hostility among fans of rival teams. This has certainly been the case with rabid soccer fans commonly referred to as soccer

hooligans (Spaaij, 2008). Some studies of fan aggression have found that team identification or the presence of a rival did not necessarily increase hostility (Dimmock & Grove, 2010; Lewis, 2007), but research into sport rivalry has found that fans would be willing to commit anonymous acts of violence, even murder, against the star player and coach of a rival team (Wann, et al., 2003; Wann, Petersen, et al., 1999). The recent story of a University of Alabama fan poisoning a publicly beloved tree on the Auburn University campus is an example of fans taking their allegiances too far and taking out their frustrations when a rival team succeeds (Schlabach, 2011).

Other research into sport rivalry has found that peoples' physiological reactions are affected by their favorite team's success or failure against a rival. Additionally, European soccer fans did not want their favorite team to share sponsorship with a rival team (Davies et al., 2006) and were more likely to help distressed others if they were wearing the colors of their favorite team than a rival team (Levine et al., 2005).

This review of literature shows how people behave in order to benefit their self-identity, and the associations' people obtain to enhance their self-esteem. Many times, these associations with groups of people sharing similar interests lead to in-group bias and out-group ostracism. The Disposition of Mirth Theory and Sport Disposition Theory help to explain fan relationships with their favorite team and their favorite team's rival in sports. At this time, no research addressing how fans feel about their favorite team's rival exists and therefore it is difficult to properly measure the effects of sport rivalry on fan psychology and behavior. The following section details the methods used in the development and validation of the Sport Rivalry Fan Perception Scale (SRFPS).



## Methods

The purpose of the current study was to develop and validate a scale that empirically measures the perceptions of fans toward the team identified as their favorite team's rival. Previous research suggests that persons will treat others differently depending on their identification with the in-group or out-group (Sherif et al., 1961; Turner, 1978). Further, members of the in-group will describe the actions of other in-group members more favorably than out-group members (Wann & Dolan, 1994; Wann & Grieve, 2005) and are more likely to watch their rival team play if they believe that the team is likely to lose (Mahony & Moorman, 1999). This section will detail the techniques, samples, and statistical analyses used to determine the reliability and validity of the scale.

### *Instrument Development*

In order to address the perceptions of fans toward their favorite team's rival, the technique for developing marketing measures identified by Churchill (1979) was used. Using Churchill's technique for designing measurement requires the researcher to: 1) specify the construct(s) being explained, 2) generate sample items, 3) collect data to initially test items, 4) purify the measure, and 5) collect data to assess reliability and validity.

*Specify Construct.* A construct has been explained as an attribute that is too general in scope to be measured on its own (Creswell, 2005). Instead, one must measure identified aspects to explain how it is constructed. In the current study, the construct is rivalry in sport, and in order to identify the construct a review of the existing literature regarding fan behavior and team identification was conducted. Balance theory (Heider,

1958), and the research on team identification by Cialdini et al. (1976) and Snyder et al., (1986) were used to identify the basis for rivalry in sport. Additionally, social identity theory (Tajfel, 1978b), in-group bias (Sherif et al., 1961; Tajfel, 1978c), and the disposition of mirth (Zillmann & Cantor, 1976) were used to guide the development of general questions regarding how fans felt regarding their favorite team's rival.

*Generation of Sample Items.* In order to generate sample items to be tested regarding fan perceptions toward a rival team, fifteen semi-structured interviews using the constructivist viewpoint were conducted over one calendar year (Crotty, 1998). During the qualitative phase of the study grounded theory (Creswell, 2007) served to guide the research and questions that participants were asked regarding their favorite team and their favorite team's rival. The interview participants were asked to identify *their* favorite team's rival to provide personal context for the study. Some previous studies addressing rivalry have identified a priori a rival for fans (Luellen & Wann, 2010; Wann et al., 2006). The tactic used in the qualitative portion of the current study is similar to the one used by Sierra et al. (2010), and is believed to add salience to the rival for respondents.

Using interview transcripts, the researcher was able to identify trends regarding fan perceptions of favorite and rival teams. These trends, along with limited questions derived from the existing literature were compiled into a list of 112 statements addressing the on-field successes and failures of favorite and rival teams, and the indirect competition (i.e., when the rival team is playing someone other than the favorite team) of the favorite team's rival.

According to Churchill (1979), an expert panel is needed to evaluate the items in an attempt to ensure the questions properly address the construct being studied and narrow the number of statements to be administered to the requisite sample populations. The expert panel used in the current study was made up of five individuals well known for their work in the areas of fan identification, consumption, and behavior. Further, four of the five panelists have published identification scales that have regularly been used in the field of sport administration.

*Initial Item Testing.* Two samples were used in the current study to test the items and scale being developed. A sample of 457 fans that followed their favorite teams through online chat rooms was used for the first sample. Participants in the first sample were directed to take the survey on formsite.com and had the option to enter for a chance to win one of four \$25 VISA gift cards selected at random. Completed surveys were analyzed using Exploratory Factor Analysis (EFA), which is used when a researcher wants to reduce a large number of items into a smaller and more manageable set of components (Tabachnick & Fidell, 2007).

*Purify the Measure.* Following the data analysis of the first sample being analyzed, the expert panelists again reviewed the construct, identified factors, and items to identify any areas of concern regarding question clarity and redundancy. During the second expert panel review, some items were deleted or added by the researcher to ensure that the construct was properly being measured.

*Collect Data to Assess Reliability and Validity.* A second sample of 374 fans, 292 of which followed their favorite teams online and 92 who attended live games was collected during February and March of 2011. In-person survey distribution, or Self-

Administered Questionnaires (SAQ) was used in the on-site collection (Lohr, 2008). SAQ allows participants to complete the survey without the help of the researcher, which gives them freedom to respond in the manner they desire (de Leeuw & Hox, 2008). Fans attending live games of their favorite teams were approached and asked if they would like to participate in the study by completing a survey. Fans were also given a chance to enter for a chance to win one of four \$25 VISA gift cards.

Collecting only SAQ or in-person data however excludes fans that are unable to follow their favorite team by attending games. A fan could be unable to follow his favorite team on-site for a multitude of reasons including geographic location in relation to the favorite team or monetary constraints. For this reason, an online protocol, and intercept survey in particular was also used in gathering data from the second sample. Online distribution allows for a wider sample to be reached and visitors to a specific site are given the opportunity to complete the survey (Gaiser & Schreiner, 2009; Manfreda & Vehovar, 2008). Online participants in the second sample were reached through team-specific fan web pages and administered the survey on formsite.com. Online participants were also given the opportunity to enter for a chance to win one of four VISA gift cards worth \$25. Attempts to ensure no one under the age of 18 complete a survey were taken in both the SAQ and online distribution methods.

Non-response error refers to the bias present in a survey due to the fact that not all potential participants choose to complete the survey (Miller & Smith, 1983). The bias occurs if the responses between respondents and non-respondents could be different (de Leeuw et al., 2008). To help with non-response error and bias in the current study, online participants in the first and second sample were given a reminder to take the survey

during collection. In other words, the survey was initially posted on fan web sites and then a reminder was posted after seven or 14 days. In the SAQ distribution, collection took place at three college basketball games in an attempt to reach the most respondents. In both online and SAQ distributions, potential participants were given the chance to enter for the participant incentive.

### *Pilot Study*

A pilot study was conducted over the summer of 2010 to allow the researcher to initially test the items generated from the qualitative study and gain experience analyzing data using EFA. In the pilot study, the first three phases of Churchill's (1979) technique were used. The initial list of 112 statements were reviewed by two separate experts in the area of sport administration and the researcher was able to narrow the list to 58 statements that were distributed to a sample using the popular online social networking site Facebook.

Data from the pilot study was analyzed using EFA in SPSS 18 and six factors consisting of 37 items were identified. The factors identified from the pilot study are presented in Table 2. Factors were identified using the Kaiser Criteria, which recognizes eigenvalues over one, and a scree plot of the factors. The factors were labeled 1) Out-group Indirect Competition, 2) Out-group Consumption, 3) Competition, 4) Out-group Linguistic Bias, 5) Out-group Academic Prestige, and 6) Vicarious Achievement. The factors addressing Competition and Vicarious Achievement were subsequently combined due to the items being similarly worded. Additionally, the Out-group Indirect Competition factor was divided into two sub factors addressing support and derogation focused toward the rival team.

Table 2

*Factors identified in Pilot EFA with Definitions*

Factor	Definition
Out-group Indirect Competition	
- Derogation (OICD)	- Likelihood that a fan will get satisfaction out of the defeat of the rival team in indirect competition.
- Support (OIS)	- Likelihood that a fan will support the athletic efforts of his rival team in indirect competition.
Out-group Consumption (OC)	- Likelihood that a fan will watch the rival team in indirect competition.
Competition/Vicarious Achievement (CVA)	- The satisfaction a fan gets when his favorite team defeats his favorite team's rival.
Out-group Linguistic Bias (OLB)	- The perceptions of fan and team sportsmanship of the favorite team's rival.
Out-group Academic Prestige (OAP)	- The amount of respect a fan has of the academic prestige of the institution where the favorite team's rival plays.

*Instrumentation*

The first survey submitted to expert panel contained 52 questions. In the final version of the survey for the first sample, the items measuring rivalry (37 questions) were combined with questions addressing demographic attributes (3 questions), favorite team information (7 questions), and rival team information (2 questions). Participants were asked to identify their perceptions of their favorite team's rival using a 7-point Likert-type scale (1 – Strongly Disagree, 3 – Neutral, 7 – Strongly Agree).

*Results*

The first expert panel reviewed the scale and survey containing the list of 37 items addressing rivalry along with the external questions (15 items). It was suggested by the

expert panel that the Out-group Consumption (OC) factor be deleted from the survey because the factor was measuring consumption rather than perception. It was also suggested that the Out-group Linguistic Bias (OLB) factor be renamed to better represent the items explaining the factor. For this reason, the factor was renamed Out-group Sportsmanship (OS) Additionally, it was advised that team identification information be added to the survey for future use. For this reason, the Team Involvement Inventory (TII) was added to the survey (Trail et al., 2003).

The first sample consisted of participants reached through online chat rooms of favorite teams collected during December 2010 and January 2011. The team sites in the first sample focused on teams that were competing in the football bowl season. Of the 587 participants who initially started the survey, 458 completed the instrument and provided useable data, for a completion rate of 78%. Mean imputation was utilized to address missing data for both samples (Groves et al., 2009). Demographics for the first sample are presented in Table 3.

Table 3

*Demographics for 1<sup>st</sup> Sample including Favorite and Rival Teams*

Demographic Variable	<i>N</i>	%
<b>Sex</b>		
Male	411	89.7
Female	26	5.7
Not Disclosed	21	4.6
<b>Age</b>		
18-25	74	16.2
26-30	83	18.1
31-40	115	25.1
41-50	64	14.0
51-60	66	14.4
61-70	32	7.0
71+	2	0.4
NA	22	4.8
<b>Sport</b>		
Football	450	98.2
Basketball	8	1.8
<b>Top 5 Favorite Teams</b>		
Oregon State Beavers	180	39.3
Texas A&M Aggies	79	17.3
Brigham Young Cougars	78	17.0
Utah Utes	40	8.73
Tennessee Volunteers	24	5.24
<b>Top 5 Rival Teams</b>		
Oregon Ducks	177	38.7
Texas Longhorns	82	17.9
Utah Utes	78	17.0
Brigham Young Cougars	39	8.5
Alabama Crimson Tide	19	4.2

Following the third step identified by Churchill (1979), the data were analyzed using EFA in SPSS 18. The EFA was run using varimax and promax rotations to allow for comparisons regarding the identified factors and items. Promax rotation allows for items to double-load on multiple factors, whereas varimax forces an item to one factor (Tabachnick & Fidell, 2007). The varimax rotation consisted of four factors and 16 items that explained 68.59% of the variance while the promax rotation consisted of four factors



and 15 items and explained 72.22% of the variance. Factors were identified using the Kaiser criteria, which identifies eigenvalues over 1 (Tabachnick & Fidell, 2007), along with review of scree plots. Items were identified by loadings greater than .40, which represent component salience (Guadagnoli & Velicer, 1988), and not double loadings greater than .50. It was determined that the promax rotation would be used because it allowed for items to double-load on multiple factors. Since in EFA, researcher discretion is used to identify factors and items using theoretical and practical support, the promax rotation would allow the researcher to make decisions regarding the data. For this reason, the EFA using promax rotation is presented in Table 4 below and the EFA using varimax rotation is presented in Table 5.

Table 4

*Factors and Items identified from EFA (Promax Rotation)*

Factors and Items	Factor Loading
<b>Out-Group Competition against Others (Indirect) OIC (5 items)</b>	
I want my favorite team's rival to win if they play in championship games.	.965
I would support my favorite team's rival in a championship game.	.941
I want my favorite team's rival to win when they play in a post-season game.	.907
I support my favorite team's rival in out-of-conference play.	.901
I want my favorite team's rival to win all games except when they play my favorite team.	.857
<b>Out-Group Academic Prestige OAP (3 items)</b>	
I feel people who attended school where my favorite team's rival plays missed out on a good education.	.948
I feel people who attended school where my favorite team's rival plays missed out on a good undergraduate experience.	.921
The academic prestige where my favorite team plays is superior to that where my favorite team's rival plays.	.484
<b>Out-Group Sportsmanship OS (4 items)</b>	
Fans of my favorite team's rival are not well behaved at games.	.946
Fans of my favorite team's rival demonstrate poor sportsmanship at games.	.863
I feel my favorite team's rival practices poor sportsmanship.	.769
I feel my favorite team's rival plays dirty.	.550
<b>Competition/Vicarious Achievement (3 items)</b>	
I feel I have bragging rights when my favorite team beats my favorite team's rival.	.833
I feel a sense of belonging when my favorite team beats my favorite team's rival.	.803
I feel I am better than fans of the rival team when my favorite team beats my favorite team's rival.	.548

Table 5

*Factors and items identified from EFA (Varimax Rotation)*

Factors and Items	Factor Loading
<b>Out-Group Competition against Others (Indirect) OIC (5 items)</b>	
I want my favorite team's rival to win if they play in championship games.	.943
I would support my favorite team's rival in a championship game.	.924
I want my favorite team's rival to win when they play in a post-season game.	.894
I support my favorite team's rival in out-of-conference play.	.889
I want my favorite team's rival to win all games except when they play my favorite team.	.841
<b>Out-Group Academic Prestige (OAP) (2 items)</b>	
I feel people who attended school where my favorite team's rival plays missed out on a good education.	.844
I feel people who attended school where my favorite team's rival plays missed out on a good undergraduate experience.	.829
<b>Out-Group Sportsmanship OS (5 items)</b>	
Fans of my favorite team's rival are not well behaved at games.	.836
Fans of my favorite team's rival demonstrate poor sportsmanship at games.	.814
I feel my favorite team's rival practices poor sportsmanship.	.753
I feel my favorite team's rival plays dirty.	.599
The academic prestige where my favorite team plays is superior to where my favorite team's rival plays.	.470
<b>Competition OC (4 items)</b>	
I feel I have bragging rights when my favorite team beats my favorite team's rival.	.768
I feel a sense of belonging when my favorite team beats my favorite team's rival.	.754
I feel I am better than fans of the rival team when my favorite team beats my favorite team's rival.	.448
I am excited when my favorite team beats my favorite team's rival.	.417

Results from the EFA with promax rotation were submitted to the second expert panel with questions and directions provided by the researcher. During the expert panel's second review of the data, it was suggested that the Competition/Vicarious Achievement factor be renamed Sense of Satisfaction (SoS). An additional item was added to both the

Out-group Sportsmanship (OS) factor and the SoS factor. Additionally, one SoS item was replaced because it did not properly measure the factor. It was also suggested to add questions addressing favorite team consumption habits to the survey. The resulting survey consisted of 17 items addressing rivalry in sport and a total of 45 questions that were distributed to the second sample. For clarity sake, the items addressing rivalry administered to the second sample are identified in Table 6.

