

THE EFFECTS OF AFFECTIVE RESPONSES TO SPORTS MEDIA-SOURCE CONTEXT
ON ADVERTISING EVALUATIONS

By

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This document is dedicated to my family. Their continued confidence in my abilities and dreams provided the peace of mind to help me through all the challenges the last three years have presented.

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Abstract of Dissertation Presented to the Graduate School
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This research contributes to the theoretical knowledge within the field of PIA (program-induced affect) and has practical implications for sports marketers and advertisers. An experiment was conducted to explore the ability of sports to create bipolar affect responses among highly identified fans of competing teams. The experiment supported previous research in sports marketing regarding the power of sports to create strong affective responses. The research failed to identify any link between these affective responses and attitude formation towards advertisements and brands present in this media.

CHAPTER 1 OVERVIEW

Sport broadcasts have been popular advertising vehicles for advertisers for years, but recently these programs have grown in popularity due to the lack of time shifting that occurs with this programming; and consequently fewer consumers are using Digital Video Recorders (DVRs) to skip commercials during these broadcasts (Atkinson 2007). This increased demand has led to an increase in CPMs (cost per thousand) for sports programs and sponsorships, as well as greater difficulty in securing these media properties, due to the large upfront commitments to become a sponsor of many leagues, tournaments and series, including NASCAR, the NFL, Olympics, and major college athletics. Mintel (2007) reports that sports advertising spending surpassed \$27 billion in 2006. Advertising revenue for ESPN alone exceeded \$1.1 billion for 2005, nearly 40% more than the closest cable competitor, and a 26.4% increase from the previous year (Advertising Age Supplement 2/28/2005). Anheuser-Busch, one of the nation's largest advertisers, recently dedicated over \$200 million a year to national TV sports (Heistand 2004). According to IEG, marketers spent \$13.4 billion on sport sponsorships in 2006, up from \$6.4 billion in 2001 (Mintel 2007). While consumers' interest in sports varies, Mintel consumer research reports that there are 94.4 million "Casual" sports fans, 36 million "Serious" sports fans, and 13.4 million "Obsessed" sports fans. Despite these large numbers, sport marketing still offers a form of narrowcasting due to the characteristics shared by fans of different sports (Burnett, Mennon, and Smart 1993). While sports like professional football have very broad audiences, less mainstream sports (i.e. bass fishing and tractor pulling) have very homogeneous groups of fans which are highly sought after by certain brands. Clearly, sport as a media vehicle represents a huge market that deserves the attention of scholars and practitioners alike.

Scholars have identified sport as a natural fit for sponsorship due to the strong imagery and broad appeal across countries and social classes (Gwinner and Swanson 2001). Others have

suggested that advertisers can positively leverage the “excitement” and “emotional attachment” viewers have with sports, in order to increase effectiveness (Copeland, Frisby and McCarville 1996). Gas stations with monitors at their pumps have recently begun showing highlights from the week’s top-viewed games, hoping to leverage the emotional response and create additional sales (Mintel, 2007). According to Roese and Maniar (1997), for many people, sports spectating represents “one of the most passionate and intense of human endeavors, utterly dominating affect and cognition for short periods of time” (p. 1245). As advertisers and scholars, it’s important for us to understand the unique challenges and opportunities presented by sports as media vehicle.

The dearth of research on sports as a media vehicle, specifically as it relates to the “program-induced affect” (PIA) of this genre of media on advertising evaluations, is surprising given the magnitude of the investments being made in the realm of sport sponsorships and corresponding advertising expenditures. PIA research suggests that advertisements tend to be more effective when consumers have more positive attitudes toward the context in which the ad is presented. While most viewers are expected to exhibit positive “liking” of the sport programming they view, little is known regarding the events’ outcome on PIA, among highly identified fans. While not all viewers have a vested interest in every sporting event they watch, there are a large number of viewers who have a strong emotional tie to specific teams either as a fan, fantasy sport participant, or in a legal or illegal gambling context. The very nature of most sporting events is that you will have fans and gamblers on both sides of the fence, and therefore mixed emotions with the outcome of every game, and perhaps every play. As stated by Madrigal (2003), “sporting events are unique in that one team’s achievements come at the expense of a competitor” (p. 25). Whereas a drama may have a decidedly “happy” or “positive” tone that is consistent among the majority of viewers, fans’ moods and emotions toward sports programming

are likely to experience wider, bipolar disparities based on the play of each team on the field and the final outcome.

Sloan (1979) was among the first to study these dual emotions in spectators, caused by wins and losses. Using football, basketball, and boxing spectators, this study found that positive emotions (happy, satisfied, pleased) were created when an individual's favorite team won and negative emotions (angry, frustrated, sad) when their team lost. Gantz and Wenner (1995) expanded on this research to include the televised sport viewing experience and found that "while watching, fans were more emotionally involved, feeling nervous and, depending on the flow of action on the field, either happy or angry with the performances they watched" (p. 70). Studies involving PIA are largely absent in the realm of sports.

De Pelsmacker, Geuens, and Anckaert (2002) define media context as "the characteristics of the content of the medium in which an ad is inserted (e.g., articles in a magazine, spots in a television program), as they are perceived by the persons who are exposed to them" (p. 49). Research on media context has increased as more researchers have recognized contextual factors as key moderators of advertising effectiveness. The most common conceptualizations of advertising effectiveness have included ad recall, attitude toward the ad (Aad) and attitude toward the brand (Ab) (Aylesworth and MacKenzie 1998; Coulter 1998; Faseur and Geuens 2006; Norris and Colman 1993; Pavelchak, Antil and Munch 1988).

A rare study involving sport context effects on advertising was conducted by Hill (2005), which examined the effects of sport context on pull-through advertisements (branding on-screen during a program instead of during a commercial break). The results of this study indicated that Aad scores were elevated for evaluations of pull-through advertising when "exciting" incidents were happening on screen, as opposed to "dead" (stoppage in play) and "action" (on-going play but no imminent scoring) sequences. The same study also concluded that recall was significantly

higher in the “action” condition than either the “exciting” or “dead” conditions. Unfortunately, these research results appear limited to pull-through advertisements, but it reaffirms the affective components involved in sports, and their potential affects on advertising effectiveness.

Theoretical underpinnings of this research

Several theories in consumer behavior and mass communication will be examined in this research, most notably mood congruence theory, consistency effect theory, and mood-maintenance repair theory. In addition this paper will examine attitude toward the ad (Aad) as a theoretical mediator of attitude toward the brand (Ab), and measure of advertising effectiveness. Due to the unique nature of sport this research will expand on existing PIA research to treat both forms of affective responses, moods and emotions. Sport fan involvement will be thoroughly reviewed in order to aid in the conceptualization of “fans.” Lastly, the Elaboration Likelihood Model (ELM) will be reviewed to understand how fan and non-fans may process sport broadcasts and commercials differently.

Kamins, Marks and Skinner (1991) explained Mood Congruency theory in terms of PIA and advertising:

Mood Congruency theory would imply that embedding either upbeat or depressing commercials in the context of a happy program would lead to more positive cognitions about the commercials, to the ads being rated as more effective, and to higher purchase intention compared to embedding them in a sad program. (p. 3)

In the same article the authors introduced a negative-state relief model labeled the Consistency Effect result. In this model the authors posit that “when sad mood states are matched by stimuli, the stimuli will be perceived as more positive than inconsistent stimuli would be” (p. 4). The results of their study supported the Consistency Effect model that a happy commercial is more positively evaluated in the context of a happy program, whereas a sad commercial excelled in the context of a sad program. This model

is slightly different from mood-maintenance models which posit that people are generally motivated to maintain positive moods and repair negative moods (Martin 2003).

Sport content provides an interesting challenge to existing schemes as it is expected that sport actually produces bipolar affective responses within a single television program, newspaper article, etc., among fans of the winning and losing teams, when there is a victor and loser, or content involving positive or negative news. Thus, advertisers can not apply Consistency Effect to this programming by matching the tone of their advertisements with that of the context since the latter will actually create pronounced, bipolar affective responses among the most involved viewers. So, the question remains of whether or not Mood Congruency holds true to sports programming and whether fans of the losing team have negative affective responses which are detrimental to advertisers as represented by diminished advertising evaluations among this segment.

Research Question and its Importance

This paper seeks to further understand: a) the role of media context in creating affective responses among highly involved fans, specifically the creation of bipolar affect based on the outcome of the sport contest; and b) the effect these affective responses have on advertising effectiveness, specifically Aad and Ab, among highly identified fans.

Given the magnitude and continued growth of spending in sports programming, advertisers need to better understand the risks and consequences of this spending in different sports, among different types of viewers, fans and non-fans. If, in fact, sport content has the ability to create negative affective states among fans, and if those affective states are detrimental to the performance of advertising, then marketers and media planners would have to reevaluate

the way in which advertisers use sport content. Of course future effects research would need to be conducted to determine how fans of different sports differ, as suggested by Sloan (1979):

Just as there may be different theories for different sports, there may be different fans for different sports. People may vary in the source of their attraction to sports and needs they seek to satisfy by playing or watching. (p. 256)

Possible implications for marketers may include reconsidering which sports to sponsor, markets to target, and the best timing for commercials to air in live broadcasts, such as the beginning of the game when the outcome is still in doubt and both sets of fans are experiencing optimism and pleasure.

The following four chapters will address this topic in greater detail, starting with the second chapter which will provide a thorough literature review of extant research in the areas of PIA theories, moods and emotions, attitude formation relevant to advertising, as well as models and scales used to study fans and fan behavior. At the conclusion of the second chapter I will introduce the hypotheses formed from this literature review, which will be addressed by this study. The third chapter will detail the experimental design of the current study including the procedure, sampling, stimulus, and manipulations. The fourth chapter will detail the results of the study and the statistical confirmation or disconfirmation of the stated hypotheses. The fifth and final chapter will provide an overview of the findings of this research, will acknowledge limitations of the study, and will offer conclusions and recommendations regarding future research on this topic.

CHAPTER 2 LITERATURE REVIEW

Sport sponsorship has been studied from several areas, most notably from the goodwill, image transfer standpoint where research has found a positive transference from sponsors to advertisers and brands (Meenaghan 2001). Lyberger and McCarthy (2001) studied attitude changes from the 1998 to the 2000 Super Bowls and found a growing apathy toward sponsorship of the Super Bowl, but it's unclear if this is unique to the excessive commercial nature of this one sporting event, or has more far reaching implications. Subsequent research comparing attitude toward advertising through sport and non-sport advertising found more positive attitudes associated with advertising through sport (Pyun 2006). However, research to date has failed to explore the bipolar nature of moods and emotions created by sport content among fans, and said effect on advertising effectiveness. In order to address this complex question, a literature review was completed in each of the following areas: affect (moods and emotions), the central and peripheral routes of processing, extant PIA theories, conceptualization and operationalizations of fanship, and lastly advertising effectiveness measures (ad recall, Aad, and Ab).

Program Induced Affect (PIA)

Gardner (1985) took the phenomenological approach in defining moods as “feeling states that are subjectively perceived by individuals” (p. 282). Conversely, Gardner distinguished emotions as being more intense, attention-getting, and tied to a specifiable behavior/object. She goes on to state that an individual is more aware of one's emotions than one's mood. This delineation is consistent with Madrigal's (2003) definition of emotions as “the direct result of a subsequent evaluation and interpretation of a subsequent evaluation and interpretation in which an actual state is compared to a desired state” (p. 26). An interesting element of this definition is the choice of language which includes a largely cognitive element. The relationship between

cognition and affect becomes even more pronounced as we later examine the prevalence of cognition in self report measures for affect.