Table 6

*Items sent to Second Sample following Second Expert Panel*


---

 Factors and Items
 

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## Out-Group Competition against Others (Indirect ) OIC (5 items)

- I want my favorite team's rival to win if they play in championship games.
- I would support my favorite team's rival in a championship game.
- I want my favorite team's rival to win when they play in a post-season game.
- I support my favorite team's rival in out-of-conference play.
- I want my favorite team's rival to win all games except when they play my favorite team.

## Out-Group Sportsmanship OS (4 items)

- Fans of my favorite team's rival are not well behaved at games.
- Fans of my favorite team's rival demonstrate poor sportsmanship at games.
- I feel my favorite team's rival practices poor sportsmanship.
- Fans of my favorite team's rival do not show respect for others.

## Out-Group Academic Prestige (OAP) (4 items)

- I feel people who attended school where my favorite team's rival plays missed out on a good education.
- I feel people who attended school where my favorite team's rival plays missed out on a good undergraduate experience.
- The academic prestige where my favorite team plays is superior to that where my favorite team's rival plays.
- I feel the school where my favorite team's rival plays is not very prestigious.

## Sense of Satisfaction SoS (4 items)

- I feel I have bragging rights when my favorite team beats my favorite team's rival.
  - I feel a sense of belonging when my favorite team beats my favorite team's rival.
  - I feel a sense of accomplishment when my favorite team beats my favorite team's rival.
  - I feel a sense of satisfaction when my favorite team beats my favorite team's rival.
- 

The second sample consisted of fans following their favorite teams online and attending live games. Of the 387 participants that started the online survey, 292 finished the survey and provided usable data, for a 75% completion rate. In addition, 100 participants surveyed on site started the SAQ survey, and 82 provided finished instruments with usable data, for a completion rate of 82%. Using both the online and

SAQ distribution methods, 374 participants provided usable data from the second sample.

Demographic information for the second sample is presented in Table 7 below.

Table 7

*Demographics for 2<sup>nd</sup> Sample including Favorite and Rival Teams*

Demographic Variable	<i>N</i>	%
Sex		
Male	319	85.3
Female	48	12.8
Age		
18-25	122	32.6
26-30	64	17.1
31-40	58	15.5
41-50	38	10.2
51-60	40	10.7
61-70	37	9.9
71+	6	1.6
NA	9	2.4
Sport		
Football	168	44.9
Basketball	159	42.5
Top 5 Favorite Teams		
Kansas Jayhawks	180	39.3
Texas Longhorns	79	17.3
Missouri Tigers	78	17.0
Colorado State Rams	40	8.73
Colorado Buffaloes	24	5.24
Top 5 Rival Teams		
Missouri Tigers	80	21.3
Oklahoma Sooners	73	19.5
Kansas Jayhawks	51	13.6
North Carolina Tar Heels	21	5.6
Southern California Trojans	21	5.6

Data were analyzed using Confirmatory Factor Analysis (CFA) in LISREL 8.8.

The factors and items identified through the CFA are presented in Table 8. The final model consisted of four factors and 12 items. The factors identified were 1) Out-Group Competition against Others (Indirect) (OIC), 2) Out-Group Academic Prestige (OAP), 3) Out-Group Sportsmanship (OS), and 4) Sense of Satisfaction (SoS).

Table 8

*Factors and Items identified from Maximum Likelihood CFA*

Factors and Items	Factor Loading
Out-Group Competition against Others (Indirect) OIC (3 items) Sample mean = 2.52 Std. Deviation = 1.67	
I would support my favorite team's rival in a championship game.	.880
I would support my favorite team's rival in out-of-conference play.	.870
I want my favorite team's rival to win all games except when they play my favorite team.	.750
Out-Group Academic Prestige OAP (3 items) Sample mean = 3.87 Std. Deviation = 1.64	
The academic prestige of my favorite team's rival is poor.	.970
I feel people who attended school where my favorite team's rival plays missed out on a good education.	.850
I feel the academics where my favorite team's rival plays is not very prestigious.	.830
Out-Group Sportsmanship OC (3 items) Sample mean = 3.87 Std. Deviation = 1.64	
Fans of my favorite team's rival demonstrate poor sportsmanship at games.	.920
Fans of my favorite team's rival are not well behaved at games.	.900
Fans of my favorite team's rival do not show respect for others.	.810
Sense of Satisfaction SoS (3 items) Sample mean = 5.96 Std. Deviation = 1.04	
I feel a sense of belonging when my favorite team beats my favorite team's rival.	.760
I feel a sense of accomplishment when my favorite team beats my favorite team's rival.	.750
I feel I have bragging rights when my favorite team beats my favorite team's rival.	.680

Fit indices showed good fit for the model, and can be found in Table 9. The Non-Normed Fit Index (NNFI) takes degrees of freedom into consideration while evaluating the model fit and numbers closer to 1 are desirable (Tabachnick & Fidell, 2007). The Comparative Fit Index (CFI) is another method commonly used to evaluate model fit and values of .95 and greater indicate good fit (Hu & Bentler, 1999). The Standardized Root



Mean Square Residual (SRMR) shows average differences between variance and covariance in the sample (Tabachnick & Fidell, 2007), and a value of .08 or lower is indicative of good fit (Hu & Bentler, 1999). The Root Mean Square Error of Approximation (RMSEA) measures lack of fit and values closer to zero are desirable (Tabachnick & Fidell, 2007). The  $\chi^2$  value (74.64) for the model was statistically significant at  $p < .05$  ( $df = 48$ ).

Table 9

*Fit Indices for Four-Factor Model of Sport Rivalry*

Fit Indices	
Normed Fit Index (NFI)	0.98
Non-Normed Fit Index (NNFI)	0.99
Comparative Fit Index (CFI)	0.99
Standardized Root Mean Square Residual (SRMR)	0.037
Root Mean Square Error of Approximation (RMSEA)	0.040

Chi square scores are also indicators of good model fit, as they show correlations between factors and items (Glass & Hopkins, 1996). The correlations among factors are presented in Table 10 and among items in Table 11.

Table 10

*Correlations among Factors*

Factor	OIC	OAP	OC	SoS
OIC	1.00	-	-	-
OAP	-.153**	1.00	-	-
OC	-.321**	.455**	1.00	-
SoS	-.159**	.244**	.237**	1.00

\*\* Note. Correlation is significant at .001 (2-tailed)

Table 11

*Correlations among Items*

Factor	Champ	DemPoor	Bragging	NotBeh	Accomp	NoResp	Belong	NotPrest	ExFav	AcaPoor	OutConf	Education
Champ	1.00											
DemPoor	-.300**	1.00										
Bragging	-.170**	.229**	1.00									
NotBeh	-.288**	.821**	.185**	1.00								
Accomp	-.150**	.116**	.508**	.160**	1.00							
NoResp	-.269**	.743**	.196**	.736**	.166**	1.00						
Belong	-.074**	.174**	.508**	.198**	.581**	.205**	1.00					
NotPrest	-.149**	.362**	.176**	.339**	.146**	.321**	.168*	1.00				
ExFav	.699**	-.212**	-.071**	-.170**	-.104**	-.182**	-.023	-.073**	1.00			
AcaPoor	-.145**	.453**	.210**	.411**	.147**	.353**	.195**	.808**	-.034	1.00		
OutConf	.757**	-.320**	-.169**	-.314**	-.165**	-.312**	-.146**	-.193**	.650**	-.187**	1.00	
Education	-.142**	.463**	.223**	.442**	.181**	-.340**	.235**	.691**	-.014	.821**	-.185**	1.00

\*\* Note. Correlation significant at 0.01 level (2-tailed)

\* Note. Correlation significant at 0.05 level (2-tailed)

The reliability, convergent validity, and discriminant validity are presented in Table 12. The Chronbach's  $\alpha$  for the four factors ranged from .772 to .911, indicating the measure is reliable. Average Variance Extracted (AVE) can be used to test convergent and discriminant validity (Fornell & Larcker, 1981). Convergent validity ensures that factors thought to be correlated in fact are correlated, meaning that they converge to measure the same construct. Discriminant validity on the other hand means that factors are not too correlated to the point that they are redundant. The measure demonstrates acceptable convergent validity, indicated by the AVE scores being greater than .50 and the discriminant validity supports that the items are not correlated to the point of concern. This is illustrated by the discriminant validity scores for each factor being higher than the corresponding factor correlation scores in Table 12.

Table 12

*Reliability, convergent validity, and discriminant validity for Maximum Likelihood CFA*

Factor	Cronbach's alpha	Average Variance Extracted (AVE)	Discriminant Validity
OIC	0.870	0.698	0.487
OAP	0.911	0.784	0.615
OS	0.908	0.771	0.594
SoS	0.772	0.534	0.285

The Sport Rivalry Fan Perception Scale (SRFPS) has been shown to have good model fit, and demonstrated a reliable and valid measure of fan perceptions toward a favorite team's rival. An operational definition of sport rivalry and the factors in the SRFPS are presented in Table 13. The operational definition of sport rivalry was developed through the previous qualitative and quantitative investigation and was

administered to the two expert panels. Table 14 identifies the Sport Rivalry Fan Perception Scale (SRFPS) that can be used to properly measure fan perceptions of rival teams. The SRFPS contains four factors, made up of 12 items.

Table 13

*Operational Definition of Sport Rivalry and the four factors of the Sport Rivalry Fan Perception Scale (SRFPS)*

Factor	Definition
Out-Group Competition against Others (Indirect) OIC	Likelihood that a fan will support the athletic efforts of his favorite team's rival in indirect competition.
Out-Group Academic Prestige OAP	The amount of respect a fan has for the academic prestige of the institution where the favorite team's rival plays.
Out-Group Sportsmanship OS	The perceptions of fan sportsmanship of the favorite team's rival.
Sense of Satisfaction SoS	The satisfaction a fan gets when their favorite team defeats his favorite team's rival.

*\* Note Sport Rivalry: A fluctuating adversarial relationship existing between two teams, players, or groups of fans, gaining significance through on-field competition, on-field or off-field incidences, proximity, demographic makeup, and/or historical occurrence(s).*

Table 14

*Final Sport Rivalry Fan Perception Scale (SRFPS) with factors, factor descriptions, and items.*

---

Out-Group Competition against Others (Indirect) OIC - *Likelihood that a fan will support the athletic efforts of his favorite team's rival in indirect competition.*

---

I would support my favorite team's rival in a championship game.

I would support my favorite team's rival in out-of-conference play.

I want my favorite team's rival to win all games except when they play my favorite team.

---

Out-Group Academic Prestige OAP - *The amount of respect a fan has for the academic prestige of the institution where the favorite team's rival plays.*

---

The academic prestige of my favorite team's rival is poor.

I feel people who attended school where my favorite team's rival plays missed out on a good education.

I feel the academics where my favorite team's rival plays is not very prestigious.

---

Out-Group Sportsmanship OC - *The perceptions of fan sportsmanship of the favorite team's rival.*

---

Fans of my favorite team's rival demonstrate poor sportsmanship at games.

Fans of my favorite team's rival are not well behaved at games.

Fans of my favorite team's rival do not show respect for others.

---

Sense of Satisfaction SoS - *The satisfaction a fan gets when their favorite team defeats his favorite team's rival.*

---

I feel a sense of belonging when my favorite team beats my favorite team's rival.

I feel a sense of accomplishment when my favorite team beats my favorite team's rival.

I feel I have bragging rights when my favorite team beats my favorite team's rival.

---

## Discussion

The purpose of the current study was to develop and validate a scale to measure fan perceptions toward the team identified as their favorite team's rival. The Sport Rivalry Fan Perception Scale (SRFPS) proved to be an acceptable measure of fan perceptions toward their favorite team's rival. The four-factor, 12-item scale was validated on two groups of college football and basketball fans. This discussion will

address the theoretical and practical implications of the SRFPS, limitations to the current study, and areas for future study.

### *Theoretical Implications*

Previous research has used rivalry in sport as a variable to explain fan behavior (Davies et al., 2006; Hilman et al., 2004; Luellen & Wann, 2010; Mahony & Moorman, 1999; Sierra et al., 2010; Spaaij, 2008; Wann et al., 2003; Wann et al., 2006), but until now no research existed explaining what a sport rivalry means to fans or how they perceive their favorite team's rival. The development and validation of the SRFPS provides the theoretical basis for future research to properly measure fan perceptions toward a rival team. Although further use and validation of the SRFPS is recommended, it can be used to discriminate fans depending on their perceptions of a rival team. The ability to separate fans depending on perceptions of a rival gives academics a scale to use in testing other variables of fan behavior.

Further, providing an operational definition of sport rivalry will help academics' future study into the area. With no prior empirically based definition or way to measure perceptions toward a rival, it was difficult for academics to properly study the phenomenon. The current study, and the SRFPS provide a starting place for such study.

The SRFPS can be used in many different ways by academics. First, further study needs to be conducted to determine where discernable differences in the scale exist. One way the scale can be used is in the study of fan behavior toward a favorite team or conference. If academics can properly measure the perceptions fans feel toward their favorite team's rival, they can begin to use the scale in conjunction with other variables and scales to gain a better understanding of how the presence of a rival affects fan



behavior. Further, the SRFPS provides another way for academics to continue the study of intergroup relationships. The Disposition of Mirth Theory (Zillmann & Cantor, 1976) states that a person can gain happiness from the failure of another in certain situations. The SRFPS adds to the intergroup relationship literature in support of such a theory. Also, the SRFPS lends support to the Sport Disposition Theory (Zillmann, et al., 1989) in indirect competition, which until now had only been tested in direct competitive situations. This was evidenced by the amount of derogation fans indicated toward the rival team. Many participants took every chance to derogate or ‘take a shot’ at their rival team. Some participants indicated the wrong name for the rival team (e.g., Texas Shorthorns), while others included disparaging comments about the rival in the open comment box. The level of derogation toward the rival in the open comment box rose to a point of alarm in some cases (e.g., Kuck Fansas, Dirty Hillbillies), which is consistent with prior research (Wann et al., 2003; Wann, Peterson et al., 1999).