Common definitions of the term “affect” tend to include emotions, feelings, drives, as well as moods (Batra and Ray 1986; Gardner 1985). For a review of the confusion between affect and emotions see Holbrook and O’Shaughnessy (1984). Advertising and consumer behavior research also frequently use the term “emotional response.” Stout and Leckenby (1986) defined emotional response as “a response to some psychologically important event, real or imagined, past or anticipated” and state that “an ‘emotional response’ exhibits valenced feelings occurring as reactions to self-relevant events” (p. 36). The authors go on to state that these emotional responses vary “depending on the individual’s ability to make progressively self-relevant connections to the specific event, person, or situation” (p. 36). In addition, to “emotional response” we frequently see the term “affective response.” The attachment of the word “response” to affect seems to direct the construct further away from moods and more directly towards categorization with emotions, due to the attribution of the “response” to a specific object. This relevance will be discussed later on in this chapter in regards to the “involvement” an individual has with a specific sporting team or individual athlete, as well as sport content.

While most program-induced mood research focuses solely on feelings, there is some evidence that emotions are a critical element of sports programming consumption. McKinley Jr. (2000) stated that:

Some researchers have found that fervent fans become so tied to their teams that they experience hormonal surges and other physiological changes while watching games, much as athletes do. The self-esteem of some male and female fans also rises and falls with a game’s outcome with losses affecting their optimism about everything from getting a date to winning at darts. (p.A1)

Pavelchak et al. (1988) studied the relationship among program context, emotional experience, and ad recall in a study of Super Bowl XX viewers from the winning and losing

cities, as well as a neutral city. The study found that those viewers in the winning and losing cities demonstrated lower ad recall than those in the neutral city. The study accounted for arousal and pleasure separately, and found that arousal affected ad recall, while pleasure had no effect. Thus, viewers in each Super Bowl city experienced high arousal, but while the pleasure varied based on the outcome of the game, it was posited that the arousal of high levels of emotion in both winning and losing cities led to the decline in ad recall, thus demonstrating the Intensity theory. The Intensity theory posits that high arousal levels lead to less peripheral processing. Newell, Henderson, and Wu (2001) conducted a similar study as Pavelchak et al. (1988), and were unable to replicate the results using Super Bowl XXXIV. While the authors hypothesized that fans of the winning and losing teams would recall fewer ads due to the arousal created by the game, their results failed to support this hypothesis, despite demonstrating that arousal levels were significantly elevated for fans of both teams. One explanation for this could be that no two sporting events are exactly alike.

Tobar (2006) studied the effects of sport fandom, utilizing the Sport Fandom Questionnaire (SFQ), on viewers of Super Bowl XL, and found that higher levels of sport fandom and greater enjoyment of advertisements were significantly related to purchase intentions. Mood and enjoyment were also included to understand the influence of affect on purchase intentions, but these affective states were never directly linked with preference for a particular team, merely overall ratings as a sport fan.

From a non-sports context Gorn, Pham, and Sin (2001) examined the interplay between valence (pleasant or unpleasant) and arousal (low or high) by dissecting existing mood states (manipulated independently) and affective tones of advertising. This study supported an excitation transfer hypothesis where consumers' affective states polarize ad evaluations in the direction of the ad's affective tone in high versus low arousal scenarios. The affect-as-

information framework actually posits that consumers knowingly engage in this behavior as “they perceive these feelings to contain valuable judgmental information” (Pham et al. 2001, p. 167).

Clearly affective states play a critical role in the consumption of sports programming and need to be accounted for conceptually. Both constructs (moods and emotions) are likely to vary based on an individual’s affective investment in the event and participants. Hillman found “that ardent football fans at the University of Florida experienced extreme physiological arousal when they viewed pictures of Gator football stars making game-winning plays, but responded indifferently to pictures of other athletes and teams” (McKinley Jr. 2000, p. A1). Therefore, a study measuring the effectiveness of advertising in a sports context must measure all affective consequences of the programming context, including mood and emotions, among fans and non-fans.

Madrigal (2003) examined spectator affect during live sporting events and found several important antecedents and consequences in relation to attribution-dependent emotions, defined as the praiseworthy and blameworthy actions of the event participants. Antecedents included goal relevance and affective expectations, while consequences were satisfaction and perceptions of entertainment value.

Dimensions of Mood

Mood has traditionally been conceptualized based on two dimensions: valence and arousal (Russell and Barrett 1999; Shapiro, MacInnis, and Park 2002), though Aylesworth and MacKenzie (1998) argue that mood is defined primarily in terms of valence. Valence is commonly defined in terms of pleasantness (positive versus negative) and arousal (high versus low) “in either physiological terms, as degree of energization, activation, inner tension, or alertness, or psychological terms, as a state of wakefulness or action preparation” (Shapiro et al.,

2002, p. 16). While Aylesworth and MacKenzie (1998) examined valence and controlled for arousal, Shapiro et al. (2002) found that valence affects schema or data driven processing, and that negative valence stimulates processing of data. Conversely, high arousal was shown to inhibit ad processing. This research supported the findings of Pavelchak et al. (1988) that higher levels of arousal reduced consumers' recall of ads. The conceptualization of arousal was similar among the two studies, both classifying arousal as either a function of mood or emotion.

As will be discussed later with emotions, several scholars have challenged the unidimensional construction of arousal and pleasure. Gardner (1985) identified several dimensions of positive moods (e.g., cheeriness, peacefulness, and sexual warmth) as well as multiple negative moods (e.g., anxiety, guilt, and depression) and postulated that the effects of negative moods are more complex than those of positive moods, due to the heterogeneity of negative mood states.

Holbrook and O'Shaughnessy (1984) identified several key differences that existed among commonly used affective constructs in research. These distinctions included whether they are: active or reactive, specific or general, and acute or chronic. Moods were largely classified as being general, reactive, and acute. In layman's terms moods are short lived reactions to an environment that lack attribution to a single source. For example, after getting in your car in the morning you have a quicker than usual drive to work, hear your favorite song on the radio, get a good parking spot, and the weather is pristine. So, for no specific reason you enter the office in a good mood. After easing into your day your boss notifies you that you're not getting a raise this year. In an instant, your feelings have changed, and you know exactly why; which leads to emotions.

Dimensions of Emotion

Emotions have been a hot topic in consumer behavior research for quite some time. Some of the seminal work by Mehrabian and Russell (1974) produced the PAD scheme around the dimensions of pleasure, arousal, and dominance. Havlena and Holbrook (1986) examined Mehrabian-Russell's (1974) three dimension PAD paradigm along with Plutchik's (1980) eight dimension scheme including; fear, anger, joy, sadness, disgust, acceptance, expectancy, and surprise. This study conducted a multi-level analysis comparing reliabilities, convergent validities, and external generalized abilities of each. The research suggested that within the context of consumption experiences, the Plutchik scheme provided no additional information over the simpler PAD schema. Since the PAD scheme has become a widely accepted framework for studying emotional responses based on the three independent, bipolar dimensions (Chebat, Filiatrault, Gelinas-Chebat, and Vanisky 1995; Eroglu, Machleit, and Davis 2003; Havlena and Holbrook 1986). Lang (1980) made a significant contribution to the PAD scheme with the introduction of the Self-Assessment Manikin (SAM). This visual self-report instrument has been shown effective in measuring emotional responses to advertising (Morris et al. 2002) and successful in cross-cultural research and studies with children (Morris 1995). In addition, Morris et al. (2002) showed the superiority of visual self-report affective measures over cognition in predicting behavior. Scholars have also supported the simplification of the PAD scheme by eliminating the "dominance" dimension which has been shown to be less significant than pleasure and arousal (Olney, Holbrook, and Batra 1991; Russell, Weiss and Mendelsohn 1989). In researching multiple emotional responses within a single advertising execution, Morris and McMullen (1994) found that levels of arousal and pleasure could be altered within a single commercial, but no results were found for dominance. The current research is distinct from the latter, in that it seeks to identify different emotional responses within a single advertisement, but

as a consequence of audience segmentation based on fan identification, not based on creative elements of an advertisement.

In recent years scholars have questioned the valence-based approach to feelings and tested multidimensional views of feelings (Babin, Darden, and Babin 1998; Faseur and Geuens 2006; Mitchell et al. 2001; Raghunathan and Pham 1999). Mitchell et al. studied context-induced feelings and found that negative constructs such as anger and sadness produced different ad effects when using a neutral ad. Raghunathan and Pham examined anxious, sad, and neutral feelings in relation to decision making regarding gambling and job selection. The authors' findings indicated that anxiety and sadness convey distinct information to the decision-maker and subsequently effects decision making, with anxiety leading to uncertainty reduction and sadness leading decision makers to seek reward replacement. Faseur and Geuens found support for feelings of "coziness," "excitement," and "romance" producing different effects on ad evaluations. Lastly Babin, Darden and Babin found that emotions are not always bipolar, meaning that feeling a negative emotion does not preclude the occurrence of a positive emotion.

An additional noteworthy study on affective response is Batra and Ray's (1986) examination of affect typologies. The authors categorized their findings from nine studies, including their own, into thirteen unique categories:

- Interest/Expectancy
- Surprise
- Disgust/Scorn
- Skepticism
- Anger
- Fear/Anxiety
- Shame
- Guilt
- Sadness
- Surgency, Elation, Vigor/Activation (SEVA)
- Deactivation

- Social Affection
- Drives

Of the thirteen categories identified in the literature, three positive affective response categories (SEVA, deactivation, and social affection) were operationalized. The empirical results of this study were that all three affective responses (ARs) were antecedents of attitude toward the ad (A_{ad}).

Two studies in sports, Pavelchak et al. (1988) and Newell et al. (2001), examined the presence of arousal and pleasure among viewers of the Super Bowl (XX and XXXIV respectively) in the cities of the participating teams and a neutral city. Neither study distinguished between moods and emotions, but both studies found significantly higher scores of arousal and pleasure among respondents from the participating cities. Neither study examined the impact of the “dominance” dimension, or the effects of arousal and pleasure on attitude formation. Unfortunately, both studies measured these emotions through self reports the day after the event, thus requiring respondents to recall previously held emotions in a post-evaluation scenario.

Theoretical Frameworks

ELM - Central vs. Peripheral Processing

Mood and persuasion literature commonly supports the belief that positive moods decrease central processing and negative moods increase it (Aylesworth and MacKenzie 1998; Bagozzi, Gopinath and Nyer 1999; Gardner and Hill 1988; Mackie and Worth 1989). Assuming motivation, ability and opportunity exist, Petty and Cacioppo’s (1981) Elaboration Likelihood model (ELM) has also been applied to explain how positive versus negative mood states lead one to process advertising centrally or peripherally. Aylesworth and MacKenzie (1998) posit that consumers in a negative mood state need only process the source of the “mood” to resolve this state, thus motivating consumers to process a show centrally, but not the ad. Conversely, the

authors propose that positive moods fail to trigger a problem-solving mode, therefore leading to the show and ad being processed centrally. The hypothesis that divergent moods lead to disparate routes of processing could present an interesting challenge to advertisers if sports content is shown to succeed in creating these bipolar moods.

ELM is also relevant to the current research as one examines the arousal and emotions experienced by fans when watching their favorite team(s). As previously mentioned, the Intensity theory purports the notion that high arousal levels lead to less peripheral processing, and several studies have supported this theory within non-sport contexts (e.g. Mackie & Worth 1989) and within sports (e.g. Pavelchak et al. 1988).

Mood Congruency and Consistency Effect models

In general, mood congruency models have supported the notion that mood states influence evaluations, judgments, and behaviors in mood congruent directions (for a comprehensive review of 40 studies on mood see Gardner 1985; also Goldberg and Gorn 1987; and Kamins et al. 1991) Quite simply, positive moods prime positive memories and negative moods, negative emotions. Another tenant of the mood-congruency hypothesis is that mood states prime the recall of memories sharing a similar affective valence (Martin 2003). Expanding mood congruence theory, studies have supported that the context of a specific program creates a mood that transcends the program and advertisement, and effects attitude toward the ad (Aad) and subsequently the brand (Ab) (Lutz, MacKenzie and Belch 1983; Mackenzie and Lutz 1989; Coulter 1998). Early research in the field was limited solely to the mood of the media context, and suggested that positive program-induced feelings led to more positive evaluations of Aad (Goldberg and Gorn 1987). Further research expanded on mood congruence by studying the relationship between various context produced moods and commercial messaging and context mood. Specifically, research on media-source effects evolved to include greater understanding of

Consistency Effects between context mood and advertisement mood (De Pelsmacker et al. 2003; Goldberg and Gorn 1987; Kamins et al. 1991). Research in this area generally supports the concept of happy commercials being most effective in the context of happy programs, and sad commercials being most effective in the context of sad programming, both of which have been linked to elevating ad and brand evaluations. To date, no studies were found that address the creation of bipolar affective responses within a single media context.

Scholars in cognitive psychology and consumer research agree that the two core dimensions of congruency include relevancy and expectancy (Dahlen 2005; Goodman 1980; Heckler and Childers 1992). Heckler and Childers (1992, p. 477) define relevancy as “material pertaining directly to the meaning of the theme and reflects how information contained in the stimulus contributes to or detracts from the clear identification of the theme or primary message being communicated” and expectancy as “the degree to which an item or piece of information falls into some predetermined pattern or structure evoked by the theme.” Specifically as it results to advertising in a sports context, relevancy may include advertisers using sports imagery to appeal to the interests and tastes of viewers, while expectancy could relate to the appropriateness of the products being advertised (i.e., viewers of football may expect to see ads for athletic apparel, beer and sports drinks, but may not expect to see ads for diapers or feminine hygiene products). While these determinants of congruency are likely to hold relevance to sport-context programming and advertising, most scholars in the field of media context have studied mood congruency solely between the media-source and the mood of the advertisement (i.e., happy media-context with happy ads). The moods produced by a sport program are predicted to be bipolar and therefore more difficult for advertisers to hold congruent with the mood of the advertisement. So, while the mood of the ad may have relevancy and expectancy to the program,

the judgment of the mood of the media-source may witness greater variance than in previous media context research.

Mood-regulation motivation may have a role in the processing of advertising in a sports context if the mood created by the program is negative and the viewer wishes to improve their mood. Chang (2006) recently found that in some situations attentive exposure to entertaining advertising can reduce negative mood evoked by the media. So, perhaps fans experiencing negative emotions will look toward the advertising to repair their current mood states.

While many elements of commercials have been studied in order to predict effectiveness, one of the simplest classifications is of “informational” or “emotional” appeals. While this dichotomy between cognition and affect is a useful simplification tool, it fails to account for the wider array of messaging approaches used by advertisers. Message context research and mood congruency theory have expanded to study the various dimensions of program moods and commercial moods to better predict effectiveness.

Sports Involvement

Imagine two individuals sitting in their respective homes watching a live sporting event on television. One sits nearly still, showing few physiological signs of arousal or pleasure, the other shows visible signs of nervousness and anger, including occasional verbal outbursts directed at an unresponsive television set. Clearly, one would assume that these two individuals differ in terms of their respective involvement with the drama unfolding on the screen. We know from the Petty and Cacioppo Elaboration Likelihood Model (ELM) that involvement effects the manner in which we process information, and subsequent studies have detailed the importance of involvement because of its latent capacity to influence attitudes toward an activity or product, and behavior in regards to said activity or product (e.g. Arora 1985). These studies led to a robust stream of research on involvement, including program induced affect and leisure

involvement in recreation and tourism contexts, the latter of which spawned more focused studies on sport fan involvement.

Shank and Beasley (1998) defined sports involvement as being “the perceived interest in and personal importance of sports to an individual” (p. 436). This definition was born from work by Zaichkowsky (1985), which sought to develop a scale to measure involvement based on the definition of “a person’s perceived relevance of the object based on inherent needs, values, and interests” (p 342). Havitz and Dimanche (1990) identified three involvement distinctions common in involvement literature: *enduring v. situational*, *emotional v. rational*, and *personal v. impersonal*. *Enduring* involvement, while continuously present, may still experience dramatic shifts over time. While an alumnus of George Mason University may have always considered himself a fan of the basketball team and watched the games and standings with interest, that individual’s involvement with the team may have reached a crescendo during the school’s 2006 run to the Final Four. Other alumnus who never followed the basketball team as students or alumnus, likely experienced a high level of *situational* involvement with the basketball team during the 2006 tournament, only to be repressed until the next time the school makes a big splash on the national scene. As expressed by Havitz and Dimanche (1990) enduring involvement is still extremely unstable over the course of a year (in-season and off-season), as well as the anticipation, experience, and recollection of a given event or game. What categorizes involvement for fans is that enthusiasm and interest for the team is ongoing.

The next types of involvement, being *emotional* and *rational*, also have fairly obvious implications to fans of a participant versus fans of specific sport content. While golf fans may enjoy watching tournaments on TV, they may not have been as emotionally touched by the 2000 Sony Open tournament as a Paul Azinger fan whom is more familiar with his entire career and his battle against non-Hodgkin lymphoma. Lastly, there is *personal* involvement. In the case of

Azinger, we may find that someone who has personally battled this disease, or lost someone close to them, may be more profoundly affected while watching Azinger achieve his first victory after beating the disease. The most highly identified fans are expected to demonstrate enduring, emotional, and personal involvement.

Laurent and Kapferer (1985) found, involvement could not be measured through a single index, but instead must account for antecedent conditions of involvement: perceived importance of product or situation, sign value, pleasure value, and risk (divided into two subcomponents). This finding led the authors to determine that the term “involvement” alone was too imprecise without further explanation, and subsequently led to several distinctions of sport fan involvement and identification over the last 20 years.

Trail, Anderson and Fink (2000) presented a theoretical model to account for sport spectator consumption behavior. Of the six factors identified, the first two hold great significance to the current study, these being, motives and levels of identification. These factors were posited to function sequentially and to lead to expectancies, confirmation or disconfirmation, self-esteem responses, and the affective state of the individual, which would influence future fan behavior. In the forthcoming pages motives and identification will be examined, but first, a delineation between fans and spectators is required.

Spectators v. Fans

While involvement may manifest itself in terms of program-liking of a genre of programming, the involvement, or affinity towards a specific team also needs to be considered as a variable effecting arousal and valence of emotions. Sherif and Hovland (1961) introduced the concept of involvement in the field of psychology through their work on social judgment theory. Nearly two decades later Petty and Cacioppo’s ELM dealt with involvement from a decision making process viewpoint. Recently, sport management literature has addressed sport fan

involvement more in terms of a psychological state, typically multidimensional in nature, and consisting of affective, behavioral, and cognitive dimensions. Havitz and Dimanche (1997) who studied over 50 leisure involvement data sets, defined leisure involvement as “an unobservable state of motivation, arousal or interest toward a recreational activity or associated product. It is evoked by a particular stimulus or situation and has drive properties” (p. 246). While involvement is a common construct in consumer behavior literature, sport management literature has sought to delineate that of sports fans and has routinely utilized “fanship” as the construct for discussing an audience’s affinity to, or involvement with a sport or team.

The previously mentioned Mintel report classified fans as Casual, Serious, and Obsessed sports fans. While scholars have sought to explore a similar classification of fanship, no consensus appears in the literature regarding the nomenclature of similar groupings for varying levels of fans. Conceptually, Gantz and Wenner (1995) defined fanship “in terms of perceived knowledge about sports, interest in viewing televised sports, and amount of televised sports viewed” (p. 61). Guttman (1986) defined fans as “emotionally committed consumers of sporting events” (p. 6). Trail et al. (2003) and Robinson et al. (2005) recognized the lack of delineation between the terms “spectators” and “fans” within the extant literature, and developed a scheme to differentiate the two based on motivational factors and points of attachment. As stated by Trail, Anderson and Fink (2000) “fans are usually spectators, however not all spectators are fans” (p. 157). Gantz and Wenner (1995) actually go as far as suggesting that with fans “viewership is likely to be active and participatory” (p.57). Other adjectives have been used by scholars as modifiers for different levels of fanship, including “avid” and “extreme” (Capella 2002), and “die-hard” and “fair-weather” (Wann and Branscombe 1990), but no dominant scheme currently exists within the literature. Sutton, McDonald, and Milne (1997) presented an additional framework of fan identification and distinguished three levels of fanship: low

identification (social fans), medium identification (focused fans), and high identification (vested fans). While the authors adequately distinguished between the motives and behaviors of each group, the authors did not present an operationalization of the three constructs, or specific methods of measurement.

Several studies have examined the antecedents and dimension of fan involvement in a sport context (e.g. Funk, Ridinger, Moorman 2004) while others have utilized involvement profiles for classification purposes of fans (e.g. Kerstetter and Kovich 1997). Recently, sport fanship literature tends to focus on either motivations for spectating (Wann 1995; Trail and James 2001), points of attachment with a team (Heere and James 2007; Kwon, Trail, and Anderson 2005; Wann and Branscombe 1993; Wann and Dolan 2001), a combination of the two (Robinson and Trail 2005; Trail et al. 2003), or psychological models (Funk and James 2001).

Fan Motivations

Wann (1995) introduced a formative study in the development of a scale for the application of measuring motivations of sports fans. This scale, labeled the Sport Fan Motivational Scale (SFMS), has been extensively used and tested now for more than a decade and has spawned similar scales including: Milne and McDonald's (1999) Motivations of Sport Consumers scale, Trail and James (2001) Motivation Scale for Sport Consumption (MSSC), and the Funk et al. (2001) Sport Interest Inventory (SII). Due to the innovativeness of the original SFMS study, the scale's content validity has been called into question (Trail and James 2001). The original SFMS did report strong internal reliability for the eight motivations of spectator attendance identified through extant literature: eustress, self-esteem, escape, entertainment, economic, aesthetic, group affiliation, family; though eustress and self-esteem loaded on the same factor. The Milne and McDonald, Trail and James, and Funk et al. studies examined nine, twelve, and ten items respectively, though later work on the Funk et al. SII scheme added four

additional motives (see Table 2-1 for an overview of motives identified and supported through these four models). All four scales measuring motives were developed specifically to those of attendees at live sporting events, and sometimes even specific sports. The same can be said for Kerstetter and Kovich's (1997) simpler Involvement Profile (IP) which examined five dimensions: importance, pleasure, risk consequence, risk probability, and sign value. The four motivational scales are clearly relegated to measuring attendance motivation, and while the IP scale is a better fit with mediated sport content, the two risk dimensions appear to have greater relevance to live sport attendance.