Outside of sport, the SRFPS adds to the intergroup relations literature and may lend itself to the continued study of groups sharing adversarial relationships. For example, investigating the relationship between members of two gangs or factions would provide valuable information. Through the understanding of what causes adversarial relationships, we can also gain knowledge on what may diminish some of the negative attributes of the relationship. Just as the rival derogation discussed earlier indicated, it is important that academics understand the feelings and perceptions people have toward members of the out-group. The participants in the Sherif et al. (1961) study were able to work together on tasks when the group competition was removed. Aside from few

situations involving natural or manmade disasters (A&M, UT students, 1999), it is yet to be seen if rival groups would be willing to work cooperatively toward common goals.

### *Practical Implications*

The SRFPS gives practitioners the ability to measure fan perceptions toward a rival team. Having this knowledge can allow practitioners to market their teams to fans surrounding rival games in direct or indirect competition. For example, if a sport marketer knows how fans feel toward the favorite team's rival, he/she can use that information to market the team based on the on-field successes and failures of the rival team. Further study is needed to determine how much the presence of a rival affects consumption of the favorite team, but the SRFPS gives practitioners a tool to gather preliminary information.

Conferences and leagues may also make use of the SRFPS to gain an understanding of fans toward rivals leading to better marketing of regular and post-season contests. For example, fans of the Texas A&M Aggies watched the Texas Longhorns in the 2006 National Football Championship Game. Many of the A&M fans were not supporting the Longhorns, instead hoping to see them lose in a national championship game. However for the Big 12, those fans watching the game not supporting the Longhorns still brought value to the conference by means of television ratings and other media exposure.

Practitioners may also use the SRFPS to compare fan perceptions toward different rival teams. In the current study participants indicated who their rival team was but if a rival team was identified *a priori* by the practitioner, they could ascertain if fans felt

differently about various teams within a league or conference. For example, a fan of the Texas Longhorns may identify the Oklahoma Sooners as their biggest rival. If administered the survey with the Baylor Bears identified as the rival, the Texas fan may have different perceptions for the Bears than for the Sooners. Having this information would allow practitioners to market the rival teams differently, depending on the perceptions of the favorite team fans. This information could also help practitioners prepare for contests between teams differently.

### *Limitations*

Although the SRFPS was developed and validated on two samples and with the help of experts in the field of sport administration and fan behavior, limitations in the current study will be discussed. One limitation of the study is the distribution method through online and in-person SAQ surveys. Although the researcher tried to distribute the survey to the largest and widest sample available, inevitably potential respondents may not have been reached. This is a product of the availability of fans through online and in-person mediums. The SAQ was distributed at college basketball games in reasonable proximity to the researcher, and attempts to distribute at more high-profile games was not logistically possible.

Another possible limitation was that the online version of the survey was posted on fan pages that did not require a paid subscription. This method was decided to be the best way to reach fans who may not have the financial means or desires to pay for subscription content of their favorite team, but may have missed potential participants. Although preliminary data analysis shows little difference between respondents, some people paying for subscriptions to favorite team content could differ in rival perceptions.

The last limitation worthy of mention is the differences in survey format between online and SAQ distribution. The online survey used formsite.com for distribution and collection. Through this service, answers from the favorite and rival team questions could be “piped” throughout the rest of the survey. For example, if a participant indicated his biggest rival was the Colorado Buffaloes, that response appeared in later questions regarding the rival to add context. This option was not available in the SAQ distribution and may have helped with context and rival team salience. Luellen and Wann (2010) state that the salience of rival teams could affect the amount of knowledge fans have about them. In the SAQ distribution, this salience may not have been as favorable compared to the online distribution.

#### *Future Study*

Aside from a limited number of projects, the study of rivalry in sport is relatively new in the sport literature. Since this area has not received considerable prior attention, many directions for future research are available to academics. It is important to assert that rivalry is an area of study that has many avenues for future research. It is the intention to discuss some areas here, but many still exist or have yet to be discovered.

One area, in the addition to further validation, is to compare college sports by sex, sport, and competition level. The current scale was developed on fans of college football and men’s basketball, and comparing data from women’s sports may reveal interesting results. Further, football and men’s basketball are known as revenue producing sports in high-profile intercollegiate athletics. A comparison of revenue versus non-revenue sports may also provide interesting findings. The competition level in the current study was teams competing at the NCAA Division I level. Rival perceptions may differ at the

Division II, III, or NAIA level. It is asserted that the construct, or concept of rivalry remains constant anywhere there is competition, but the extent of perceptions may differ between these groups. Also administering the survey to fans with *a priori* teams identified to determine if fan rival perceptions differ toward various teams within a league or conference would provide valuable results.

Administering the SRFPS at the professional level may reveal interesting results. Doing so would allow the validity and reliability of the scale to be tested at the professional level, and may tap into fan perceptions regarding teams in Major League Baseball, the National Football League, the National Basketball Association, the National Hockey League, or Professional Soccer. For example, one intense rivalry at the professional level is the one between the New York Yankees and Boston Red Sox and their fans, and gaining fan perception regarding the rivalry would be valuable information. Further, extending the study of rivalry and the use of SRFPS to international soccer provides a wealth of future study. For example, the rivalry between the Celtic and Ranger football clubs in the Scottish Premier League is very intense because of the religious ties both clubs maintain.

As previously mentioned, it is imperative that the SRFPS be administered to more fan groups and discernable differences among groups identified. If differences cannot be identified, it is recommended that the SRFPS be used in cooperation with other fan identification scales to test for differences in rival perceptions.

The SRFPS should also be used to determine favorite team consumption habits among fans. For example, fans of intercollegiate athletics could be administered the survey to determine if and how the rival team affects their likelihood to consume their

favorite team through licensed products, television or Internet viewership, or monetary support in the form of donations.

Qualitative research into rivalry can also provide areas for future research. With the recent conference expansion and relocation of teams, academics may be able to determine how fans feel about the end of traditional competitive rivalries and the beginning of new ones. Further, it is recommended that more qualitative research is conducted in order to determine what other factors affect fan perceptions of rival teams.

In conclusion, the SRFPS proved a reliable and valid measure of fan perceptions toward a favorite team's rival. The area of sport rivalry has received little attention in the sport literature, and the SRFPS provides academics and practitioners with a tool to properly gauge perceptions toward a rival and possible affects to fan behavior and consumption. The SRFPS adds to the literature addressing intergroup relations and showed support for the Sport Disposition Theory in indirect competition. It is important for academics and practitioners to gain a better understanding of rival perceptions in order to continue study into the phenomenon. The current study provides such a basis and asserts that more study into rivalry in sport is warranted.

## CHAPTER V

SEGMENTATION OF FAN PERCEPTIONS TOWARD  
RIVAL TEAMS IN INTERCOLLEGIATE ATHLETICS

## Abstract

The Sport Rivalry Fan Perception Scale (SRFPS) measures four factors of fan perceptions toward a favorite teams rival(s). The current study set out to determine where, if any discernable differences exist within the model amongst fans of intercollegiate football and basketball. In particular, the current study examined if fan perceptions toward a rival team were affected by living in the same city and same state as the favorite team, and if someone attended/received a degree from the institution where the favorite team plays. A total of 374 completed surveys were collected for the study. The four factors of the SRFPS were analyzed with three MANOVA's regarding the city, state, and degree/attendance responses. Results found no significant differences existing between fans perceptions toward rival teams by city, state, or degree/attendance. Implications and areas for future study are discussed.

## Introduction

In the United States, intercollegiate athletics infiltrates many areas of a person's life. Institutions of higher learning use intercollegiate athletics to reach fan bases and alumni (Toma, 2003), and conversely many fans invest large amounts of time, money, and effort into following their favorite teams (Gibson et al., 2002). College athletics is so popular that currently nine college football stadiums seat over 100,000 fans ("100,000 +", 2010) and alumni groups exist around the nation to support favorite schools and teams.

Fans display identification with their favorite team in many ways, including watching and attending games, purchasing merchandise, or reveling in the on-field success of the athletes (Cialdini et al., 1976). Fans also support their teams online by researching relevant information and participating in team-specific chat rooms. People who are highly identified with a favorite team will often keep track of the program in-season as well as during the off-season, making it a year-round pursuit.

Another way that fans show support of a favorite team is by displaying antagonistic feelings toward a team identified as a rival. Although discussed and written about on an almost daily basis, the phenomenon of sport rivalry has not received much attention in the sport literature. Most of the research involving rivalry in sport addresses the effects the phenomenon has on fan behavior, player evaluation, or physiological reactions (Hillman et al., 2004; Wann et al., 2003; Wann, Petersen et al., 1999; Wann et al., 2006). The current investigation extends the study in rivalry and looks at fan differences in perceptions toward teams identified as a rival. The Sport Rivalry Fan Perception Scale (SRFPS) (Havard, 2011) was developed to measure fan perceptions toward a favorite team's rival(s). The SRFPS is being used in the current study to



determine if differences in perceptions exist between fans that live in the same city as the favorite team (proximity), live in the same state as the favorite team (proximity), and received degrees from and/or attended the institution where the favorite teams play (institutional affiliation). In particular, the following research questions guided the investigation:

- Q2 Do the identifiable factor scores explaining rivalry differ significantly between those residing in the same city as their favorite team and those living in another city?
- Q3 Do the identifiable factor scores explaining rivalry differ significantly between fans residing in the same state as their favorite team and those living in another state?
- Q4 Do the identifiable factor scores explaining rivalry differ significantly between fans that received a degree from and/or attended from the institution where their favorite team plays and fans that did not receive a degree from and/or attend the institution where the favorite team plays?

It is important for sport academics and practitioners to investigate the phenomenon of rivalry in sport and ascertain discernable differences between fan groups because the information could help with marketing a favorite team or conference through different avenues. If practitioners know how different fans perceive those identified as rivals, they can better reach and target those fans using the on-field and on-court success and failure of the rival team as well as the favorite team. In the case of an athletic conference, knowing what perceptions fans have of rival teams would allow practitioners to market the on-field and on-court success and failure of one team to fans of numerous others within the conference or league. A brief review of the literature addressing fan identification, in-group bias, and adversarial relationships will be presented along with the Disposition of Mirth Theory (Zillmann & Cantor, 1976) and the Sport Disposition Theory (Zillmann et al., 1989), which help to explain rivalry in sport. The methods

utilized in the study will be presented along with results, discussion, and areas for future research.

## Review of Literature

### *Fan Identification*

People will affiliate with others to positively affect their self-identity (Tajfel, 1978b) and maintain a balanced state in life (Heider, 1958). The inherent need for people to enhance self-esteem affects many relationships and associations one enjoys (Tajfel, 1981; Tajfel & Turner, 1979). Further, people tend to participate in activities in which they are able to display mastery or self-efficacy (Bandura, 1977; Deci, 1975). Social facilitation states that a person will try to display a satisfactory performance in comparison with another person (Triplet, 1897). One way for people to increase self-esteem is to gain the approval of others (Campbell et al., 2010). Fans can accomplish all of these; favorably compare, compete with others, and gain approval of others through the vicarious experience of a favorite sport team or player (Bandura, 1977; Cialdini et al., 1976). By identifying with a favorite team, fans feel that they can connect with something that is bigger than them self (Kahle & Close, 2011).

Basking In Reflected Glory (BIRGing) addresses the tendency of fans to associate with a team following a successful season or accomplishment (Cialdini et al., 1976). In order to protect oneself, fans will sometimes distance, or Cut Off Reflected Failure (CORFing) from a team that has experienced some level of perceived failure (Snyder & Fromkin, 1980; Snyder et al., 1986). Further, research asserts that fans use the tendencies of BIRGing and CORFing to protect their ego (Madrigal, 1995). This explains why a team that wins a league or national championship is rewarded with an onslaught of new

fans, and is evidenced by research that found highly identified college students tended to evaluate their favorite team more favorably following on-field success than failure (Dietz-Uhler & Murrell, 1999).

However, a team's win/loss record is not the only agent that can affect fan identification among those who have a strong attachment to a favorite team. Campbell, Aiken, and Kent (2004) proposed two tendencies to explain highly identified fans. Basking In spite of Reflected Failure (BIRFing) asserts that some fans may remain highly identified to a favorite team during periods of extended on-field failure, such as is the case with the Chicago Cubs fan base which continually sell out Wrigley Field despite not having won a league championship in over a century. Cutting Off Reflected Success (CORSing) addresses those fans that may distance themselves from the club during periods of success if they do not agree with the philosophy or decisions made by the organization. For example, the Oakland Athletics have long developed their talent in the minor leagues. If the organization made a big purchase for a player or players and won a World Series, some people that view themselves as diehard fans may choose not to celebrate the success of the club because they felt it was bought rather than earned. Regarding intercollegiate athletics, fans of teams that regularly perform poorly tend to display BIRFing tendencies toward the favorite team.

### *In-group Bias*

People will attempt to increase their personal (Vohs & Heatherton, 2001) and social-identity (Tajfel, 1982) by banding together with others sharing similar interests or characteristics. When this occurs, such as often happens in intercollegiate athletics when fans join others in watch party or tailgate events, the result is the group separating others

into categories (Tajfel, 1978a). When a group encounters another group or person that does not share the same identity or characteristics, intergroup relations occurs (Sherif, 1966). In this situation, groups will often display favoritism toward others based on their affiliation within or outside of the group. This phenomenon is known as in-group bias, and asserts that a group will show favoritism toward those similar to them and derogation toward members of another group (Tajfel, 1978a).

An early example of in-group bias was the Robber's Cave Experiment (Sherif et al., 1961), where school aged boys were separated into two groups in a camp setting and pitted against each other in several competitive situations. When faced with competition from the other group, the boys tended to show bias toward members of their in-group. Only when the competition aspect was removed from the study were the boys able to coexist and work with participants from the out-group. This is much the same as when two groups of rival fans interact before and after an athletic contest.

Groups also often display in-group bias through the descriptions they offer of members in and out of the group, which is known as Linguistic Intergroup Bias (LIB) (Maass et al., 1989). In-group bias and LIB is present among rival sports fans in the way they describe fan and team behavior (Hastorf & Cantril, 1954; Wann & Dolan, 1994; Wann & Grieve, 2005), team performance (Wann & Thomas, 1994), and player evaluations (Wann et al., 2006). Additionally, highly identified fans may choose to derogate, or Blast the rival team or supporters when faced with personal or reflected failure rather than CORF (Cialdini et al., 1976; Cialdini & Richardson, 1980). This helps to explain why sports fans derogate rival teams and fans when in a group setting. Prior research also shows that people who would not normally derogate the out-group may do

so in order to increase their membership within an in-group (Noel et al., 1995), for by acknowledging the presence of a rival team an individual can distinguish between the two groups (Brewer, 1979) and enhance their membership within an in-group (Ashforth & Mael, 1989), thereby increasing their self-identity.

Two theories help to further explain the adversarial feelings individuals and groups have toward rival teams in sports. The Disposition of Mirth Theory was introduced by Zillmann and Cantor (1976) and was based on the human condition to display superiority over others. The Disposition of Mirth Theory states that a person will experience happiness when someone they admire is successful, and sadness when that person is unsuccessful. Further, people will experience happiness if someone they dislike is unsuccessful or fails at something and sadness if that person is successful. This is similar to the German term *schadenfreude*, which refers to people taking pleasure in the demise or misfortunes of another (Kahle & Close, 2011).