Table 2-1. - Motivations identified in sport spectating

Wann (1995)	Milne and McDonald (1999)	Trail and James (2001)	Funk et al. (2001)	Funk, Mahony, Ridinger (2002)
Sport Fan Motivation Scale (SFMS)	Motivations of Sport Consumers scale	Motivation Scale for Sport Consumption (MSSC)	Sport Interest Inventory (SII)	Sport Interest Inventory (SII) revisited
eustress	risk-taking	Achievement	drama	drama
self-esteem	stress reduction	Knowledge	interest in player	interest in player
escape	aggression	Aesthetics	interest in soccer	interest in soccer
entertainment	affiliation	Drama	Team identification	team identification
economic	social facilitation	Escape	socialization	socialization
aesthetic	self-esteem	Family	aesthetics	aesthetics
group affiliation	competition	physical attraction	national pride	national pride
family	achievement	physical skills	excitement	excitement
	skill mastery	Social	support women's opportunity in sport vicarious	support women's opportunity in sport
	aesthetics		achievement	vicarious achievement
	value development		role model	role model
	self-actualization			wholesome environment entertainment and value bonding with family

Team Identification as an Antecedent of Involvement

The second significant genre of fan research consists of team identification (or attachment to the team) literature. Traditionally, sport management scholars have studied identification in two contexts: athlete's identification with his or her athletic role, and a sport fan's identification with a team or player (Wann 2002). This study is only concerned with the

latter. Trail et al. (2000) defined identification as “an orientation of the self in regard to other objects including a person or group that results in feelings of sentiments of close attachment” (p. 165-166). Wann (1997) defined team identification as “the extent that a fan feels psychologically connected to a team” (p. 331) and Gwinner and Swanson (2003) defined the same concept from a social identity perspective as “the spectators perceived connectedness to a team and the experience of the team’s failings and achievements as one’s own” (p. 276). This stream of research dates back to early work by Cialdini et al. (1976), which is most renowned for contributions to the sport management literature in the field of BIRGing (basking-in-reflected glory), which was a precursor to the forthcoming CORFing (cutting-off-reflected failure) concept (Snyder, Lassegard, and Ford 1986).

Utilizing the Sport Spectator Identification Scale (SSIS), Wann and Branscombe (1993) found that team identification is an antecedent of involvement, as fans high in identification tend to be more involved and invested in the team. Similar to scale development on motivations of sports involvement, team identification literature has sought to identify the various dimensions of identification, and several studies have linked these with spectator motives (Funk, Ridinger, and Moorman 2004; Robinson and Trail 2005; Trail et al. 2003). The original Points of Attachment Index (PAI) developed by Trail et al. (2003) examined seven different points of attachment: player, team, coach, university, community, sport, and level. Their study also linked these points of attachment with three types of motives and found that motives varied by fans and spectators, and whether those individuals identification was associated with a successful or unsuccessful team. Subsequent studies by Kwon, Trail and Anderson (2005) discontinued the use of “community” as this dimension fit less well, presumably due to the usage of a student sample in many studies. An additional study by Robinson and Trail (2005) examined motives and points of

attachment of live sport spectators to intercollegiate athletics, and found that significant differences existed by gender and type of sport attended.

In addition to the scales previously identified, Heere and James (2007) recently developed a multi-dimensional team identity scale (Team*ID) based on social identity theory. Their confirmatory factor analysis identified six dimensions of team identity including: public evaluation, private evaluation, interconnection of self, sense of interdependence, behavioral involvement, and cognitive awareness. In addition to the sport and fan identification dimensions previously identified, scholars have also identified university identity as a significant mediator of evaluations of a university football team (Dietz-Uhler and Murrell 1999). To date, scholars have successfully linked team identification to changes in physiological arousal (Branscombe and Wann 1992), exhibition of physical effects (Sloan 1979), and affect (Madrigril 1995; Wann et al. 1994), among highly identified fans.

Gwinner and Swanson (2003) sought to examine the antecedents of team identification in the realm of spectators for a college football team, and found that team identification could be predicted by perceived prestige of the university, involvement with the domain of football, and associations with the team/school.

Psychological Models

A third significant realm of research on involvement of fans includes the Psychological Continuum Model (PCM) and Psychological Commitment to Team (PCT) scale development. The PCM introduced by Funk and James (2001), details the parameters in which a relationship between an individual, sport or athlete is mediated. Similar to Hierarchy of Effects Models, the PCM model outlines a four step process beginning with *awareness*, and then followed by *attraction*, *attachment*, and *allegiance*. Instead of focusing on behavioral change, this model focuses on the psychological relationship between the fan and the sport object (e.g. a team or

athlete). Within this framework, the previously discussed “attachment” construct is accounted for within a larger conceptual framework. The second scheme, PCT, provided by Mahony, Madrigal, and Howard (2000) relates specifically to the *attachment* and *allegiance* dimensions, and is conceptually defined by the authors as a “scale to be used in segmenting sport consumers based on loyalty” (p. 15) and to assess “the strength of an individuals commitment to sport teams” (p. 18). The authors further distinguished “team loyalty” as a two-dimensional construct representing “enduring allegiance to a particular team” (p. 16). Again, we see “enduring” as a critical dimension of fanship. Additional sport and leisure studies research distinguished two forms of loyalty, behavioral and attitudinal (Park and Kim 2000). Attitudinal loyalty is the closer construct to “attachment” as described by Park and Kim in the context of recreational sport as “the process of attaching psychologically to a selected recreational sport program” (p. 198). Here the authors extend the loyalty construct from an organizational commitment model developed by Allen and Meyer (1990), consisting of affective, continuance, and normative components.

Wann and Pierce (2003) compared the aforementioned SSIS to the PCT scale, in the context of fan behavior utilizing the Sport Fandom Questionnaire (SFQ). The SFQ, introduced by Wann (2002), represents a measure of one’s identification with being a sport fan. Unlike previous identification studies discussed, this construct goes beyond the identification with any single team or player, and instead examines one’s self-perceptions as a sport fan. Comparing the SSIS and PCT, Wann and Pierce determined that the two measures were highly correlated and appear to assess a similar construct, as both scales predicted fan behaviors as represented by the SFQ measure. The results of this study may imply that loyalty and team identification are in fact similar constructs, at least as operationalized in the two unique unidimensional scales examined. Of these two scales, Wann and Pierce concluded that the SSIS was more strongly related to a general measure of fandom, as represented by the SFQ.

Models and Scales in Relation to TV Viewing of Sports

The lone use of a scale for television viewing was introduced by Gantz and Wenner (1995) and created a fanship index based on an individual's: interest in watching TV sports in general, perceived knowledge of one's favorite sport, exposure to sports programming on the weekends, and exposure to televised sporting events on weekdays. While this study was not focused on scale development, the author's did introduce a scale for sport fanship based on television sport viewing experiences, which reported a Cronbach's alpha of .74. The fanship index moved beyond existing unidimensional approaches by accounting for affective, cognitive, and behavioral components. Frequency distributions were then used to identify respondents in the outer two quartiles, labeled "fans" and "non-fans." Other interesting contributions from this research included the link between fanship and affective responses to a sport exposure, which determined that fans were more emotionally involved and more invested in the television viewing experience.

Program Liking (Content Involvement)

Murry, Lastovicka, and Singh (1992) used Gardner's definition of moods in a subsequent definition of program liking as a summary evaluation of the experience of viewing a television program. This definition distinguishes program liking from affective responses. Thus, a preference for watching sports programming would indicate a "high liking" for this material, but would indicate little regarding the affective investment in the program, or outcome of such behavior. The authors distinguish program-elicited feelings from program liking by recognizing these feelings as "temporary affective states that are subjectively perceived by an individual" (p. 442). Based on this definition, program-elicited feelings can be construed as either moods or emotions. So, while two baseball fans watching a Yankees-Red Sox game may both respond consistently regarding their liking for viewing MLB baseball on television, the outcome of the

events on the field, is posited to move their program-elicited feelings differently and either subtly effecting each viewers mood, or producing more noticeable emotional outbursts depending on each individuals' affective investment in the two teams competing.

Murry and Dacin (1996) elaborated on the relationship between program-elicited feelings and program liking. The authors postulated that program-elicited positive emotions directly influence program liking, while negative emotions trigger cognitive processing which seeks to interpret how the program may "threaten the viewer's well-being" (p. 440). While on the surface one may not associate the viewing of sports, regardless of the outcome, with a threat to the viewer's well being, the common practice of gambling on sports may be an exception. Social identity theorists may also argue that when a fan's favorite team loses that individual's well-being is "threatened." Hirt et al. (1992) found that after a team loss, highly identified fans felt worse about themselves and their own abilities. Gwinner and Swanson (2003) described this relationship in that "fans highly involved with a team can be extremely loyal, holding a particular team as central to their identity where team success and failure is interpreted as personal success or failure" (p. 277).

Murry, Lastovicka, and Singh (1992) concluded that the liking of a program was a better predictor of an advertisement's success than the negative or positive emotion created by the program. Thus, they concluded that program liking was a better predictor of success than PIA. Schumann (1986) also found that product evaluations (of advertised products) were influenced by program liking. Applying these findings to the topic of sports context media we may find that the liking for sport media should be more instrumental in ad effectiveness than program-induced affect, and the outcome of play may have little effect on attitude formation.

Advertising Effectiveness

While ad recall has been examined as a consequence of program created affective states, this study seeks to introduce the effect of these affective states on attitude formation, specifically Aad and Ab as core measures of ad effectiveness, and thus seeks to extend the knowledge within this field of study.

Ad Recall

Ad recall has been the most frequently studied dependent variable of sport programming created affective responses (Pavelchak et al. 1988; Newell et al. 2001). Both studies sought to support an intensity arousal theory utilizing Super Bowl viewership in three separate cities (winning team city, losing team city, and neutral city). The two studies found conflicting results regarding ad recall, with Pavelchak et al. finding higher recall scores for viewers with no team preference, while Newell et al. found no diminished ad recall among fans from the participating cities. Both studies however did find support for their initial hypothesis regarding elevated levels of arousal and pleasure for viewers with a team preference.

While ad recall is a noteworthy consequence of pleasure and arousal to be studied, this measure remains a front-line measure of advertising effectiveness and fails to facilitate a real understanding of attitudinal effects of fanship. This viewpoint is similar to that expressed by Meenaghan (2001) in regards to the evolution of sport sponsorship research that focuses on event sponsorship recall.

Attitude Toward the Ad (Aad) and Attitude toward the Brand (Ab)

While the attitude toward the ad (Aad) construct has received near consensus regarding its mediating role in influencing attitude toward the brand (Ab) (Batra and Ray 1986; Lutz et al. 1983; Mitchell and Olson 1981) and advertising effectiveness, scholars have differed in the core dimensions of the construct (Olney, Holbrook and Batra 1991). While early studies

operationalized Aad as a unidimensional global affect measure (Lutz et al. 1983; Mitchell and Olson 1981), numerous studies since, have attempted to isolate the cognitive or affective elements of a subject's evaluation (e.g. Bruner II 1998). Most commonly, researchers have examined Aad as a multidimensional construct (Batra and Ray 1983; Holbrook 1978; Muehling 1987) and recent scale development has sought to isolate the affective and cognitive dimensions of advertising evaluations.

Conceptualization of Constructs for this Study

The literature reviewed thus far led to the following conceptualizations:

Affective responses – Due to the uniqueness of sport as a media vehicle, conceptualization must include all affective components of sport-programming induced feelings, including mood and emotions. Whereas other media contexts may have more subtle effects on moods, the effects of sport spectating is known to produce greater arousal which can be directly attributed to the results of the events on the field of play.

“Fanship” as involvement - Within this study there are two objects which will be studied regarding an individual's involvement: involvement with a participant (team or athlete) and involvement with a piece of sport content. Conceptually, this study shall define fanship in terms of “fanship toward specific sport content” (Fan Content) and “fanship toward specific sport participants” (Fan Participant). The term participant was selected to account for fanship toward athletes in individual, as well as team sports.

When speaking of Fan Participant, this term will represent an individual's “fan” or “fanship”, and the construct of Fan Content shall be similar in nature to “program liking,” but with a more enduring conceptualization, somewhat similar to the “domain involvement” construct identified by Gwinner and Swanson (2003). The distinction between “content” and “participant” is of critical importance as one delineates between the multidimensionality of the

mediators of affective responses. While the term “program liking” seems to be a natural fit with television programs, Fan Content shall represent all mediated communications (e.g. magazine or newspaper article, or website/webpage) an individual consumes in relation to the object on their fanaticism.

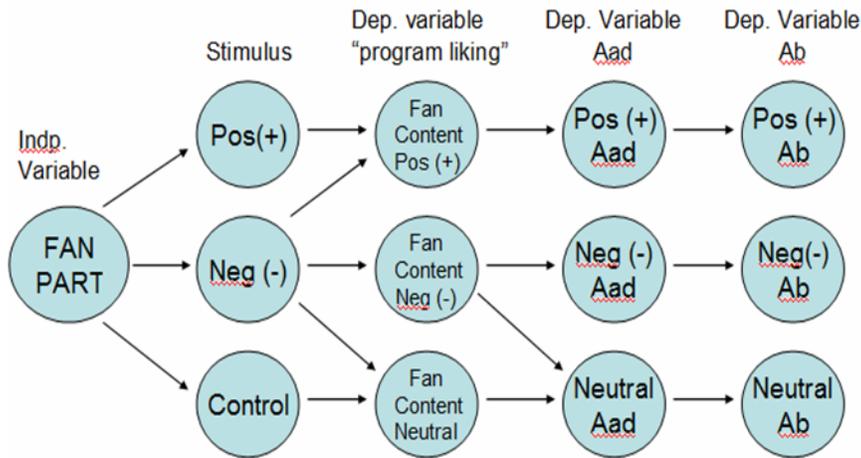


Figure 2-1- Proposed Model of Fan Identification on PIA and Ad Effectiveness

The inclusion of mood and emotions as mediators of Aad seems like a logical progression, but other researches who have tried to identify the mediating role of moods have failed in identifying any mediation. Hirst et al. (1992) found significant results of fanship and event outcome on moods, team estimates (how the team would do in the future), and self estimates (how the respondent would perform on skills test). Significantly, the authors also found that mood did not mediate the effects of outcome on subjects’ estimates. A second study by Snyder, Lassegard and Ford (1986) added self-esteem as a new variable; and while affected by outcome, the authors found that mood did not significantly predict self-esteem over and above the independent variables. The authors also attempted to find a mediating role for mood in the context of CORFing, but their results indicated that the postulated mood mediational model did not fit the data.

While there are questions about the mediating effects of moods (and in this study emotions) on Aad in a PIA study, the role of program context is more accepted. Mackenzie and Lutz (1989) posited that program context is an antecedent of Aad, and is likely to mediate program context influences on Ab.

Hypotheses

Whereas most media creates affective responses that are fairly consistent and valence congruent among most viewers, sports have a uniquely opposed audience which is expected to experience bipolar affective outcomes depending on an individual's team affiliation and the strength of that relationship (For a review of antecedents of spectator affect during a live sporting event see Madrigal 2003).

H1 - Level of fanship will moderate mood changes when exposed to team specific media regarding their preferred team.

H1a –The greater the fan involvement, the greater the negative moods following exposure to a losing team effort.

H1b - The greater the fan involvement, the greater the positive moods following exposure to a winning team effort.

H2 - Among highly identified fans of participating teams, sporting events will create significantly different emotions among fans of the winning and losing teams (or positive versus negative situations).

H2a – Pleasure will be significantly higher for highly identified fans of winning teams, versus highly identified fans of losing teams.

H2b – Arousal will be significantly higher for highly identified fans of winning and losing teams, compared to the control group of individuals with low levels of fanship.

H2c – Dominance will be significantly higher for highly identified fans of winning and losing teams, compared to the control group of individuals with low levels of fanship.

H3 – Affective states created by the sport programming will affect advertisement evaluations in this media, with Aad and Ab being directly correlated to positive and negative affective states created by the sport media, among highly identified fans.

H3a – Highly identified fans of winning teams will witness elevated levels of Aad as compared to highly identified fans of the losing team and non-fans.

H3b – Highly identified fans of losing teams will report lower Aad scores than highly identified fans of the winning team and non-fans.

H3c - Highly identified fans of winning teams will witness elevated levels of Ab as compared to highly identified fans of the losing team and non-fans.

H3d – Highly identified fans of losing teams will report lower Ab scores than highly identified fans of the winning team and non-fans.

CHAPTER 3 METHODOLOGY

Research Design

While Pavelchak et al. (1988), Newell et al. (2001) and Tobar (2006) utilized consumer selected real-world settings for exposure to various Super Bowls due to the high viewership of these live events, all three studies failed to account for opportunity and ability factors which may have inhibited respondents from centrally processing the advertisements. A national consumption study of Super Bowls XXXII and XXXIV by Lyberger and McCarthy (2001) found that 91% of respondents did not plan on watching the Super Bowl by themselves. Since Super Bowl viewing, especially in Super Bowl cities, is often categorized by parties and social get-togethers, the presence of additional distractions may have likely inhibited the respondents' opportunity and ability to process the advertising. While these environments had unquestionable external validity strengths, an experimental design is preferred for this study in order to control for all stimuli and to measure mood and emotions closer to the point of stimulation and not in post-evaluation scenarios like the previous studies. Unfortunately the very nature of "sport" makes it difficult to recreate in a lab environment. As Madrigal (2003) detailed, "sporting events are a type of live, unscripted performance consumed by spectators either in person or via media" (p. 25). An additional limitation of previous work by Pavelchak et al. (1988) and Newell et al. (2001) was the nature of the timing delayed assessments, used within these evaluations, which required subjects to respond with stored evaluations, and therefore may have been biased by mood states at the point of retrieval, or the ability to accurately retrieve previously experienced moods.

For this study, an experimental design with three conditions was employed with sport outcomes (win/loss/neutral or control) as the experimental conditions. Teams winning and losing

were chosen to present positive and negative outcomes, but these are by no means the only sport outcomes which results in positive and negative affective responses.

All respondents began the experiment by completing a brief questionnaire containing self-report scales for team identification with the two college basketball teams expected to have low fanship among the study sample, due to their lack of geographic proximity to the sample. In addition, global mood evaluations were collected at this time to reflect mood states upon entering the experiment.

Following the completion of the first brief survey, students in the control group were asked to watch a brief clip of a basketball game between the two college basketball teams they just answered questions about regarding their personal identification as fans or non-fans of those specific teams. The nearly eight minutes of basketball footage was immediately followed by a single commercial for a newly released cell phone.

Students in the non-control groups were provided additional instructions after completing the first survey. These details included a stipulation that the participant would receive three extra credit points if the team they were randomly assigned to scored more points in the forthcoming clip. Conversely, if their team was outscored they would only receive one extra credit point. Assignment to each of the two conditions (win and loss) was determined by randomly distributing playing cards among all participants present from a full and shuffled deck. Those receiving red cards were assigned to the win condition while those receiving black cards were assigned to the loss condition.

Sample and Team Selection

This study included 298 male and female undergraduate students enrolled in three different sections of advertising courses at a large Division I southeastern university. The decision to use college students was supported by the subject matter being studied, college

sports, which typically has great relevance among this audience. Several previous studies have indicated that the most highly identified fans are those supporting college athletics (Goldstein and Arms 1971; Schurr, Ruble, and Ellen 1985; Zillman et al. 1979), thus undergraduate students at a large public university were deemed an appropriate sample for studying fan behavior. According to Calder, Phillips and Tybout (1981) “the ideal theory falsification procedure, however, is to employ maximally homogeneous respondents. This entails sampling from groups of individuals that are similar on dimensions likely to influence the variables of theoretical interest” (p. (199-200)). In this research, the homogeneity in the sample of students was expected to be high, thus providing a stable sample for measurement of attitudes towards a sporting event and commercial presence. The most important similarities included their length of familiarity with cell phones and brand experiences.

Since this study is specifically concerned with the affective responses and attitude formation of highly identified fans compared to non-fans, it was necessary to compare fans and non-fans under positive and negative situations. In order to accomplish this, subjects were randomly assigned to one of three experimental conditions: (a) high-fanship and positive content; (b) high-fanship and negative content; and (c) control (non-fans, or low-fanship, likely to view the stimuli as either positive or negative). Traditionally, fanship could be measured in terms of identification with a specific team. The current study utilized this approach, but attempted to manipulate temporary involvement with one of the two teams participating in order to create random assignment of involvement as a substitute for actual fanship.

Research participants were recruited from two different advertising courses. Participants for the win and loss conditions were recruited from two sections of a large introductory course consisting of various majors from several colleges within the university. These participants were recruited during their class and told that if they signed up for an extra credit project they would

receive the standard two points of extra credit commonly offered by their instructor. These individuals then signed up for one of several time slots available for this experiment. Subjects from this class then entered a single classroom at various dates and times within the following ten days. Regardless of which day and time the participants chose they were treated to the same experimental procedures. Within every scenario, participants were being randomly assigned to either the win or loss condition based on a playing card handed to them upon entering the classroom where the experiment occurred.

The control group was specifically held at a separate time for several notable reasons. First, it was critical for participants to believe that their extra credit points would vary depending on the outcome of the game. This manipulation was critical in creating the involvement needed to replicate fan behavior. If control group subjects were interspersed with the two test conditions, the subjects likely would have had a harder time accepting the multi-faceted classification system and varying levels of extra credit. While this may not have lead to hypothesis guessing it may have led subjects to doubt that so many different extra credit levels would actually be offered to a single class. In addition, the IRB required that students have the ability to opt-in to a study worth two extra points if they were uncomfortable with the gamble of one or three extra credit points. If a group of students within the same experiment were going to be receiving two points they may have asked to be included in this sample, which would have eliminated the randomness of the assignment.

The entire control group was taken from a second advertising class within the college who were all gathered together for class and told that they could receive two extra credit points for participation in the study. Since theses subjects had already completed the course where the other subjects were collected from, it decreased the likelihood that any discussion occurred where an individual might have discussed their assignment to rooting for a specific team based

on playing cards. No playing cards were involved in this class as all subjects were included within the same condition.

Product Category and Brand Selection

An additional element of the experiment that was carefully considered was the selection of the advertisement to be tested. In order to increase internal validity, a commercial was required that featured a product of relevance to the sample. The commercial chosen for this experiment was a relatively new commercial for the Samsung Behold smartphone. This commercial was chosen as cell phones represent a product category that is relevant to the audience. Academic studies have found that over 97% of college students own a cell phone (Gemmill and Peterson 2006) and recent industry reports indicate that this percentage has grown to 99% in the most recent quarter (IBM 2009). A recent Ball State University study also found that 27% of college students owned smartphones, which was 8% higher the national average (DN Online 2009), thus making smartphones a relevant product for the sample used in this study.