Applying the Disposition of Mirth Theory in sport, the Sport Disposition Theory (Zillmann et al., 1989) asserts that fans will cheer for the successes of their favorite team and the failures of an opponent in direct competition. This is supported by previous research that has shown fans get excitement from the success of a favorite team and the failure of a hated, or rival team (Mahony & Howard, 1998). Further, fans' physiological reactions are affected by the successes of a favorite team and failure of a rival team (Hillman et al., 2004). Currently, the Sport Disposition Theory has only been tested in direct competitive situations, although one study found that fans would be more willing to watch their rival team play in indirect competition if the team was likely to lose (Mahony & Moorman, 1999). The tendencies of fans to experience happiness when their

favorite team's rival is unsuccessful lead to a discussion of existing studies addressing rivalry in sport.

### *Rivalry in Sport*

Along with the studies discussed above, research into sport rivalry has found that fans display in-group bias when approached with fans of another team. European soccer fans indicated that they did not wish for their favorite team to share sponsorship with a rival team (Davies et al., 2006), and were more likely to help someone in need if they were affiliated with the favorite team rather than the rival team (Levine et al., 2005).

Rivalry in sport has the capability of producing in-group favoritism and out-group ostracism that can result in fan hostility (Lee, 1985), such as is the case with individuals commonly referred to as soccer hooligans (Spaaij, 2008). This is supported by research into sport that found individuals would be willing to commit acts of violence against players and coaches of a rival team (Wann et al., 2003; Wann, Peterson et al., 1999).

One question to be addressed is whether a fan's adversarial feelings and perceptions toward a rival team diminishes over time. Prior research suggests that a fan's identification with a favorite team will change or fluctuate throughout the life cycle (Funk, 2008). This could be a result of an individual moving away from a favorite team, starting a family, or beginning to follow a new team. The current study uses the SRFPS to determine if a fans proximity to a favorite team affects their perceptions of the rival team. In particular, do fans living in the same city and state as the favorite teams differ in their rival perceptions from fans living in another city or state? At the collegiate level, it is difficult to ascertain if a fan is affiliated to the team or the institution because of favorable memories associated with their time as a student. For this reason, another

research question addresses whether fans that received degrees from and/or attended the institution where the favorite team plays have different perceptions toward a rival team than individuals that did not attend or receive a degree from the university.

This brief review of literature asserts that people will affiliate with a favorite team in order to enhance and protect their self-identity and self-esteem. Further, fans will band together in order to share collective identity focused toward a favorite team. When faced with an out-group, or rival fans, people will display favoritism toward members of the in-group. Finally, the Sport Disposition Theory asserts that fans experience happiness when their favorite team beats their rival team and leads to the questions of rival perceptions being affected by proximity and type of affiliation with the favorite team. The next section will present the methods and techniques used in the current study to answer the questions presented.

### Methods

The purpose of the current study was to determine if fans differed in their perceptions of rival teams based on proximity and type of affiliation with the favorite team. In particular, discernable differences regarding whether a fan lived in the same city as the favorite team, the same state as the favorite team, and received a degree from or attended the institution where the favorite team plays were investigated in the context of favorite and rival teams. Prior research states that a person's affiliations with a favorite team may change throughout the life cycle as other factors such as family, relocation, etc. are introduced (Funk, 2008). Qualitative information regarding rivalry in sport, and intercollegiate sport in particular seems to support this trend (Havard, 2010). This

section will detail the methods and procedures used to answer the proposed research questions.

### *Sample*

The sample in the current study consisted of fans of intercollegiate athletics who followed their favorite teams online through team-specific fan pages and attended live games of their favorite team. Online and onsite participants were required to be at least 18 years of age to complete the survey. The teams focused on for the data sample were ones experiencing a successful year in men's basketball (i.e., likely to qualify for a post-season tournament), or were traditionally successful in football or men's basketball at the National Collegiate Athletic Association (NCAA) Division I level (i.e., regularly played in post-season bowls). These sports were chosen because they are known as revenue-producing sports in intercollegiate athletics and are used by many institutions to engage fan and an alumni base (Toma, 2003). Further, fans of revenue-producing sports tend to spend large amounts of resources to follow their favorite team (Gibson et al., 2002).

### *Instrumentation and Distribution*

The instrument contained favorite team information (19 questions), including the Team Involvement Inventory (Trail et al., 2003), rival team information (3 questions), demographic information (6 questions), and the SRFPS for a total of 45 questions and one open response or comment box at the conclusion of the survey. Subjects were instructed to respond to questions regarding the favorite and rival teams using a 7-point Likert-type scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). The SRFPS contains 12 questions that measure four factors addressing fan perceptions toward a rival team. It is important to note that the SRFPS was validated using the sample in the current



study and therefore contained 17 questions during distribution. The four factors and 12 items of the SRFPS are presented in Table 15 below.

Table 15

*Sport Rivalry Fan Perception Scale (SRFPS) with factors, factor descriptions, and items.*Out-Group Competition against Others (Indirect) OIC - *Likelihood that a fan will support the athletic efforts of their favorite team's rival in indirect competition.*

I would support my favorite team's rival in a championship game.

I would support my favorite team's rival in out-of-conference play.

I want my favorite team's rival to win all games except when they play my favorite team.

Out-Group Academic Prestige (OAP) - *The amount of respect a fan has for the academic prestige of the institution where the favorite team's rival plays.*

The academic prestige of my favorite team's rival is poor.

I feel people who attended school where my favorite team's rival plays missed out on a good education.

I feel the academics where my favorite team's rival plays is not very prestigious.

Out-Group Sportsmanship OS - *The perceptions of fan sportsmanship of the favorite team's rival.*

Fans of my favorite team's rival demonstrate poor sportsmanship at games.

Fans of my favorite team's rival are not well behaved at games.

Fans of my favorite team's rival do not show respect for others.

Sense of Satisfaction SoS - *The satisfaction a fan gets when their favorite team defeats their favorite team's rival.*

I feel a sense of belonging when my favorite team beats my favorite team's rival.

I feel a sense of accomplishment when my favorite team beats my favorite team's rival.

I feel I have bragging rights when my favorite team beats my favorite team's rival.

The favorite team information provided context to participants regarding their favorite intercollegiate football or basketball team while taking the survey. Respondents were asked to indicate who they felt was their favorite team and whether it was a football or basketball team. Using a method similar to Mano and Oliver (1993), respondents were then instructed to use the identified favorite team to answer questions throughout the survey. Further, the three questions of interest in the current study regarding fans living in the same city and state as the favorite team, and receiving a degree from or attending the institution where the favorite team plays were included in the favorite team information questions.

The rival team information was included to provide context to the participants regarding the team they felt was their favorite team's biggest rival. Respondents were asked to identify which team they felt was their favorite team's biggest rival. This method of having the participant identify the rival is similar to the one used by Sierra et al. (2010), where they had respondents identify the team they felt was a rival. Other research into sport rivalry has identified a rival a priori (Wann et al., 2006), and it was determined that having the respondent identify the team they felt was the biggest rival was important in the current investigation. Respondents were also then instructed to use the identified rival team to complete the rest of the survey (Mano & Oliver, 1993).

Since the survey was distributed both in-person and online, two versions with minor differences existed. The paper-and-pencil survey contained the favorite team questions first to provide context, followed by the rival questions and SRFPS, with demographic information located at the end of the survey. The online version was built using formsite.com because it allowed for a higher level of clarity to participants. In the online version, the questions asking participants to identify their favorite and rival teams were presented at the beginning of the survey. This method was used because formsite.com allows answers to be "piped", or filled in throughout the survey. For example, if an individual identified the Washington Huskies as their favorite team's biggest rival, the words Washington Huskies would be displayed in future questions regarding the rival team. This added for salience among participants, as salience is important in order for fans to understand the relationship between their favorite team and their favorite team's rival (Wann, 2006b). The survey format then followed that of the SAQ instrument.

The instrument was distributed using two techniques. For in-person data collection, a Self-Administered Questionnaire (SAQ) was utilized. Self-Administered Questionnaire was used because it allowed participants to be chosen by the researcher and to take the survey without assistance; thereby giving them the freedom to respond in a manner they chose (de Leeuw & Hox, 2008). However, using only SAQ distribution would exclude potential respondents that may not be able to follow their favorite team by attending live games for either monetary or geographical reasons. For this reason, the survey used an online method for distribution as well, which allowed for a wider range of potential respondents to be reached (Gaiser & Schreiner, 2009). The online version of the instrument was placed on team-specific web sites that did not require a paid subscription to allow fans that may not have the monetary means to pay for team-specific content to participate in the study. To protect against forms of non-response bias, the SAQ was administered at three college basketball games and reminders were posted on the web site where the online survey was located. Additionally, steps were taken to ensure no one under the age of 18 completed the survey in both distribution methods, and all potential respondents were given the opportunity to enter for a chance to win one of four \$25 VISA gift cards.

The survey was administered to a group of 127 fans on the popular online social networking site Facebook in a pilot study during the summer of 2010. The pilot study allowed the researcher to gain information regarding fan perceptions toward a rival team and identified questions that should be added in order to properly measure fan identification and rival perceptions. This helped to add context to the survey and valuable information to the researcher. Additionally, an open-ended comment box was

added at the end of the survey to allow participants to give their opinions regarding their favorite team's rival.

### *Data Analysis*

The three proposed research questions address whether fan perceptions regarding a rival identified in the SRFPS differ from fans living in the same city, the same state, or that have received a degree from the institution where the favorite team plays and those that do or did not. A Multivariate Analysis of Variance (MANOVA) determines if significant differences exist between dependent and independent variables (Tabachnick & Fidell, 2007). To answer the three proposed questions, the data were analyzed using three MANOVA's. Since three statistical tests were run on the data, a Bonferroni adjusted significance level of 0.0167 was used for each analysis.

### Results

The survey was distributed at three basketball games in the Rocky Mountain Region and on seven team-specific web sites. The three games and seven web sites were selected because the respective institutions were experiencing a level of success in men's basketball or had traditionally performed well in men's basketball and football. Of the 100 participants that started the SAQ survey, 82 provided finished and provided usable data for a response rate of 82%. Additionally, 387 participants started the survey online, and 292 provided useable surveys for a rate of 75%. In total, 374 participants provided usable data for the current study. Respondent demographics are presented in Table 16.

Respondents were mostly male (85.3%), 18 to 40 years of age (65.2%), and identified their favorite team as a football or basketball team almost evenly (44.9% and

42.5% respectively). Additionally, the top five identified favorite and rival teams are also presented.

Table 16

*Participant Demographics*

Demographic Variable	<i>N</i>	%
<b>Sex</b>		
Male	319	85.3
Female	48	12.8
<b>Age</b>		
18-25	122	32.6
26-30	64	17.1
31-40	58	15.5
41-50	38	10.2
51-60	40	10.7
61-70	37	9.9
71+	6	1.6
NA	9	2.4
<b>Sport</b>		
Football	168	44.9
Basketball	159	42.5
<b>Top 5 Favorite Teams</b>		
Kansas Jayhawks	180	39.3
Texas Longhorns	79	17.3
Missouri Tigers	78	17.0
Colorado State Rams	40	8.73
Colorado Buffaloes	24	5.24
<b>Top 5 Rival Teams</b>		
Missouri Tigers	80	21.3
Oklahoma Sooners	73	19.5
Kansas Jayhawks	51	13.6
North Carolina Tar Heels	21	5.6
Southern California Trojans	21	5.6

The four factors addressing rival perceptions were tested for reliability and were acceptable, ranging from .772 to .911. Type III SS was used in the analysis for all research questions due to sample sizes not being equal. To answer the first research question regarding perceptions of fans that live in the same city as the favorite team compared to those living in a different city, a MANOVA was run using SPSS 18. Frequencies for the question are presented in Table 17.

Table 17

*Frequencies for Q2: Do you currently live in the same city as the identified favorite team?*

City	<i>n</i>
Yes	125
No	248

As indicated by the frequency table, the samples were not equal. The Box's Test of Equality of Covariance Matrices were not significant ( $p = .922$ ). The conservative Pillai's Trace statistic showed no significant results  $F(4, 368) = .450$ ,  $p = .772$ , indicating that differences in the four factors of the SRFPS do not differ between fans living in the same city as the favorite team and ones living in another city.

To answer the second research question regarding rival perceptions of fans living in the same state as the favorite team and ones living outside of the state, a second MANOVA was run using SPSS 18. Frequencies used for the question are presented in Table 18.

Table 18

*Frequencies for Q3: Do you live in the same state as the identified favorite team?*

State	<i>n</i>
Yes	252
No	122



The Box's Test of Equality of Covariance Matrices was not significant ( $p = .164$ ). There was not a main effect difference for the test according to the Pillai's Trace statistic  $F(4, 369) = 2.178, p = .071$ . This indicates that there are no significant differences in the four factors of the SRFPS between fans living in the same state of the favorite team and ones living in a different state.

To answer the third research question addressing whether a fan that received a degree from and/or attended the institution where the favorite team plays and those that did not differed in rival perceptions, a third MANOVA was run in SPSS 18. The frequencies used to answer the question are presented in Table 19.

Table 19

*Frequencies for Q4: Did you attend/receive a degree from the institution where the identified favorite team plays?*

Degree	<i>n</i>
Yes	206
No	164

The sample sizes were normal in the distribution, however the Box's Test of Equality of Covariance Matrices was significant indicating a violation ( $p < 0.05$ ). No main differences were reported according to the conservative Pillai's Trace statistic  $F(4, 365) = 1.172, p = .323$ , indicating that no discernable differences existed regarding the four factors of the SRFPS between fans that attended/received a degree from the institution where the favorite team plays and those that did not.

## Discussion

The purpose of the current study was to determine where, if any discernable differences existed between participants who were administered the SRFPS. The MANOVA's indicated that no significant differences existed between fans that lived in the same city or different city as the favorite team, fans that lived in the same state or a different state as the favorite team, and fans that received degrees from/attended the institution where the favorite team plays and those that did not. The fact that no significant differences were found among fan groups is itself very enlightening to the study of rivalry in sport and intergroup relationships. The results and implications for the research questions will be discussed in this section, along with limitations to the current investigation and areas for future research.

One reason that significant differences were not found could be the nature of the respondents participating in the study. Highly identified fans are ones that invest large amounts of time and resources into following their favorite teams (Gibson et al., 2002). These fans are more likely to follow their favorite teams online, participate in online team chat rooms, and keep up with the off-season progress of favorite and rival teams. For this reason, it is possible that the participants choosing to complete the survey are more likely to keep up with the favorite and rival team(s) throughout the season and in the off-season. Additionally, highly identified fans may appreciate the history of the relationship between a favorite and rival team more than other fans and therefore may continue to harbor negative feelings toward a rival team. To this end, it is reasonable to state that a person not highly identified with a favorite team may not desire to gather information

regarding the favorite team's rival. So it seems appropriate to address the proximity and degree questions separately.

### *Proximity*

Previous research asserts that one factor affecting fan identification with a favorite team is moving away from the area where the favorite team is located (Funk, 2008). Further, qualitative evidence supports the claim that fans no longer living in close proximity to their favorite team begin to diminish their adversarial feelings and relationship with the team identified as their favorite team's rival (Havard, 2010). However, the current study found no significant differences in fan rival perceptions between fans living in the same city as the favorite team or a different city. Further, no significant differences were found between fans that live in the same state as the favorite team and those living in another state. There could be multiple reasons for such a finding, and two will be presented here.

One viable reason for the lack of significant differences between fan perceptions in the SRFPS regarding city and state could be the reach of the online community. In the past, one reason that led people who moved away from a favorite team to decrease their identification with the team was the lack of information or coverage they could receive about the favorite team. With the current reach of the Internet and the countless premium television packages available, it is easier than ever to follow a favorite team no matter where a person resides. The Internet has the ability to allow for people to receive information instantly and continuously. In writing about the Internet, Aboujaoude (2011) asserts, "the Internet is a societal leveler the likes of which humankind has never seen before" (p. 198). This means that fans that were unable to follow a favorite team five

years ago now have the capability to keep up with and gather relevant information on a constant basis. For example, a fan of the Wisconsin Badgers living in Orlando, Florida could follow the Badgers online and watch games on the Big Ten Network. This type of continuous engagement allows teams and practitioners to keep fans identified with the favorite team. This is evidenced by the example Toma (2003) gives about Brigham Young University and the use of intercollegiate athletics to reach members of the Later Day Saints Church living around the world. The attention the church garners from BYU Athletics allows it to keep in touch with its members, regardless of where they live.

Another reason explaining the lack of significance between people living in the same and different cities and states as their favorite team could be the inherent need for people to engage in relationships with others (e.g., friends and acquaintances) to keep a balanced state in life. According to Balance Theory, people will associate with others in either dyadic or triadic relationships in a way to maintain balance (Heider, 1958). Further, the Disposition of Mirth states that people are happy when others they admire are successful and ones they dislike are unsuccessful (Zillmann & Cantor, 1976). The current study supports such findings in that it is possible that highly identified fans never fully let go of the adversarial relationship they share with a rival team. Further, the study of rivalry in sport points to the assertion that the Sport Disposition Theory (Zillmann et al., 1989) may exist in indirect competitive situations. In the case of fans not highly identified with their favorite teams, those people would be more likely to follow the life cycle tendencies pointed out in previous research (Funk, 2008). If those people move away from the favorite team, they are more likely to not only stop keeping up with their favorite team but the rival team(s) as well.

### *Institutional Affiliation*

It is difficult to determine if fans at the intercollegiate level are more identified with the favorite team or the institution where the favorite team plays. Such identification with the institution may occur because of the memories one fosters from their tenure of study at the university or college. For this reason, an additional question was added to determine if institution affiliation affected fan perceptions toward a rival team. In particular, did people who received degrees from and/or attended the institution where the favorite team plays differ in their perceptions of a rival team from those that did not receive a degree from or attend the affiliated institution? The lack of significance indicates that the adversarial relationships and perceptions toward a rival team do not differ depending on institutional affiliation. This could again be a result of the type of respondents reached in the current study, the reach of the Internet, or also could relate back to Balance Theory (Heider, 1958) and the Disposition of Mirth Theory (Zillmann & Cantor, 1976).

### *Implications*

The study of rivalry in sport is relatively new and beginning to receive more attention in the literature, but more is needed. Therefore, any information that can be gathered on the phenomenon is valuable to academics and can be used to guide future study. Additionally, the current study adds to the literature addressing intergroup relations, and adversarial relations in particular. Continuing to gain information on intergroup relations is important to guide future study in the area.

The SRFPS also provides academics wishing to study rivalry with a tool that properly measures fan perceptions toward a rival team. With a valid and reliable measure

available, academics will be better able to study the phenomenon of rivalry and how it affects other areas of fan behavior. Adding to the body of literature addressing rivalry in sport is important to the field of sport administration, and the SRFPS provides a starting place for future investigation into the phenomenon.

One reason the SRFPS was created was to allow practitioners to measure the perceptions fans feel toward rival teams. The fact that the current study showed no significant differences existed between the fan groups provides practitioners with valuable information. The current study asserts that practitioners can use the on-field and on-court efforts of a rival team equally among fans of the favorite team, regardless of proximity or affiliation type to the favorite team.

#### *Limitations*

One limitation to the current study could be the type of distributions used. Although effort was made to reach the widest possible pool of potential respondents, it is inevitable that some were missed. This could affect the results of the current study. Also, the use of online web sites and forums that did not require a paid subscription could have affected the results. It was determined that non-subscription web sites would be used in the current study to allow fans who may not be able to pay for premium content to participate in the investigation, however reaching fans on subscription web sites could have also affected the nature of the study.

#### *Future Study*

Since rivalry in sport is a relatively new area of investigation, there are many areas for future study that will be presented here or that have yet to be discovered. One area for future study would be to examine the SRFPS for differences by sex, age, team,

sport, and conference. Previous research asserts that men and women watch and follow sport for different reasons (Dietz-Uhler et al., 2000), and may have different perceptions toward rival teams. It would also be interesting to determine if rival perceptions were affected by participant age.

Regarding team, administering the SRFPS to fans with different rival teams identified a priori would help to determine if the type of rival relationship affected differences in perceptions. This type of information would allow practitioners to market and plan for competitions against other teams in varying ways depending on fan perceptions toward the visiting team. Fans of football and basketball teams may differ in their perceptions of rivals, and differences between these two groups should be examined. Further, administering the SRFPS to fans of different sports such as non-revenue ones could result in significant differences in rival perceptions. Fans of teams in different conferences could display different rival perceptions, and this too is another area for future study. For example, it would be interesting to investigate whether a Big Ten fan differed in perceptions toward a rival team than someone in the South Eastern Conference (SEC). To this end, investigating fan perceptions between the six Bowl Championship Series (BCS) Conferences (ACC, Big Ten, Big 12, Big East, Pac 10, SEC) and non-automatic conferences (Mountain West, Conference USA, WAC, etc.) would provide valuable information.

Since no significant results were found in the current investigation, another area for future study would be to administer the SRFPS in cooperation with a scale measuring fan identification. As stated, the participants in the current study were highly identified

with their favorite teams, but using the SRFPS concurrently with another scale could provide useful fan information to academics and practitioners.

In conclusion, the SRFPS was administered to fans of intercollegiate football and men's basketball and was tested for differences regarding proximity and affiliation type. No significant differences were reported, indicating that the perceptions of rival teams do not differ among the three fan groups. This could be a result of the reach the Internet and premium content channels provided to fans or the inherent need of people to associate in relationships to maintain a balanced life (Heider, 1958) or experience happiness at the expense of others (Zillmann & Cantor, 1976; Kahle & Close, 2011). The study of rivalry in sport is relatively new, and it is important that academics and practitioners appropriately investigate and use the phenomenon to help explain fan behavior. More research into the area is warranted, and the SRFPS provides a tool to properly assist such study.



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APPENDIX A  
PROOF OF IRB APPROVAL

Cody –

Thank you for your thorough and prompt revisions, responses and provision of additional materials. Regarding the protocol for entry into the raffle please be advised that participants providing an email address not only limits/reduces confidentiality but also does not allow for anonymity. Please add this to your consent form so participants are "informed" in their consent prior to participation and provision of an email. I will trust that you make this change before use of your consent form in data collection. I do not need to review another draft.

That raffle amount is quite large. Not really my role as IRB but if your incentive is intended to increase participation than you might want to consider more chances to win lesser amounts? Again, not an IRB issue just a thought! If you change that be sure to note so in the email and consent form.

You now have IRB approval based. Dr. Gray will receive official notice from Sherry May and OSP but you may proceed with full consideration of the amended materials (e.g., consent form, etc.) in the interim.

Please let me know if you have questions or concerns.  
Best wishes with your dissertation research.

Sincerely,  
Dr. Stellino

\*\*\*\*\*

Dr. Megan Babkes Stellino  
Professor  
Social Psychology of Sport and Physical Activity  
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\*\*\*\*\*

APPENDIX B

SCALE DEVELOPMENT SENT TO 1<sup>ST</sup> EXPERT PANEL



## Rivalry Scale

**General instructions for Expert Panel:** The construct and factors identified below are results of interviews and a pilot study conducted over the past calendar year. Instructions for each section will be given.

**I. Construct** – Below is a working definition that I have developed based on interviews and a review of the existing literature: Is there anything else that should be included or anything that should be deleted or clarified?

**Sport Rivalry**- a fluctuating adversarial condition existing between two teams, gaining significance through on-field competition, incidences, proximity, demographic makeup, and/or historical occurrence(s).

**II. Research already conducted** – No need for feedback, just background information so that you know how I ended up at the current stage.

### Stage 1:

- Conducted 15 semi-structured interviews addressing construct of rivalry

### Stage 2:

- Analyzed initial list of 112 statements derived from semi-structured interviews
- Used 2 experts in pilot study
  - o 1 Expert reviewed completeness of construct
  - o 1 Expert helped in deletion/modification of items
- During pilot expert panel, first narrowed items to 65, and then to 58.

### Stage 3:

- Administered items to sample in pilot study conducted during summer 2010
- Conducted pilot EFA to identify preliminary factors
  - o 6 Factors, 37 items
  - o Combined 2 factors (Vicarious Achievement/Competition) to create proposed scale
    - 5 Factors, 29 items

**III. Proposed Factors and Items** - Proposed factors identified below. Please review the factor names and definitions for clarity.

**Proposed Factors** (71.917% Variance Explained) (e.g., eigenvalue, Variance Explained, items)

**Factor 1 OIC - Out-group Indirect Competition** (17.020, 43.609%, 17 items in initial scale/10 items in proposed scale)

*Factor 1 split into two subfactors addressing Out-group derogation and support*

**OICD - Derogation** (11 items in initial scale/5 items in proposed scale)  
- Likelihood that a fan will get satisfaction out of the defeat of the rival team in indirect competition.

**OICS - Support** (6 in initial scale/5 items in proposed scale)  
- Likelihood that a fan will support the athletic efforts of their rival team in indirect competition.

**Factor 2 OC - Out-group consumption** (3.728, 9.774%, 5)

Likelihood that a fan will watch the rival team in indirect competition.

**Factor 3 CVA - Competition/Vicarious Achievement** (3.682, 9.487%, 7/6)

The satisfaction a fan gets when their favorite team defeats their rival team.

**Factor 4 OLIB – Out-group Linguistic Intergroup Bias** (2.153, 5.455%, 4)

The perceptions of fan and team sportsmanship of the rival team.

**Factor 5 OAP - Out-group Academic Prestige** (1.386, 3.591%, 4)

The amount of respect a fan has of the academic prestige of the institution where the rival team plays.

**IV. Proposed Scale Items** – Items identified below. Color-coded items address similar questions. Items deleted from proposed scale identified by (deleted). Please review the item names for clarity.

**Factor 1a: Out-group derogation OICD (original factor loading)**

1. I do not like the rival. .487
2. I want to see the rival lose when they play in a post-season game. .981

3. I want the rival to lose in championship games. .951 (deleted)
4. I am upset to see the rival win a championship game. .739 (deleted)
5. I always root against the rival. .725 (deleted)
6. I will root for another conference team when they are playing the rival. .896
7. It is exciting to see another team beat the rival. .943
8. I am happy when another team beats the rival. .892 (deleted)
9. I am happy when the rival loses a game. .654 (deleted)
10. I would rather see the rival lose to an underdog team than a top-tier team. .876
11. I am happy when the rival loses to an underdog team. 1.028 (deleted)

*Items retained in Proposed Scale*

1. I do not like the rival.
2. It is exciting to see another team beat the rival.
3. I will root for the team that is playing the rival.
4. I want to see the rival lose when they play in a post-season game.
5. I would rather see the rival lose to an underdog team than a top-tier team.

**Factor 1b: Out-group support OICS (original factor loading)**

1. I want the rival to win all games except when they play the favorite team. .545
2. I support the rival in conference play except when they play the favorite team. .514 (deleted)
3. I support the rival in out-of-conference play. .617
4. I want the rival to win championship games. .809
5. I would support the rival in a championship game. .892
6. I want to see the rival win when they play in a post-season game. -.957

*Items retained in Proposed Scale*

1. I want the rival to win all games except when they play the favorite
2. I support the rival in out-of-conference play.
3. I want the rival to win in championship games.
4. I would support the rival in a championship game.
5. I want to see the rival win when they play in a post-season game.

**Factor 2: Out-group consumption OC (original factor loading)**

1. I am likely to watch the rival on television when they are a threat to the favorite team. .920
2. I root for the rival team if it helps the favorite team. .770
3. Prior to the rivalry game, I watch the rival team to see how they do in comparison to the favorite team. .913
4. I will watch the rival team play in a championship game. .716
5. I could never root for the rival team. .655

*All items retained in Proposed Scale*

**Factor 3: Competition/Vicarious Achievement CVA (original factor loading)**

1. I feel I have bragging rights when the favorite team beats the rival team. .672
2. I am excited when the favorite team beats the rival team. .949
3. I am proud when the favorite team beats the rival team. .835
4. I am happy when the favorite team beats the rival team. .919 (deleted)
5. I feel the favorite team has to beat the rival team in order to have a successful season. .531
6. I feel a sense of belonging when the favorite team beats the rival team. .747
7. I feel I am better than fans' of the rival team when the favorite team beats the rival team. .807

*Items retained in Proposed Scale*

1. I am proud when the favorite team beats the rival team.
2. I am excited when the favorite team beats the rival team.
3. I feel I have bragging rights when the favorite team beats the rival team.
4. I feel the favorite team has to beat the rival in order to have a successful season.
5. I feel a sense of belonging when the favorite team beats the rival team.
6. I feel I am better than fans' of the rival team when the favorite team beats the rival team.

**Factor 4: Out-group Linguistic Intergroup Bias OLIB (original factor loading)**

1. I feel the rival team practices poor sportsmanship. .751
2. Fans of the rival team are not well behaved at games. .877
3. Fans of the rival team demonstrate poor sportsmanship at games. .878
4. I feel the rival team plays dirty. .712

*\* Items reworded because to reflect negative feelings of participants regarding rival team behavior*

*All items retained in Proposed Scale***Factor 5: Out-group Academic Prestige OAP (original factor loading)**

1. The academic prestige where the favorite team plays is superior to that where the rival team plays. .976
2. I feel people who attended school where the rival team plays missed out on a good education. .839
3. I feel people who attended school where the rival team plays missed out on a good undergraduate experience. .639
4. I respect the academic prestige of the institution where the rival team plays. .732

*All items retained in Proposed Scale*

APPENDIX C

SURVEY SENT TO 1<sup>ST</sup> EXPERT PANEL

## Rivalry in Intercollegiate Athletics

This survey gathers information regarding fan feelings toward their favorite intercollegiate athletic team's rival. Please complete each prompt to the best of your ability.