The commercial was also newly released, which was preferred for this study, as it was less likely that participants had already been overexposed to the stimuli, thus allowing the exposure within this experiment to more accurately measure initial attitudes formed in the context of the current study, instead of previously formed attitudes created under previous immeasurable circumstances. The brand selected also represents a second tier brand within the cell phone market (not one of the top three manufacturers of these products) and thus was less likely to be owned, and therefore less likely to possess the well entrenched attitudes common among products consumers have greater experience with, and therefore had the opportunity to witness variance in attitude formation within the experiment. A more established brand/product (i.e. the Apple iPhone), would have had more strongly held engendered attitudes which would

have been more difficult to alter within a laboratory experiment measuring attitudes toward a brand following a specific exposure.

Experimental Procedure

With the permission of instructors, the researcher recruited students through multiple advertising courses. The students were promised two extra credit points for participation. Students then signed a sheet indicating a specific time and date to participate in the study. In the test conditions students entered a classroom and were handed a playing card from a randomly shuffled standard deck of cards. All test groups were conducted in the same classroom to maintain internal validity.

At the designated start time a note was posted on the door indicating that the experiment had begun and that late arrivals would not be admitted and would need to sign up for an alternate date and time. At this time the researcher passed out a brief questionnaire including pre-exposure questions (see following section for detail on specific items) and an IRB informed consent disclosure which was signed and dated.

Once all pre-exposure questions had been completed the researcher read new instructions approved by an IRB committee. The new instructions were:

Thanks. You will now be shown the beginning of a previously recorded basketball game between Memphis and the University of Massachusetts (UMASS). When you entered the classroom you were randomly given a playing card. If you received a BLACK playing card you have randomly been assigned Memphis. If you received a RED playing card you have randomly been assigned the University of Massachusetts (UMASS). In order to make this research more interesting your professor has agreed to let me adjust his standard 2 point extra credit format. Instead of rewarding everyone 2 extra credit points for participating in this study, you will earn either 1 or 3 extra credit points based on which team scores more points during this portion of the game you are about to watch. So if the University of Massachusetts (UMASS) outscores Memphis, red card holders will earn 3 extra credit points while black card holders will earn one extra credit point. Conversely, if Memphis outscores the University of Massachusetts (UMASS), black card holders will earn 3 point while red card holders will earn one point. At the conclusion of the study today you will need to turn your survey in with your playing card to receive extra credit points.

If this uncertain outcome makes you uncomfortable, or you are uncomfortable with the nature of this experiment you are free to exit the experiment now or at any point and we will be happy to reschedule you into another experiment worth 2 extra credit points for all participants.

Participants were then asked to sign a revised IRB informed consent form. There were no instances where an individual was uncomfortable or unwilling to continue. At this point the researcher also instructed the participants in attendance not to verbally express their pleasure or discomfort while watching the video. The video then began to play on a large screen at the front of the classroom. At the conclusion of game footage all subjects were shown the same commercial from the previously identified advertiser. At the conclusion of the video a second questionnaire was distributed containing the post-exposure questioning. All subjects were instructed to remain in their seats after completing the second survey. After all subjects had completed the second survey the researcher read the following statement:

Thank you for your participation in this experiment. The purpose of this experiment was to study the effects of affective states created through sports based on affiliation with a team, leading to a positive or negative sports viewing experience. In order to accomplish this it was necessary to create a rooting interest in each of the teams participating. In order to be fair to all participants however, everyone will receive 3 extra credit points for your class regardless of which team you were randomly assigned.

Now that you have learned the true and full purpose of the current study and know about the actual manipulations that took place as part of this study, do you wish to have your data included in this research project?

Participants were then asked to sign a revised IRB form indicating their acknowledgement of the experimental manipulation and their permission to include their results within this study. Again, all participants agreed to have their responses included. Finally, participants were informed that this study would be ongoing for several days, and in order to maintain the integrity of the study they were told not to discuss the experiment itself with individuals. Subjects were then free to leave the classroom.

Measurement

Pre-exposure Questionnaire

The pre-exposure questionnaire was comprised of two sections. The first recorded the respondents' global mood state and was measured through a three-item semantic differential scale utilized by Pham (1996) with a Cronbach alpha of .94. The items included in this global mood scale were "I am in a good mood/bad mood," "I am feeling happy/unhappy," and "I am pleased annoyed." While several other scales conceptualized their usage as mood scales, the items clearly represented more visceral emotions.

The second section measured the individuals' team identification (Fan Participant) and leveraged the original Wann and Branscombe (1993) SSIS. This scale consists of seven items, and uses a Likert-scale with end points from one to eight, with the summation of all seven items being used to create an aggregate score of fanship. Previous results suggested that the scale was both reliable, alpha of .91, and unidimensional. While other scales have examined the multidimensional nature of identification to include players, the team, coach, etc., this study is purposefully interested in fan identification with a team as the primary object of interest, thus the selection of the SSIS.

Post-Exposure Questionnaire

After reviewing the game footage and advertisement, respondents were asked to complete a second questionnaire comprised of five sections, "program liking" (FANCONTENT), advertising effectiveness (Aad and Ab), affective states (mood and emotions), involvement, and biographical data. In order to measure "program liking" in the context of the current study, a modification of existing scales was required to measure involvement with the specific sport. The scale with the best fit for modification appeared to be Speed and Thompson's (2000) scale measuring involvement with an event. Their original scale consisted of four items and reported a

Cronbach alpha of .96. A slight modification of this scale produced the following three items to be measured on a seven-point Likert-type scale consisting of the following statements: “I am a strong supporter of college basketball,” “I would want to attend college basketball games,” and “I enjoy following coverage of college basketball.”

The second section consisted of Aad and Ab scales directed at the advertised brand. Several scales have been developed to measure Aad, either by affect or cognition, or by media. For the purpose of this study, an attitude toward the ad scale will be borrowed from one created and utilized by Cho, Lee and Tharp (2001). This scale consists of eight Likert-type statements designed to evaluate overall attitudes regarding a specific advertisement. The actual scale items were not provided in this article, but were detailed by Bruner, Hensel and James (2005). The eight items utilized in this scale are as follows: “I like this ad,” “this ad is entertaining,” “this ad is useful,” “this ad is important,” “this ad is interesting,” “this ad is informative,” “I would enjoy seeing this ad again,” and “this ad is good” (p. 735). The scale demonstrated high reliability for this study, with an alpha calculated at .87. This study will also utilize the Ab scale used by Cho, Lee and Tharp in their study of banner advertising effectiveness. This scale is composed of three Likert-type statements assessing overall attitudes regarding the exposed brand. The three items utilized in this scale, and provided by Bruner, Hensel and James are: “I like _____,” “_____ is satisfactory,” and “_____ is desirable.” The authors report that the scale possesses an alpha of .92 which indicates strong reliability.

While the vast majority of PIA research excludes emotions, this study will measure both moods and emotions due to the intense emotions known to be associated with sports, among highly identified fans. The scale usage for the mood variable can be found in the pre-exposure questionnaire section of this paper. To measure emotions, the frequently used Mehrabian and Russell (1974) semantic differential scale will be used due to the strong validity and reliability of

the scale. This scale will allow for pleasure, arousal and dominance to be examined individually, utilizing a six-item, seven-point Likert scale to measure each dimension of emotions.

Next, a three-item, seven-point Likert scale will be utilized to measure the participants' involvement with the stimuli to check if "fan behavior" was created through the experiment manipulation. For this measure the study utilized a "situational" involvement scale originating from the Zaichkowsky (1985) Personal Involvement Inventory (PII). This scale has been used in several studies and Cronbach alphas have been reported in the range of .89 to .99 (Bruner, Hensel, and James 2005). The scale consists of three semantic differential pairs: unimportant-important, of no concern-of concern to me, and irrelevant/relevant. The survey instrument also contained questions dealing with basic demographic data including age and gender.

CHAPTER 4 RESULTS

This chapter reports the statistical tests of the hypotheses and research questions. SPSS 17.0 and Microsoft Excel were used for the data analysis. The first step was to determine if any respondents needed to be removed from the sample due to high levels of actual identification with either of the teams in the tested stimuli. Examining the scale used to measure team identification, this study obtained a Cronbach alpha of .83 and .84 for the usage of the seven-item scale twice within this study, once for each of teams participating in the study. Of the 298 participants, only three indicated a level of identification over five on an eight-point scale measuring team identification with the two competing teams. Given the small number of individuals indicating some level of fanship with one of the two teams, it was decided to leave these subjects in the analysis. As for the sample itself, 70.4% of the subjects were female (n=209) and the mean age of the participants was 20.5 years. Means were compared on the variables studied to determine if there were any differences based on gender which may have affected the results of this study. Men and women reported no significant differences in pre or post moods, involvement with the stimulus, and reported levels of pleasure and arousal. The two groups did report significant differences on the scale used to measure fanship of college basketball, but this variable was seen to have no effect on any of the dependent variables tested.

The next step required was a test to measure the success of the manipulation of the two involvement treatments. Was the random assignment of individuals to a team and the promise of varying levels of extra credit effective in creating temporary involvement with the stimuli? In order to answer this question a manipulation check was conducted utilizing a one-way ANOVA (analysis of variance) in which the three treatment conditions (win, loss and control) were the independent variables and a three-item involvement with the “game and outcome” scale was utilized as the dependent variable. The three-item involvement scale utilized reported a Cronbach

alpha of .96 in this experiment showing high reliability for this scale. Results showed involvement with the stimuli was significantly higher for the win and loss conditions than the control group where no team assignment or promise of additional rewards occurred. The means for the involvement levels among the test conditions and control group were significantly different, $F(2, 292) = 19.527, p < .05$ (Table 4-1). Means for the win and loss condition were 4.8 and 4.49 respectively, while the mean for the control group's involvement was a mere 2.36.

A post hoc Scheffe analysis confirms a significant delineation between the two test conditions and the control group, thus demonstrating that during the experiment the manipulation was successful in producing a significantly higher level of involvement among individuals in the treatment conditions. Thus, it is believed that this manipulation was successful in creating involvement in the stimuli representative of what fans experience while watching their teams compete. Therefore, it should be concluded that this manipulation yielded the correct conditions for a test of the previously identified hypotheses.

Table 4-1. One-Way ANOVA results for "involvement" by condition

Win	Loss	Control
4.8 ^a (n=130)	4.5 ^a (n=135)	2.4 ^b (n=30)

Note: means with different superscripts differ at $p < .05$ using Scheffe post hoc test.

H1 - Level of fanship will moderate mood changes when exposed to team specific media regarding their preferred team.

H1 theoretically tests the bipolarity of sports as a media vehicle. In order to test these hypotheses the dependent measure of post-mood was compared to the pre-mood measure using MANOVA (multivariate analysis of variance) with team performance (win, loss and control) as the independent variables.

H1a –The greater the fan involvement, the greater the negative moods following exposure to a losing team effort.

H1b - The greater the fan involvement, the greater the positive moods following exposure to a winning team effort.

Utilizing tests of between-subjects effects for the three conditions demonstrated no significant differences on the measure of pre-experiment moods, $F(2, 293) = 2.422, p > .05$. The global mood scale reported a Cronbach alpha of .85 for the pre-exposure usage and .93 for the measure of moods post exposure, both of which indicate satisfactory reliability for this scale. Referencing Table 4-2 one can see that the two treatment conditions were successful in creating significant mood changes among the two treatment conditions and control group $F(2, 293) = 47.905, p < .01$, but as expected the stimuli produced no significant mood changes among the control group when compared to their pre-mood means. For respondents in the win condition, self-reported moods were significantly higher after watching the stimuli, conversely, those in the loss condition reported significantly lower moods than they reported prior to beginning the experiment. Thus, both hypotheses were statistically supported.

Table 4-2. MANOVA for “mood” by condition

Dependent Variable	Condition	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
pre mood avg	Win	5.300 ^c	.116	5.072	5.528
	Loss	5.195 ^c	.114	4.971	5.419
	Control	5.774	.237	5.307	6.241
post mood avg	Win	5.569 ^{a c}	.128	5.317	5.821
	Loss	3.901 ^{bc}	.126	3.654	4.148
	Control	5.559 ^a	.262	5.044	6.075

Note: means with ^b superscripts differ between groups with ^a superscripts at $p < .05$ using Scheffe post hoc test. Means with ^c superscripts differ within groups from pre to post reporting.

H2 - Among highly identified fans of participating teams, sporting events will create significantly different emotions among fans of the winning and losing teams (or positive versus negative situations).

H2a – Pleasure will be significantly higher for highly identified fans of winning teams, versus highly identified fans of losing teams.

Table 4-3 contains the means and standard deviations for the “pleasure” measure among the three conditions. A significance difference between the three conditions was found using a

one-way ANOVA, $F(2, 293) = 52.788, p < .05$. Pleasure was measured using a 6-item scale consisting of the following semantic differential pairs: happy-unhappy, pleased-annoyed, satisfied-unsatisfied, contented-melancholic, hopeful-despairing, and relaxed-bored. All items were rated on a 7-point Likert scale with higher scores indicating positive pleasure responses and lower pleasure scores indicating negative pleasure responses. Within this study the six-item scale reported a Cronbach's alpha of .9.

Table 4-3. One-Way ANOVA results for "pleasure" by condition

Win	Loss	Control
5.2 ^a (n=130)	3.75 ^b (n=135)	4.94 ^a (n=31)

Note: means with different superscripts differ at $p < .05$ using Scheffe post hoc test.

A post hoc Scheffe analysis supported hypothesis H2a as respondents in the win condition reported significantly greater pleasure than respondents in the loss condition. In addition, the control group reported significantly higher scores on the pleasure dimensions than the loss condition. Interestingly, there was no significant difference between individuals in the win condition and those in the control group.

H2b – Arousal will be significantly higher for highly identified fans of winning and losing teams, compared to the control group of individuals with low levels of fanship.

Table 4-4 contains the means and standard deviations for the "arousal" measure among the three conditions. A significance difference between the three conditions was found using a one-way ANOVA, $F(2, 293) = 6.945, p < .05$. Arousal was measured using a 6-item scale consisting of the following semantic differential pairs: stimulated-relaxed, excited-calm, frenzied-sluggish, jittery-dull, wide awake-sleepy, and aroused-unaroused. All items were rated on a seven-point Likert scale with higher scores indicating higher levels of arousal and lower pleasure scores indicating lower levels of arousal. The six-item scale for arousal reported a Cronbach alpha of .76.

Table 4-4. One-Way ANOVA results for “arousal” by condition

Win	Loss	Control
4.0 ^a (n=130)	3.5 ^b (n=135)	3.8 ^{ab} (n=31)

Note: means with different superscripts differ at $p < .05$ using Scheffe post hoc test.

A post hoc Scheffe analysis indicated that there was no significant difference between the fan conditions (win and loss) and the control condition. There was however a significant difference between fans in the win and loss conditions, with individuals in the win condition reporting significantly higher levels of arousal than individuals in the loss condition. These results require us to reject hypothesis 2b.

H2c – Dominance will be significantly higher for highly identified fans of winning and losing teams, compared to the control group of individuals with low levels of fanship.

Table 4-5 contains the means and standard deviations for the “dominance” measure among the three conditions. A significance difference between the three conditions was found using a one-way ANOVA, $F(2, 293) = 7.082, p < .05$. Dominance was measured using a 6-item scale consisting of the following semantic differential pairs: controlling-controlled, dominant-submissive, influential-influenced, important-awed, autonomous-guided, and in control-cared for. All items were rated on a 7-point Likert scale with higher scores indicating higher levels of dominance and lower scores indicating lower levels of dominance, or increased levels of submissiveness. The six-item scale for dominance reported a Cronbach alpha of .75.

Table 4-5. One-Way ANOVA results for “dominance” by condition

Win	Loss	Control
4.4 ^a (n=130)	4.0 ^b (n=135)	4.4 ^{ab} (n=31)

Note: means with different superscripts differ at $p < .05$ using Scheffe post hoc test.

A post hoc Scheffe analysis identifies a significant difference between the fan conditions, with subjects in the win condition indicating greater dominance than their peers in the loss condition who reported greater submissiveness (the opposite of dominance as detailed by

Mehrabian and Russell (1974)) There were no significant differences between fans in the treatment conditions and individuals in the control group. These results require us to reject hypothesis 2c.

H3 – Affective states created by the sport programming will effect advertisement evaluations in this media, with Aad and Ab being directly correlated to positive and negative affective states created by the sport media, among highly identified fans.

Table 4-6 contains the means and standard deviations for the Aad measure among the three conditions. Though a significance difference between the three conditions was found using a one-way ANOVA, $F(2, 291) = 6.924, p < .05$, a post hoc Scheffe analysis provides a more detailed look at differences between individual conditions which will be discussed further. The eight-item scale for Aad showed strong reliability with a reported Cronbach alpha of .93.

Table 4-6. One-Way ANOVA results for “Aad” by condition

Win	Loss	Control
4.4 ^a (n=130)	4.2 ^a (n=133)	5.1 ^b (n=31)

Note: means with different superscripts differ at $p < .05$ using Scheffe post hoc test.

H3a – Highly identified fans of winning teams will witness elevated levels of Aad as compared to highly identified fans of the losing team and non-fans.

A post hoc Scheffe analysis fails to support hypothesis 3a, as subjects in the win condition showed no significance difference in rating the tested advertisement on the Aad scale compared to the subjects in the loss condition. In addition, the analysis indicates that while there is a significant difference between the win and control conditions, the difference is not in the direction expected. Respondents in the control condition reported a significantly higher Aad, $p < .05$, than the respondents in the win condition. Thus, we must reject hypothesis 3a.

H3b – Highly identified fans of losing teams will report lower Aad scores than highly identified fans of the winning team and non-fans.

The statistical results of a post hoc Scheffe analysis failed to support hypothesis 3b, as subjects in the loss condition showed no significance difference in rating the tested

advertisement on the Aad scale compared to the subjects in the win condition. Similarly to the win condition, the analysis indicates that there is a significant difference between the loss and control conditions, $p < .05$, with the difference being in the hypothesized direction. Given the lack of difference between the win and the loss conditions however, one can assume that the differences in Aad results may be more highly related to a factor other than the independent variables of wins or losses.

H3c - Highly identified fans of winning teams will witness elevated levels of Ab as compared to highly identified fans of the losing team and non-fans.

Having determined that there were no significant differences between the two test conditions on the Aad measure, it would foretell that there is likely no significant affect on Ab measures. *Table 4-7* contains the means and standard deviations for the Ab measure among the three conditions. The three-item Ab scale showed acceptable reliability with a Cronbach alpha of .91. Similar to the Aad test, a one-way ANOVA for Ab scores across identified no significant differences between the test conditions. In addition, there were no significant differences between either of the two test conditions and the control group, $F(2, 292) = 2.817, p > .05$. Again, a post hoc Scheffe analysis was utilized to provide a more detailed look at differences between individual conditions. This analysis indicates that the greatest difference on the Ab measure was between the loss and control conditions, but these scores were not significant, $p = .079$.

Table 4-7. One-Way ANOVA results for “Ab” by condition

Win	Loss	Control
4.5 (n=130)	4.2 (n=134)	4.8 (n=31)

The post hoc Scheffe analysis confirms that there were no significant differences found on the Ab measure for the win, loss and control conditions. Therefore, we can reject hypothesis 3c as no significant differences were found.

H3d – Highly identified fans of losing teams will report lower Ab scores than highly identified fans of the winning team and non-fans.

Referring back to *Table 4-7*, we see that there were no significant differences between the loss condition and the win and control conditions on the Ab measure for the tested ad. Again, we must reject hypothesis H3d as no significant differences were found for individuals in the loss condition.

Table 4-8. Summary of Hypothesis Findings

	Supported	Failed to Support
H1a –The greater the fan involvement, the greater the negative moods following exposure to a losing team effort.	X	
H1b - The greater the fan involvement, the greater the positive moods following exposure to a winning team effort.	X	
H2a – Pleasure will be significantly higher for highly identified fans of winning teams, versus highly identified fans of losing teams.	X	
H2b – Arousal will be significantly higher for highly identified fans of winning and losing teams, compared to the control group of individuals with low levels of fanship.		X
H2c – Dominance will be significantly higher for highly identified fans of winning and losing teams, compared to the control group of individuals with low levels of fanship.		X
H3a – Highly identified fans of winning teams will witness elevated levels of Aad as compared to highly identified fans of the losing team and non-fans.		X
H3b – Highly identified fans of losing teams will report lower Aad scores than highly identified fans of the winning team and non-fans.		X
H3c – Highly identified fans of winning teams will witness elevated levels of Ab as compared to highly identified fans of the losing team and non-fans.		X
H3d – Highly identified fans of losing teams will report lower Ab scores than highly identified fans of the winning team and non-fans.		X

CHAPTER 5 DISCUSSION AND CONCLUSIONS

The purpose of the current research was to better understand the affective states created by sports, and their impact on advertising effectiveness as measured by attitudes toward ads and brands. This study differentiated itself from previous research by Pavelchak et al. (1988) and Newell et al. (2001) in that it expanded advertising effectiveness from brand recall to attitudes toward specific advertising and attitudes toward brands within sport programming. The extant literature in Aad research has supported the premise that moods created by TV programming have a significant effect on advertising effectiveness, yet research has failed to address the possible creation of bipolar moods created by sport programming, and what effect these bipolar moods may have on advertising evaluations within a single program among different audiences. This issue has significant relevance to marketers and advertisers if the creation of negative moods and emotions, in the case of negative event outcomes (i.e. losses), has a detrimental effect on advertising and sponsorship evaluations. While the unpredictability of sports would prevent an advertiser from avoiding exposure to fans in the latter condition, it would provide caution to the brands, which could manifest itself in lower CPMs to reach these audiences due to the volatile nature of moods among highly involved fans.

Affective Responses Created by Sports Programming

This study corroborates the findings of previous research studies that sports are capable of creating changes in affective states among highly involved sports fans. This was demonstrated through the significantly different moods reported among highly involved “fans” in the “win” and “loss” conditions. These global mood states moved significantly in the expected directions for “fans” of the winning and losing teams. In addition to significant changes in self reported moods, participants who were in the “win” condition reported significantly higher levels of pleasure when compared to the “loss” condition. Additionally, individuals in the “win”

condition reported higher levels of arousal and dominance than their peers in the “loss” condition. These results vary from those of Newell et al. (2001), which found that arousal levels were significantly higher for fans of both the winning and losing teams when compared to non-fans. Pavelchak et al. (1988) found that arousal was a greater predictor of ad recall than pleasure, but the former study failed to examine the relationship of these dimensions of emotions to attitudes towards advertising and brands.