Please indicate the name of your favorite **college football or basketball** team in the space provided below (*e.g., Miami Hurricanes*)

My Favorite Team:

---

**Use your favorite team identified above to answer the following questions**

**Please indicate your level of agreement with the statements below as they pertain to your favorite college team.**

	Strongly disagree		Neutral			Strongly agree	
I consider myself to be a <b>real</b> fan of my favorite team.	1	2	3	4	5	6	7
I would experience a loss if I had to stop being a fan of my favorite team.	1	2	3	4	5	6	7
Being a fan of my favorite team is very important to me.	1	2	3	4	5	6	7

Is the team identified above a basketball or football team? Basketball \_\_\_\_\_  
Football \_\_\_\_\_

How long have you been a fan of the team identified above? \_\_\_\_\_ years

Did you attend the university of the team identified above? Yes \_\_\_\_\_ No \_\_\_\_\_

Did you receive a degree from the university of the team identified above? Yes \_\_\_\_\_  
No \_\_\_\_\_

Are you currently attending the university of the team identified above? Yes \_\_\_\_\_  
No \_\_\_\_\_

Do you currently live in the same city as the team identified above?  
Yes \_\_\_\_\_ No \_\_\_\_\_

If no, what city do you live in?  
\_\_\_\_\_

Do you live in the same state as the team identified above?  
Yes \_\_\_\_\_ No \_\_\_\_\_

If no, what state do you live in?  
\_\_\_\_\_

Approximately how many games of the team identified above did you attend last season?  
\_\_\_\_\_

Approximately how many games of the team identified above did you watch on television/Internet last season?

\_\_\_\_\_

To your best recollection, what was the above team's win/loss record last season?  
(Win/Loss) \_\_\_\_\_

Please indicate the name of the **college football or basketball** team that you consider to be your favorite team's biggest rival in the space provided below (*e.g., Florida State Seminoles*)

My Favorite Team's **RIVAL**:

\_\_\_\_\_

**Use rival team identified in space above to answer the following questions**

**Please indicate your level of agreement toward your favorite team's rival for each prompt below.**

	Strongly disagree		Neutral			Strongly agree	
	1	2	3	4	5	6	7
I am excited when my favorite team beats their rival.	1	2	3	4	5	6	7
I will root for the team that is playing my favorite team's rival.	1	2	3	4	5	6	7
Fans of my favorite team's rival are not well behaved at games.	1	2	3	4	5	6	7
I would rather see my favorite team's rival lose to an underdog team than a top-tier team.	1	2	3	4	5	6	7
I feel I am better than fans of my favorite teams rival when my favorite team beats their rival.	1	2	3	4	5	6	7
I support my favorite team's rival in out-of-conference play.	1	2	3	4	5	6	7
The academic prestige of my favorite team's school is superior to the rival school.	1	2	3	4	5	6	7
I would support my favorite team's rival in a championship game.	1	2	3	4	5	6	7
I feel my favorite team's rival plays dirty.	1	2	3	4	5	6	7
I am proud when my favorite team beats their rival.	1	2	3	4	5	6	7
I want my favorite team's rival to win if they play in championship games.	1	2	3	4	5	6	7
I feel I have bragging rights when my favorite team beats their rival.	1	2	3	4	5	6	7
I respect the academic prestige of the institution where my favorite team's rival plays.	1	2	3	4	5	6	7
I want my favorite team's rival to win all games except when they play my favorite team.	1	2	3	4	5	6	7
I feel the favorite team has to beat the rival to have a successful season.	1	2	3	4	5	6	7
I feel my favorite team's rival practices poor sportsmanship.	1	2	3	4	5	6	7
I want to my favorite team's rival lose when they play in	1	2	3	4	5	6	7

a post-season game.							
Fans of my favorite team's rival demonstrate poor sportsmanship at games.	1	2	3	4	5	6	7
I want my favorite team's rival win when they play in a post-season game.	1	2	3	4	5	6	7
It is exciting to see another team beat my favorite team's rival.	1	2	3	4	5	6	7
I feel people who attended school where my favorite team's rival plays missed out on a good education.	1	2	3	4	5	6	7

Did your favorite team win or lose to its rival the last time the two teams played? Won \_\_\_\_\_ Lost \_\_\_\_\_

Gender \_\_\_\_\_ Age \_\_\_\_\_  
 Ethnicity \_\_\_\_\_

Zip Code \_\_\_\_\_

What general comments do you have regarding your favorite intercollegiate team, your favorite intercollegiate team's rival, or their relationship?

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**Thank you!**



APPENDIX D  
SAMPLE 1 SURVEY NOTICE

## **Rivalry in Intercollegiate Athletics**

by **havard22** on **Dec 13, 2010 1:20 PM PST**

I am a doctoral candidate studying rivalry in intercollegiate athletics for my dissertation. Please take the time to give your opinions regarding your favorite college team and your favorite team's rival. The survey is designed to only take about 10 minutes to complete. Please follow the link below to fill out my survey. At the end, be sure to enter to win a \$25 VISA gift card.

**<http://fs21.formsite.com/havard22/form3/index.html>**

Thank you for helping with my dissertation research.

APPENDIX E  
SURVEY SENT TO 1<sup>ST</sup> SAMPLE

## **Rivalry in Intercollegiate Athletics**

CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH UNIVERSITY OF NORTHERN COLORADO Project Title: General Fan Perceptions of Rival Teams in Intercollegiate Athletics Researcher: Cody Havard, M.Ed., Department of Sport and Exercise Science, (512) 699-8254 Advisor: Dianna Gray, Ph.D., Department of Sport and Exercise Science, (970) 351-1725 Email: cody.havard@unco.edu, dianna.gray@unco.edu

I am researching the perceptions intercollegiate fans have regarding their favorite team's rival. You are asked to fill out the survey to the best of your ability. The survey instrument is designed to take no longer than 15 minutes to complete, and your responses will help determine how fans view and perceive their favorite team's rival. At the end of the survey, you will be asked if you would like to be entered into a raffle for a chance to win one of four \$25 VISA gift cards. If so, you will have the opportunity to provide a working email address. Although providing an email address decreases the level of confidentiality, email addresses will not be used for any purpose other than contacting raffle winners. Survey responses will not be linked to individuals, and every effort will be made to protect participant identity. Although, anonymity and confidentiality cannot be promised due to the use of Internet distribution, every attempt will be made to keep information gathered during the survey process private. Completed survey responses will be downloaded from the Internet survey site, [www.formsite.com](http://www.formsite.com), and any copies of responses will be locked in a secure location that I have provided. Be assured that at no time will individuals other than myself, have access to your responses. Completed surveys will be kept for a period of three years after which they will be destroyed. By filling out the survey, you are agreeing that the information supplied will appear in any professional report of this research. Risks to you are minimal. You may initially feel anxious about giving responses dealing with your perceptions toward a rival team, but be assured that at no time will any individual, myself or others, know the identity associated with completed surveys, other than email address for individuals choosing to take part in the incentive raffle. The benefits to you for completing the survey are that you will be adding to an area of the sport literature that is substantially lacking. Further, you will be given the opportunity to give your opinions regarding your favorite college football team's rival, and you may learn more about your personal views toward a rival team. Participation is voluntary. You may decide not to participate in this study and if you begin participation you may still decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. Having read the above and having had an opportunity to ask questions, please complete the questionnaire if you would like to participate in this research. By completing the questionnaire you will give us permission for your participation. You may keep this form for future reference. If you have any concerns about your selection or treatment as a research participant, please contact the Office of Sponsored Programs, 25 Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970-351-2161. Your participation in this study is greatly appreciated. Once data have been analyzed and reported, feel free to contact me for any findings or implications of the study. Thank you for assisting me with my research.

\* Are you at least 18 years of age?

- Yes  
 No

### Rivalry in Intercollegiate Athletics

This survey gathers information regarding fan feelings toward their favorite intercollegiate athletic team's rival. Please complete each prompt to the best of your ability

\* Please indicate the name of your favorite college football or basketball team in the space provided below. (e.g., Miami Hurricanes)

\* Please indicate the name of the college football or basketball team that you consider to be your favorite team's biggest rival in the space provided below. (e.g., Florida State Seminoles)

### Rivalry in Intercollegiate Athletics

Please complete each prompt to the best of your ability.

\* Please indicate your level of agreement with the statements below as they pertain to your favorite college team.

	1 - Strongly Disagree	2 - Disagree	3 - Somewhat Disagree	4 - Neutral	5 - Somewhat Agree	6 - Agree	7 - Strongly Agree
I consider myself to be a real fan of the [pipe:5].							
I would experience a loss if I had to stop being a fan of the [pipe:5].							
Being a fan of the [pipe:5] is very important to me.							

\* Is your identified favorite team a basketball or football team? (team used to complete survey)

- Basketball  
 Football

\* How many years have you been a fan of the [pipe:5]? (e.g., 9 years)

\* Did you attend/receive a degree from the university where the [pipe:5] play?

- Yes  
 No

\* Did you attend but not receive a degree from the university where the [pipe:5]

**play?**

- Yes  
 No

**\* Are you currently attending the university where the [pipe:5] play?**

- Yes  
 No

**\* Do you currently live in the same city where the [pipe:5] play?**

- Yes  
 No

**If no, what city do you live in?**

**\* Do you currently live in the same state where the [pipe:5] play?**

- Yes  
 No

**If no, what state do you live in?**

**\* Approximately how many [pipe:5] games did you attend last season?**

**\* Approximately how many [pipe:5] games did you watch on television/Internet last season?**

**\* To your best recollection, what was the [pipe:5] win/loss record last season? (e.g., Win/Loss)**

**\* Did the [pipe:5] win or lose to the [pipe:6] the last time the two teams played?**

- Won  
 Lost

## Rivalry in Intercollegiate Athletics

Please indicate your level of agreement toward the [pipe:6] for each prompt below.

	1 - Strongly Disagree	2 - Disagre e	3 - Somewh at Disagree	4 - Neutral	5 - Somewhat Agree	6 - Agree	7 - Strongly Agree
<p>I am excited when the [pipe:5] beat the [pipe:6]. I will root for the team that is playing the [pipe:6] Fans of the [pipe:6] are not well behaved at games. I would rather see the [pipe:6] lose to an underdog team than a top-tier team. I feel I am better than fans of the [pipe:6] when the [pipe:5] beat the [pipe:6]. I support the [pipe:6] in out-of-conference play. The academic prestige where the [pipe:5] play is superior to where the [pipe:6] play. I would support the [pipe:6] in a</p>							

championsh  
ip game.

### Rivalry in Intercollegiate Athletics

Please indicate your level of agreement toward the [pipe:6] for each prompt below.

	1 - Strongly Disagree	2 - Disagre e	3 - Somewha t Disagree	4 - Neutr al	5 - Somewh at Agree	6 - Agr ee	7 - Strong ly Agree
I feel the [pipe:6] play dirty.							
I am proud when the [pipe:5] beat the [pipe:6].							
I want the [pipe:6] to win if they play in championship games.							
I feel I have bragging rights when the [pipe:5] beat the [pipe:6].							
I respect the academic prestige of the institution where the [pipe:6] play.							
I want the [pipe:6] to win all games except when they play the [pipe:5].							
I feel the [pipe:5] have to beat the [pipe:6] to have a successful season.							
I feel the [pipe:6] practice poor sportsmanship.							

### Rivalry in Intercollegiate Athletics

Please indicate your level of agreement toward the [pipe:6] for each prompt below.

	1 - Strongl y Disagre e	2 - Disagre e	3 - Somewh at Disagree	4 - Neutr al	5 - Somewh at Agree	6 - Agr ee	7 - Strong ly Agree
I want the [pipe:6] to lose when they play in a post-season game.							
Fans of the [pipe:6] demonstrate poor sportsmanship at games.							



I want the [pipe:6] to win when they play in a post-season game.

It is exciting to see another team beat the [pipe:6].

I feel people who attended school where the [pipe:6] play missed out on a good education.

I feel people who attended school where the [pipe:6] play missed out on a good college experience.

I feel a sense of belonging when the [pipe:5] beat the [pipe:6].

### Rivalry in Intercollegiate Athletics

Gender

Age

Ethnicity

Zip Code

What general comments do you have regarding the [pipe:5], the [pipe:6], or their relationship?

### Rivalry in Intercollegiate Athletics

Thank you for participating in the study!

**If you would like to participate in the raffle for a Visa Gift Card worth \$25, enter a valid email address below. Only raffle winners will be contacted. Email addresses will not be used for any other purposes.**

APPENDIX F

SCALE DEVELOPMENT SENT TO 2<sup>ND</sup> EXPERT PANEL

## Rivalry Scale

**General instructions for Expert Panel:** The construct and factors identified below are results of interviews, a pilot study, the first round of expert panel and an EFA from a sample of respondents conducted over the past calendar year. Instructions for each section will be given.

- I. Construct** – Below is a working definition that I have developed based on interviews and a review of the existing literature:

*Question: Is there anything else that should be included or anything that should be deleted or clarified?*

**Sport Rivalry**- a fluctuating adversarial relationship existing between two teams, players, or groups of fans, gaining significance through on-field competition, on-field or off-field incidences, proximity, demographic makeup, and/or historical occurrence(s).

**II. Research already conducted** – No need for feedback, just background information so that you know how I ended up at the current stage.

### Stage 1:

- Conducted 15 semi-structured interviews addressing construct of rivalry

### Stage 2:

- Analyzed initial list of 112 statements derived from semi-structured interviews
- Used 2 experts in pilot study
  - o 1 Expert reviewed completeness of construct
  - o 1 Expert helped in deletion/modification of items
- During pilot expert panel, first narrowed items to 65, and then to 58

### Stage 3:

- Administered items to sample in pilot study conducted during summer 2010
- Conducted pilot EFA to identify preliminary factors
  - o 6 Factors, 37 items
  - o Combined 2 factors (Vicarious Achievement/Competition) to create proposed scale
    - 5 Factors, 29 items

### Stage 4:

- 1<sup>st</sup> Expert Panel
- Items narrowed from 29 to 23

**Stage 5:**

- Administered items to sample in December, 2010 and January 2011
- Conducted EFA to identify factors and items
  - o 4 Factors, 15 Items

**III. Proposed Factors and Items** - Proposed factors identified below. Please review the factor names and definitions for clarity.

**Proposed Factors** (72.22% Variance Explained) (e.g., eigenvalue, Variance Explained, items)

**Factor 1 OIC - Out-group Indirect Competition** (5.83, 38.85%, 5 items in proposed scale)

Likelihood that a fan will support the athletic efforts of their favorite team's rival in indirect competition.

1. I want my favorite team's rival to win if they play in championship games.
2. I would support my favorite team's rival in a championship game.
3. I want my favorite team's rival to win when they play in a post-season game.
4. I support my favorite team's rival in out-of-conference play.
5. I want my favorite team's rival to win all games except when they play my favorite team.

**Factor 2 OB - Out-group Behavior** (2.52, 16.79%, 4 items in proposed scale)

The perceptions of fan and team sportsmanship of the favorite team's rival.

5. Fans of my favorite team's rival team are not well behaved at games.
6. Fans of my favorite team's rival demonstrate poor sportsmanship at games.
7. I feel my favorite team's rival practices poor sportsmanship.
8. I feel my favorite team's rival plays dirty.

**Factor 3 OAP - Out-group Academic Prestige** (1.38, 9.18%, 3 items in proposed scale)

The amount of respect a fan has of the academic prestige of the institution where the favorite team's rival plays.

5. I feel people who attended school where my favorite team's rival plays missed out on a good education.
6. I feel people who attended school where my favorite team's rival plays missed out on a good undergraduate experience.
7. The academic prestige where my favorite team plays is superior to that where my favorite team's rival plays.

**Factor 4 CVA - Competition/Vicarious Achievement** (1.11, 7.42%, 3 items in proposed scale)

The satisfaction a fan gets when their favorite team defeats their rival team.

8. I feel I have bragging rights when my favorite team beats my favorite team's rival.
9. I feel a sense of belonging when my favorite team beats my favorite team's rival.
10. I feel I am better than fans of the rival team when my favorite team beats my favorite team's rival.

**IV. Proposed Scale Items** – Items identified below. Please review the item for clarity.

*Question: Since non-fitting items will be deleted during CFA, should additional items be added to factors containing only 3 items? If so, what additional indicators or items should be included to properly measure the identified factors?*

**Factor 1: Out-group Indirect Competition** *Out-group Competition against Others OIC (original factor loading)*

1. I want my favorite team's rival to win if they play in championship games. .965
2. I would support my favorite team's rival in a championship game. .941
3. I want my favorite team's rival to win when they play in a post-season game. .907
4. I support my favorite team's rival in out-of-conference play. .901
5. I want my favorite team's rival to win all games except when they play my favorite team. .857

*All items retained in Proposed Scale*

**Factor 2: Out-group Behavior OB (original factor loading)**

6. Fans of my favorite team's rival team are not well behaved at games. .946
7. Fans of my favorite team's rival demonstrate poor sportsmanship at games. .863
8. I feel my favorite team's rival practices poor sportsmanship. .769
9. I feel my favorite team's rival plays dirty. .550 (*possibly will be deleted*)

*All items retained in Proposed Scale*

**Factor 3: Out-group Academic Prestige OAP (original factor loading)**

10. I feel people who attended school where my favorite team's rival plays missed out on a good education. .948
11. I feel people who attended school where my favorite team's rival plays missed out on a good undergraduate experience. .921

12. The academic prestige where my favorite team plays is superior to that where my favorite team's rival plays. .484 (*possibly will be deleted*)

*All items retained in Proposed Scale*

**Factor 4: Competition/Vicarious Achievement CVA (original factor loading)**

13. I feel I have bragging rights when my favorite team beats my favorite team's rival. .833
14. I feel a sense of belonging when my favorite team beats my favorite team's rival. .803
15. I feel I am better than fans of the rival team when my favorite team beats my favorite team's rival. .548 (*possibly will be deleted*)

*All items retained in Proposed Scale*

APPENDIX G  
SURVEY SENT TO 2<sup>ND</sup> EXPERT PANEL

## Rivalry in Intercollegiate Athletics

This survey gathers information regarding fan feelings toward their favorite intercollegiate athletic team's rival. Please complete each prompt to the best of your ability.

Please indicate the name of your favorite **college football or basketball** team in the space provided below (*e.g., Miami Hurricanes*)

My Favorite Team:

---

**Use your favorite team identified above to answer the following questions**

**Please indicate your level of agreement with the statements below as they pertain to your favorite college team.**

	Strongly disagree			Neutral			Strongly agree		
I consider myself to be a <b>real</b> fan of my favorite team.	1	2	3	4	5	6	7	7	7
I would experience a loss if I had to stop being a fan of my favorite team.	1	2	3	4	5	6	6	7	7
Being a fan of my favorite team is very important to me.	1	2	3	4	5	6	6	7	7

Is the team identified above a basketball or football team? Basketball \_\_\_\_\_

Football \_\_\_\_\_

How long have you been a fan of the team identified above? \_\_\_\_\_ years

Did you attend the university of the team identified above? Yes \_\_\_\_\_ No \_\_\_\_\_

Did you receive a degree from the university of the team identified above? Yes \_\_\_\_\_ No \_\_\_\_\_

Are you currently attending the university of the team identified above? Yes \_\_\_\_\_ No \_\_\_\_\_

Do you currently live in the same city as the team identified above? Yes \_\_\_\_\_ No \_\_\_\_\_

If no, what city do you live in?

\_\_\_\_\_

Do you live in the same state as the team identified above?

Yes \_\_\_\_\_ No \_\_\_\_\_

If no, what state do you live in?

\_\_\_\_\_

Approximately how many games of the team identified above did you attend last season?

\_\_\_\_\_

Approximately how many games of the team identified above did you watch on television/Internet last season?

\_\_\_\_\_

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To your best recollection, what was the above team's win/loss record last season?  
(Win/Loss) \_\_\_\_\_

Please indicate the name of the **college football or basketball** team that you consider to be your favorite team's biggest rival in the space provided below (*e.g., Florida State Seminoles*)

My Favorite Team's **RIVAL**: \_\_\_\_\_

**Use rival team identified in space above to answer the following questions**

**Please indicate your level of agreement toward your favorite team's rival for each prompt below.**

		Strongly Disagree		Neutral			Strongly agree	
OI C	I want my favorite team's rival to win if they play in championship games.	1	2	3	4	5	6	7
OI C	I would support my favorite team's rival in a championship game.	1	2	3	4	5	6	7
OI C	I want my favorite team's rival to win when they play in a post-season game.	1	2	3	4	5	6	7
OI C	I support my favorite team's rival in out-of-conference play.	1	2	3	4	5	6	7

**Please indicate your level of agreement toward your favorite team's rival for each prompt below.**

		Strongly disagree		Neutral			Strongly agree	
OI C	I want my favorite team's rival to win all games except when they play my favorite team.	1	2	3	4	5	6	7
OB	Fans of my favorite team's rival are not well behaved at games.	1	2	3	4	5	6	7
OB	Fans of my favorite team's rival demonstrate poor sportsmanship at games.	1	2	3	4	5	6	7
OB	I feel the rival team practices poor sportsmanship.	1	2	3	4	5	6	7
OB	I feel my favorite team's rival plays dirty.	1	2	3	4	5	6	7
OA P	I feel people who attended school where my favorite team's rival plays missed out on a good education.	1	2	3	4	5	6	7
OA P	I feel people who attended school where my favorite team's rival plays missed out on a good undergraduate experience.	1	2	3	4	5	6	7
OA P	The academic prestige where my favorite team plays is superior to that where my favorite team's rival plays.	1	2	3	4	5	6	7
OA P	I feel the school where my favorite team's rival plays is not very prestigious.	1	2	3	4	5	6	7
CV A	I feel I have bragging rights when my favorite team beats my favorite team's rival.	1	2	3	4	5	6	7
CV A	I feel a sense of belonging when my favorite team beats my favorite team's rival.	1	2	3	4	5	6	7
CV A	I feel a sense of accomplishment when my favorite team beats my favorite team's rival.	1	2	3	4	5	6	7

CV A	When my favorite team beats my favorite team's rival, I feel a sense of personal achievement.	1	2	3	4	5	6	7

- Items will be randomized before distribution to sample
- Item initials will be deleted before distribution to sample

Did your favorite team win or lose to its rival the last time the two teams played? Won \_\_\_\_\_ Lost \_\_\_\_\_

Gender \_\_\_\_\_ Age \_\_\_\_\_

Ethnicity \_\_\_\_\_

Zip Code \_\_\_\_\_

What general comments do you have regarding your favorite intercollegiate team, your favorite intercollegiate team's rival, or their relationship?

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**Thank you!**

APPENDIX H  
SAMPLE 2 SURVEY NOTICE

## **Rivalry in Intercollegiate Athletics**

by **havard22** on **Mar 2, 2011 10:34 AM PST**

I am a doctoral candidate studying rivalry in intercollegiate athletics for my dissertation. Recently, I posted a survey meant to gauge fan perceptions toward their favorite team and favorite team's rival. If you have not had a chance to participate, please complete the survey at the link below. At the conclusion of the survey, be sure to enter for a chance to win a \$25 VISA Gift Card.

<http://fs21.formsite.com/havard22/form4/index.html>

Information obtained from the survey will be used for educational purposes only.

Thank you.

APPENDIX I

ONLINE SURVEY SENT TO 2<sup>ND</sup> SAMPLE

### **Rivalry in Intercollegiate Athletics**

CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH UNIVERSITY OF NORTHERN COLORADO Project Title: General Fan Perceptions of Rival Teams in Intercollegiate Athletics Researcher: Cody T. Havard, M.Ed., Department of Sport and Exercise Science, (512) 699-8254 Advisor: Dianna Gray, Ph.D., Department of Sport and Exercise Science, (970) 351-1725 Email: cody.havard@unco.edu, dianna.gray@unco.edu

I am researching the perceptions college football fans have regarding their favorite team's rival. You are asked to fill out the survey to the best of your ability. The survey instrument is designed to take no longer than 15 minutes to complete, and your responses will help determine how fans view and perceive their favorite team's rival. Survey responses will not be linked to individuals, and every effort will be made to protect participant identity. Although, anonymity and confidentiality cannot be promised due to the use of Internet distribution, every attempt will be made to keep information gathered during the survey process private. Completed survey responses will be downloaded from the Internet survey site, [www.formsite.com](http://www.formsite.com), and any copies of responses will be locked in a secure location that I have provided. Be assured that at no time will individuals other than myself, have access to your responses. Completed surveys will be kept for a period of three years after which they will be destroyed. By filling out the survey, you are agreeing that the information supplied will appear in any professional report of this research. Risks to you are minimal. You may initially feel anxious about giving responses dealing with your perceptions toward a rival team, but be assured that at no time will any individual, myself or others, know the identity associated with completed surveys, other than email address for individuals choosing to take part in the incentive raffle. The benefits to you for completing the survey are that you will be adding to an area of the sport literature that is substantially lacking. Further, you will be given the opportunity to give your opinions regarding your favorite college football team's rival, and you may learn more about your personal views toward a rival team. At the end of the survey, you will be asked if you would like to be entered into a raffle for a chance to win one of four VISA gift cards in the amount of \$50. If so, you will have the opportunity to provide a working email address. Although providing an email address decreases the level of confidentiality, email addresses will not be used for any purpose other than contacting raffle winners. Participation is voluntary. You may decide not to participate in this study and if you begin participation you may still decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. Having read the above and having had an opportunity to ask questions, please complete the questionnaire if you would like to participate in this research. By completing the questionnaire you will give us permission for your participation. You may keep this form for future reference. If you have any concerns about your selection or treatment as a research participant, please contact the Office of Sponsored Programs, 25 Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970-351-2161. Your participation in this study is greatly appreciated. Once data have been analyzed and reported, feel free to contact me for any findings or implications of the study. Thank you for assisting me with my research.

**\* Are you at least 18 years of age?**

Yes

No

### Rivalry in Intercollegiate Athletics

This survey gathers information regarding your feelings toward your favorite intercollegiate athletic team's rival. Please complete each question or statement to the best of your ability.

**\* Please indicate the name of your favorite college football or basketball team in the space provided below (for example, Miami Hurricanes)**

**\* Please indicate the name of the college football or basketball team that you consider to be your favorite team's biggest rival in the space provided below (for example, Florida State Seminoles)**

### Rivalry in Intercollegiate Athletics

**Is your favorite team a basketball or football team?**

- Football  
 Basketball

**Please indicate your level of agreement with the statements below.**

	1 - Strongly Disagree	2 - Disagree	3 - Somewhat Disagree	4 - Neutr al	5 - Somewhat Agree	6 - Agre e	7 - Strongl y Agree
I consider myself to be a real fan of the [pipe:7].							
I would experience a loss if I had to stop being a fan of the [pipe:7].							
Being a fan of the [pipe:7] is very important to me.							

Please indicate your consumption habits as they pertain to your favorite college team.

**How many years have you been a fan of the [pipe:7]?**

**Are you a current season ticket holder for the [pipe:7]?**

- Yes  
 No

**How much would you estimate you spend on purchasing merchandise of the [pipe:7] in the last 12 months?**

**Did you receive a degree from the university where the [pipe:7] play?**

- Yes

No

Did you attend but not receive a degree from the university where the [pipe:7] play?

Yes

No

Are you currently attending the university where the [pipe:7] play?

Yes

No

### Rivalry in Intercollegiate Athletics

Please indicate your consumption habits as they pertain to your favorite college team.

Do you currently live in the same city where the [pipe:7] play?

Yes

No

If no, what city do you live in?

Do you live in the same state where the [pipe:7] play?

Yes

No

If no, what state do you live in?

Approximately how many [pipe:7] games did you attend last season?

Approximately how many [pipe:7] games did you watch on television/Internet last season?

Approximately how many hours would you estimate that you spend following the [pipe:7] on the Internet in a week?

To your best recollection what was the [pipe:7] win/loss record last season? (e.g. Win/Loss)

Approximately how many games of the [pipe:8] did you watch on television/Internet last season?

Did the [pipe:7] win or lose to the [pipe:8] the last time the two teams played?

Won

Lost

Don't Know



## Rivalry in Intercollegiate Athletics

Please indicate your level of agreement toward the [pipe:8] for each prompt below.

	1 - Strongly Disagree	2 - Disagree	3 - Somewhat Disagree	4 - Neutral	5 - Somewhat Agree	6 - Agree	7 - Strongly Agree
I want the [pipe:8] to win if they play in championship games.							
I feel the academics where the [pipe:8] play is not very prestigious.							
I feel the [pipe:8] practice poor sportsmanship.							
I feel I have bragging rights when the [pipe:7] beat the [pipe:8].							
I feel people who attended school where the [pipe:8] play missed out on a good undergraduate experience.							
Fans of the [pipe:8] are not well behaved at games.							
I feel a sense of accomplishment when the [pipe:7] beat the [pipe:8].							
I want the [pipe:8] to win when they play in a post-season game.							
Fans of the [pipe:8] do not show respect for others.							

## Rivalry in Intercollegiate Athletics

Please indicate your level of agreement toward the [pipe:8] for each prompt below.

	1 - Strongly Disagree	2 - Disagre e	3 - Somewha t Disagree	4 - Neutr al	5 - Somewha t Agree	6 - Agr ee	7 - Strongl y Agree
<p>I feel a sense of belonging when the [pipe:7] beat the [pipe:8].</p> <p>I want the [pipe:8] to win all games except when they play the [pipe:7].</p> <p>The academic prestige where the [pipe:8] play is poor.</p> <p>I would support the [pipe:8] in a championship game.</p> <p>I support the [pipe:8] in out-of-conference play.</p> <p>I feel people who attended school where the [pipe:8] play missed out on a good education.</p> <p>Fans of the [pipe:8] demonstrate poor sportsmanship at games.</p> <p>I feel a sense of satisfaction when the [pipe:7] beat</p>							

the [pipe:8].

## Rivalry in Intercollegiate Athletics

Sex

- Male  
 Female  
 Not Disclosed

Age

Ethnicity

Monthly Gross Household Income

Highest Level of Education Completed

What general comments do you have regarding your favorite team, your favorite team's rival, or their relationship?

## Rivalry in Intercollegiate Athletics

Thank you for participating in the study!

**If you would like to participate in the raffle for a VISA Gift Card worth \$25, enter a valid email address below. Only raffle winners will be contacted. Email addresses will not be used for any purposes other than the promotional raffle.**

APPENDIX J

CONSENT FORM FOR ONLINE AND SAQ SAMPLES

## CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH

## UNIVERSITY OF NORTHERN COLORADO

Project Title: General Fan Perceptions of Rival Teams in Intercollegiate Athletics

Researcher: Cody T. Havard, M.Ed., Department of Sport and Exercise Science, (512) 699-8254

Advisor: Dianna Gray, Ph.D., Department of Sport and Exercise Science, (970) 351-1725

Email: cody.havard@unco.edu, dianna.gray@unco.edu

I am researching the perceptions college fans have regarding their favorite team's rival. You are asked to fill out the survey to the best of your ability. The survey instrument is designed to take no longer than 15 minutes to complete, and your responses will help determine how fans view and perceive their favorite team's rival.

Survey responses will not be linked to individuals, and every effort will be made to protect participant identity. Although, anonymity and confidentiality cannot be promised due to the use of Internet distribution, every attempt will be made to keep information gathered during the survey process private. Completed survey responses will be downloaded from the Internet survey site, [www.formsite.com](http://www.formsite.com), and any copies of responses will be locked in a secure location that I have provided. Be assured that at no time will individuals other than myself, have access to your responses. Completed surveys will be kept for a period of three years after which they will be destroyed. By filling out the survey, you are agreeing that the information supplied will appear in any professional report of this research.

Risks to you are minimal. You may initially feel anxious about giving responses dealing with your perceptions toward a rival team, but be assured that at no time will any individual, myself or others, know the identity associated with completed surveys, other than email address for individuals choosing to take part in the incentive raffle. The benefits to you for completing the survey are that you will be adding to an area of the sport literature that is substantially lacking. Further, you will be given the opportunity to give your opinions regarding your favorite college football team's rival, and you may learn more about your personal views toward a rival team.

At the end of the survey, you will be asked if you would like to be entered into a raffle for a chance to win one of four VISA gift cards in the amount of \$50. If so, you will have the opportunity to provide a working email address. Although providing an email address decreases the level of confidentiality, email addresses will not be used for any purpose other than contacting raffle winners.

Participation is voluntary. You may decide not to participate in this study and if you begin participation you may still decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. Having read the above and having had an opportunity to ask questions, please complete the questionnaire if you would like to participate in this research. By completing the questionnaire you will give us permission for your participation. You may keep this form for future reference. If you have any concerns about your selection or treatment as a research participant, please contact the Office of Sponsored Programs, 25 Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970-351-2161.

Your participation in this study is greatly appreciated. Once data have been analyzed and reported, feel free to contact me for any findings or implications of the study.

Thank you for assisting me with my research.

APPENDIX K

SAQ SURVEY ADMINISTERED TO 2<sup>ND</sup> SAMPLE

## Rivalry in Intercollegiate Athletics

This survey gathers information regarding fan feelings toward their favorite intercollegiate athletic team's rival. Please complete each prompt to the best of your ability.

Please indicate the name of your favorite **college football or basketball** team in the space provided below (*e.g., Miami Hurricanes*)

My Favorite Team:

**Use your favorite team identified above to answer the following questions**

**Please indicate your level of agreement with the statements below as they pertain to your favorite college team.**

**Strongly disagree      Neutral      Strongly agree**

I consider myself to be a <b>real</b> fan of my favorite team.	1	2	3	4	5	6	7
I would experience a loss if I had to stop being a fan of my favorite team.	1	2	3	4	5	6	7
Being a fan of my favorite team is very important to me.	1	2	3	4	5	6	7

**Please indicate your consumption habits toward the favorite team identified above. (Circle Response)**

Is the team identified above a basketball or football team?	Basketball	Football
How long have you been a fan of the team identified above?	years	
Are you a current season ticket holder for the team identified above?	Yes	No
How much would you estimate you spend of purchasing merchandise of the team identified above?	\$	
Did you attend the university of the team identified above?	Yes	No
Did you receive a degree from the university of the team identified above?	Yes	No
Are you currently attending the university of the team identified above?	Yes	No
Do you currently live in the same city as the team identified above?	Yes	No
If no, what city do you live in?	City:	
Do you live in the same state as the team identified above?	Yes	No
If no, what state do you live in?	City:	
Approximately how many games of the team identified above did you attend last season?	games	
Approximately how many games of the team identified above did you watch on television/Internet last season?	games	

Approximately how many hours would you estimate that you spend following the team identified above on the Internet?	_____ games	
To your best recollection what was the above team's win/loss record last season?	W o n	L o s t

**More on Back**

Please indicate the name of the **college football or basketball** team that you consider to be your favorite team's biggest rival in the space provided below (e.g., *Florida State Seminoles*)

My Favorite Team's **RIVAL**:

**Use rival team identified in space above to answer the following questions**

Approximately how many games of the <b>RIVAL</b> team identified above did you watch on television/Internet last season?	_____ games		
Did your favorite team win or lose to its rival the last time the two teams played?	W o n	L o s t	D o n' t K n o w

**Please indicate your level of agreement toward your favorite team's rival for each prompt below. (Circle)**

	Strongly disagree		Neutral			Strongly agree	
	1	2	3	4	5	6	7
I want my favorite team's rival to win if they play in championship games.	1	2	3	4	5	6	7
I would support my favorite team's rival in a championship game.	1	2	3	4	5	6	7
I want my favorite team's rival to win when they play in a post-season game.	1	2	3	4	5	6	7
I support my favorite team's rival in out-of-conference play.	1	2	3	4	5	6	7
I want my favorite team's rival to win all games except when they play my favorite team.	1	2	3	4	5	6	7
Fans of my favorite team's rival are not well behaved at games.	1	2	3	4	5	6	7
Fans of my favorite team's rival demonstrate poor sportsmanship at games.	1	2	3	4	5	6	7
I feel the rival team practices poor sportsmanship.	1	2	3	4	5	6	7
I feel my favorite team's rival plays dirty.	1	2	3	4	5	6	7
I feel people who attended school where my favorite team's rival plays missed out on a good education.	1	2	3	4	5	6	7
I feel people who attended school where my favorite team's rival plays missed out on a good undergraduate experience.	1	2	3	4	5	6	7
The academic prestige where my favorite team plays is superior to that where my favorite team's rival plays.	1	2	3	4	5	6	7
I feel the school where my favorite team's rival plays is not very prestigious.	1	2	3	4	5	6	7
I feel I have bragging rights when my favorite team beats my favorite team's rival.	1	2	3	4	5	6	7
I feel a sense of belonging when my favorite team beats my favorite team's rival.	1	2	3	4	5	6	7
I feel a sense of accomplishment when my favorite team beats my favorite team's rival.	1	2	3	4	5	6	7
When my favorite team beats my favorite team's rival, I feel a	1	2	3	4	5	6	7



sense of personal achievement.							
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**Demographics**

Gender	Male	Female	Not Disclosed	Age	years
Ethnicity				Zipcode	
Annual Household Income					
Highest Level of Education Completed					

What general comments do you have regarding your favorite intercollegiate team, your favorite intercollegiate team’s rival, or their relationship?

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**Thank you!**

APPENDIX L  
PILOT STUDY RESULTS

The purpose of the pilot study was to give the researcher experience collecting and analyzing data, and gain feedback for the full study that took place beginning the fall of 2010. Since one purpose of the full study will be to develop and validate a scale that empirically measures fan perceptions of rival teams, the technique for developing marketing measures identified by Churchill (1979) will be utilized. In the pilot study, the first three phases of the method were used; 1) specify construct(s), 2) generation of sample items, and 3) initial item testing.

The construct is sport rivalry, and the researcher completed a review of literature regarding fan behavior and identity to generate interview questions. Fifteen semi-structured interviews were completed over one calendar year using ground theory (Creswell, 2007) and the constructivist viewpoint (Crotty, 1998). Responses were analyzed to generate an initial list of 112 statements addressing fan perceptions toward a rival team.

During the pilot study, two experts in the field of sport administration provided feedback on item clarity. Through the help of the two expert panels, the researcher was able to narrow the list of 112 statements to 58 items that would be distributed to the pilot sample. Three demographic and six external questions were added to the survey to make the pilot instrument a total of 67 questions. The sample used in the pilot study was contacts of the researcher on the popular online social networking site Facebook.

Participants were asked to identify their favorite college football team and their favorite team's rival. Fans of college sport were chosen because they tend to display high amounts of affiliation toward a favorite team (Gibson et al., 2002). In a method similar

to Mano and Oliver (1993), participants were instructed to use their favorite team and favorite team's rival to complete the rest of the survey to provide salience to both teams.

To reach potential respondents, a group was created on Facebook, and 354 people were "invited" to take the survey. It is difficult to determine how many people had access to view the survey through Facebook because of the viral nature of the Internet (e.g., friends sending the instrument to friends). At last count, approximately 1200 individuals had an opportunity to view the survey. 167 individuals started the survey, and 110 useable surveys were returned. Considering the amount of people that could have viewed the survey, the response rate was 9%. Utilizing the number of people that were sent the surveys gives a response rate of 31%.

The demographic information for the pilot study is presented in Table 20 and the fan identification and consumption questions are presented in Table 21 and Table 22.

Table 20

<i>Demographic information</i>		
Demographic Variable	<i>n</i>	%
Sex		
Male	76	69
Female	34	31
Age		
18-25	13	12
26-35	59	56
36-45	24	23
46+	10	9

\* *Note.* 106 responses for age

Table 21

*Fan Identification and Consumption*

Attended/Degree where Favorite team plays	Yes 80 (74%)	No 28 (26%)
Live in same City as Favorite team	Yes 37 (34%)	No 71 (66%)
Live in same State as Favorite team	Yes 67 (62%)	No 40 (37%)
Outcome of 2009 Rivalry Game	Won 74 (69%)	Lost 31 (29%)

\* Note. 108 responses for Attended/Degree, Same City

\* Note. 107 responses for Same State

\* Note. 105 responses for 2009 Rivalry Game

Table 22

*Fan Consumption*

Approx. # of games Attended in 2009	2 or fewer 61 (58%)	3 to 5 16 (15%)	6 to 8 24 (23%)	9 or more 4 (4%)
Approx. # of games Watched on TV/Internet in 2009	2 or fewer 14 (14)	3 to 5 25 (26%)	6 to 8 21 (21%)	9 or more 38 (39%)

\* Note. 105 responses for 2009 Attended

\* Note. 98 responses for Watched

Data from the rivalry questions were analyzed using Exploratory Factor Analysis (EFA) in SPSS 18 to determine which items loaded on similar factors. The factors were identified using the Kaiser criteria, which recognizes eigenvalues over 1. Items were identified by factor loadings over .40 and no double-loading over .50. The factors identified in the Pilot EFA are presented in Table 23. Six factors were identified through the EFA, and it was determined that one factor be divided into two sub factors. The

factors and items are presented in Table 24. Therefore, the pilot study identified seven factors and 36 items, which explained 72.08% of the variance.

Table 23

*Factors identified in Pilot EFA with Definitions*

Factor	Definition
Out-group Indirect Competition	
- Derogation (OICD)	- Likelihood that a fan will get satisfaction out of the defeat of the rival team in indirect competition.
- Support (OIS)	- Likelihood that a fan will support the athletic efforts of his rival team in indirect competition.
Out-group Consumption (OC)	- Likelihood that a fan will watch the rival team in indirect competition.
Competition/Vicarious Achievement (CVA)	- The satisfaction a fan gets when his favorite team defeats his favorite team's rival.
Out-group Linguistic Bias (OLB)	- The perceptions of fan and team sportsmanship of the favorite team's rival.
Out-group Academic Prestige (OAP)	- The amount of respect a fan has of the academic prestige of the institution where the favorite team's rival plays.

Table 24

*Factors and Items identified from Pilot EFA (Promax Rotation)*

Factors and Items	Factor Loading
Out-group Derogation (11 items)	
I do not like the rival	.487
I am happy when the rival loses a game	.654
I want to see the rival lose when they play in a post-season game	.981
I want the rival to lose in championship games	.951
I am upset to see the rival win a championship game	.739
I always root against the rival	.725
I will root for another conference team when they are playing the rival	.896
It is exciting to see another team beat the rival	.943
I am happy when another team beats the rival	.892
I would rather see the rival lose to an underdog team than a top-tier team	.876
I am happy when the rival loses to an underdog team	1.028
Out-group Support (5 items)	
I support the rival in conference play except when they play the favorite team	.514
I support the rival in out-of-conference play	.617
I want the rival to win championship games	.809
I would support the rival in a championship game	.892
I want to see the rival win when they play in a post-season game	-.957
Out-group Consumption (5 items)	
I am likely to watch the rival on television when they are a threat to the favorite team	.920
I root for the rival team if it helps the favorite team	.770
Prior to the rival game, I watch the rival team to see how they do in comparison to the favorite team	.913
I will watch the rival team play in a championship game	.716
I could never root for the rival team	.655
Vicarious Achievement (4 items)	
I am excited when the favorite team beats the rival team	.949
I feel I have bragging rights when the favorite team beats the rival team	.672
I am proud when the favorite team beats the rival team	.835
I am happy when the favorite team beats the rival team	.919
Rival Behavior (4 items)	
I feel the rival team practices good sportsmanship	-.751
Fans of the rival team are well behaved at games	-.877
Fans of the rival team demonstrate good sportsmanship at games	-.878
I feel the rival team plays dirty	-.712
Rival Academic Prestige (4 items)	
The academic prestige where the favorite team plays is superior to that where the rival team plays	.976
I feel people who attended school where the rival team plays missed out on a good education	.839
I feel people who attended school where the rival team plays missed out on a good undergraduate experience	.639
I respect the academic prestige of the institution where the rival team plays .	.732

Table 24 continued

*Factors and Items identified from Pilot EFA (Promax Rotation)*

Factors and Items	Factor Loading
Direct Competition (3 items)	
I feel the favorite team has to beat the rival team in order to have a successful season	.531
I feel a sense of belonging when the favorite team beats the rival team	.747
I feel I am better than fans of the rival team when the favorite team beats the rival team	.807

Another purpose of the pilot study was to receive feedback from participants regarding the scale and instrument design. The majority of the feedback addressed the length of the survey or redundancy of the items. Since length and redundancy are expected in scale development, these suggestions were dismissed. An open comment box was added after the pilot study to the end of the survey to allow participants to voice their opinions toward a rival team a last time. This was added because some participants took every opportunity to derogate their favorite teams rival (e.g., Colorado Fluffaloes instead of Colorado Buffaloes).

The purpose of the pilot study was to give the researcher experience developing an instrument, analyze data using EFA, and gain participant feedback. For these reasons, only the first three stages of the measurement process identified by Churchill (1979) were utilized. In conclusion, the pilot study provided important information regarding the instrument design and a better understanding of the scale development process.