While the link between sport events (wins/losses and positive/negative outcomes) and mood and emotion changes is quite sensible, the bipolarity of these affective responses are still poorly understood and under researched by scholars. This study was unable to demonstrate a significant relationship between these affective states and attitude formation toward advertising; extant research would suggest that variance in evaluations is likely given the breadth of research showing a correlation between moods and advertising evaluations.

Attitude findings

While this study identified elevated Aad scores among the control group, representing non-fans, relevant to the test conditions, the study was unable to conclusively attribute this difference to any of the factors measured, including; the three dimensions of emotions and mood states. While involvement with the program was significantly lower among the control group, this difference fails to explain the heightened attitudes for the advertisement given that the involvement failed to correlate with the arousal reported between the test conditions and the control group.

Given that no significant differences were found between the two test conditions on the Aad measure, it comes as no surprise that no significant differences were found between these two groups for the Ab measure. The lack of significance between the two test conditions and the

control group is also explainable due to the moderate, but significant difference between the control group and test conditions on the Aad measure.

Limitations

Due to the pioneering nature of this study, the results presented in this paper have significant limitations as the protocol for this research was designed specifically for this study. The first and most notable limitation of this research is the creation of temporary involvement through the manipulation of extra credit. While the author believes this approach was a successful method of creating involvement with the specific teams in the stimuli being viewed, the audience clearly lacked the long-term orientation and knowledge of the participants that would be found by conducting a similar study with actual fans during a live game. A critic could also argue that the affective responses created were the result of the incentive and not the actual sport consumption, but for the purpose of this study I believe the two were one in the same since the incentive was directly correlated to the performance of the assigned teams. Ideally this study would be conducted utilizing real fans watching a game in real time, but this was unrealistic for this research given the financial limitations of recruiting fans of two competing teams to watch a game live. A benefit of the current research design was the homogeneity of the sample. This same homogeneity would be much more difficult to accomplish using fans of actual teams. For instance, in Chicago, Cubs fans are known for being more white-collar and affluent than their cross town White Sox brethren. Cubs fans and White Sox fan are also perceived as to being fans for different reasons, with Cubs fans being more motivated by the social affiliation and entertainment associated with Wrigley Field and the surrounding neighborhood. So, while real fans may improve the external validity of the research, there would undoubtedly be additional confounds that the current study was able to eliminate. Again, for theory testing research

homogeneity is of paramount importance, thus this sacrifice was indeed prudent, and advantageous to this study.

Unfortunately, live broadcasts also force the researcher to relinquish control of the advertising featured in the stimuli. So, if the advertisements are all familiar ads for top tier brands like Apple, Coca-Cola and Bud Light, it may not provide the best test of attitude formation if attitudes have already been informed and are fairly well entrenched in the consumers.

The second limitation of the research was the lack of variety in sport stimuli tested. As the literature review discussed, there are numerous factors that affect emotions of viewers, beyond mere wins and losses. The ebb and flow of many sporting events also creates emotional swings which this study was unable to replicate and measure. This study relied on a single game that was characterized by a closely fought game until the last couple of minutes in which one team pulled ahead. A last second shot, a monumental comeback, an uplifting David vs. Goliath underdog story, or a controversial call by referees could be additional factors which would influence affective responses besides the final score.

An additional limitation of this research was the size of the control group. A larger sample would have made statistics utilizing this group more stable. The timing of the control sample so close to a holiday resulted in lower than expected turnout which negatively affected attendance for this sample. The decision to use a separate class for the control group could also be criticized for lacking true random assignment, but for the integrity of the study the researcher chose to accept this risk in order to ensure the manipulation of the extra credit points and interest in the program was successfully manipulated. If participants felt that situation was unrealistic and their extra credit would not vary based on the performance of the two participating teams, then would have been less involved and less likely to experience changes in their affective states.

While the selection of a second tier brand in the cell phone category was meant to foster a cleaner slate for attitude formation, the loyalty held for other brands within this category may have affected attitudes. For instance, iPhone advocates may have been predisposed not to like a non-Apple product due to their preference for this particular manufacturer. Unfortunately, this bias was not accounted for and thus can not be discredited as a possible covariate of the attitudes reported in this study.

Lastly, since emotions are attributable to a specific source, the author determined it was improper to compare emotions from a pre and post exposure scenario, so we are limited to the variations between the three conditions at the post-exposure point only. Thus, we are unable to determine how pleasure, arousal and dominance changed within subjects throughout the experiment. Since emotions were self reported at the conclusion of the stimulus exposure, these results are directly attributable to the emotions created by the stimuli. This same set of questioning seemed inappropriate prior to the exposure since the respondents would lack a reference point for evaluation. The primary differentiator between moods and emotions was the attribution of emotions to a specific factor, a factor which was absent at the onset of the experiment. The redundancy of the questioning would also have lead to fatigue due to the breadth of the scale for these measures.

Future Research

Due to the massive investments being made by corporations in this genre of marketing, future research is certainly needed in this arena to better understand the bipolarity of affective responses created by sports programming. Specifically, how these divergent affective responses influence recall and attitude formation.

While this research found no relationship between negative affective states and negative attitude formations among fans of losing teams, more conclusive research needs to be conducted

in the field to better understand why this is not occurring, when mood congruency theory suggests that we should see an impact on attitude formation. If research does indeed discover that negative emotions are detrimental to marketers in these programs then additional research could be conducted to identify how different sports vary in the creation of affective responses. For instance, are college sports fans more feverish than professional team sports fans? Are European soccer fans more feverish than U.S. soccer fans? How do affective responses differ for individual sports vs. team sports? Perhaps tennis and golf viewers are more connected with the sport than specific athletes, thus less likely to experience the emotional ebbs and flows created by viewing team sports where there is a higher probability of witnessing a win or a loss due to the smaller number of participants. So while a NASCAR fan may favor a specific driver, say Jeff Gordon, they may realize that he is competing against 40 or so drivers every week, thus the probability of him winning is much lower than a basketball team that's playing a single opponent.

This study also focused on the evaluation of an advertisement placed immediately after the conclusion of an event. Additional studies in memory formation would be of value to understand how individuals code advertisements in their memory, specifically in regards to emotions felt at the time of exposure compared to emotions felt at the conclusion of an event. So, when a fan recalls a previously seen advertisement, do they code their attitudes with the emotions felt at the specific moment they saw the ad, or with the emotions tied to the overall sport viewing experience based on the final outcome of the contest?

Future research may also include the testing of commercials of various moods within the context of sport programming. For instance, do fans feeling negative emotions respond better to happy or sad commercials? Some may argue that this is irrelevant since marketers are unable to predict the outcomes of sporting events, and thus would be unable to target different audiences with different creative, but this knowledge would be of significant value in supporting a

consistency effects or mood maintenance theory of the role of creative mood tones and PIA in attitude formation.

Conclusions

The primary objective of this research was to better understand affective states created by sports programming to determine whether or not attitudes toward advertisements and brands differed based on the moods and emotions felt by fans of competing teams. While the passion sports fans have for the programming is unquestioned, and has largely been believed to be a positive affiliation for advertisers, this research was unable to identify any detrimental effects linked to the negative emotions felt by fans of losing teams. Conversely, no positive rub-off was witnessed among fans of the winning team. While the affective responses created by sports programming may still have significant relevance to advertisers, this research was unable to demonstrate a clear link between mood changes and attitudes toward advertising. Admittedly, not enough is known regarding attitude formation for advertising relevant to the moods and emotions felt at various points in time.

These findings fail to support the mood congruency theory that attitudes toward advertisements will move in a congruent direction with the mood of the media context. This research was also unable to explore the consistency effects and mood maintenance repair theories of PIA research.

APPENDX A
INFORMED CONSENT DISCLOSURES AND QUESTIONNAIRE

Purpose of the Study:

The purpose of this study is to gain insights into sport viewing among males and females over 18.

Expectation of Study Participants:

Those choosing to participate in this study you will be asked to view a brief 10 minute video of a previously recorded college basketball game. Prior and post viewing, you will be asked to answer a total of 58 questions regarding your experience. The study should take approximately 20 - 25 minutes to complete.

Potential Risks:

There are no potential health or stress risks involved with this study, nor will there be any personal discomfort. Should any participant feel uncomfortable at any time during this study, they are free to discontinue their participation with no penalties or questions asked.

Compensation and Benefits:

Participants will receive no financial compensation for their involvement in this study. An average of two extra credit points will be awarded to individuals from participating sections of Elements of Advertising who complete the study. There are no other expected benefits from participation in this study.

Confidentiality:

All information collected will remain confidential and responses by participants will not be associated with personal names. Participants are free to withdraw at any time during the study for any reason.

Questions/Contact Information:

If you have any questions or comments regarding the study feel free to contact Michael Clayton or Dr. Sutherland in the Advertising Department. Both individuals have offices located in Weimer Hall, or you may contact them by email at clayts23@ufl.edu and jsutherland@jou.ufl.edu. For questions about your rights as a research participant, contact the IRB @ 352-392-0433.

Agreement:

I have read and understand all of the above information and agree to participate in the study. I understand that my participation is completely voluntary and I have received a copy of this information.

Participant (print name): _____ Sect (a.m. or p.m.) _____

Participant (sign): _____ Date: _____

Primary Researcher: _____ Date: _____

Color of card (red or black): _____

Please read each of the ten pairs of words below carefully and indicate answer by circling the number which best corresponds with your current state.

1. I am in a good mood 1 2 3 4 5 6 7 I am in a bad mood

2. I am annoyed 1 2 3 4 5 6 7 I am feeling pleased

3. I am feeling happy 1 2 3 4 5 6 7 I am feeling unhappy

4. How important to YOU is it that the Memphis basketball team wins?
Not Important 1 2 3 4 5 6 7 8 Very Important

5. How important to YOU is it that the University of Massachusetts (UMASS) basketball team wins?
Not Important 1 2 3 4 5 6 7 8 Very Important

6. How strongly do YOU see YOURSELF as a fan of the Memphis basketball team?
Not at all a fan 1 2 3 4 5 6 7 8 Very much a fan

7. How strongly do YOU see YOURSELF as a fan of the UMASS basketball team?
Not at all a fan 1 2 3 4 5 6 7 8 Very much a fan

8. How strongly do your FRIENDS see YOU as a fan of the Memphis basketball team?
Not at all a fan 1 2 3 4 5 6 7 8 Very much a fan

9. How strongly do your FRIENDS see YOU as a fan of the UMASS basketball team?
Not at all a fan 1 2 3 4 5 6 7 8 Very much a fan

10. During the season, how closely do you follow the Memphis basketball team via ANY of the following: a) in person or on television, b) on the radio, c) television news or a newspaper, d) online?
Never 1 2 3 4 5 6 7 8 Almost every day

11. During the season, how closely do you follow the UMASS basketball team via ANY of the following: a) in person or on television, b) on the radio, c) television news or a newspaper, d) online?
- | | | | | | | | | | |
|-------|---|---|---|---|---|---|---|---|------------------|
| Never | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Almost every day |
|-------|---|---|---|---|---|---|---|---|------------------|
12. How important is being a fan of Memphis basketball to YOU?
- | | | | | | | | | | |
|---------------|---|---|---|---|---|---|---|---|----------------|
| Not important | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Very important |
|---------------|---|---|---|---|---|---|---|---|----------------|
13. How important is being a fan of UMASS basketball to YOU?
- | | | | | | | | | | |
|---------------|---|---|---|---|---|---|---|---|----------------|
| Not important | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Very important |
|---------------|---|---|---|---|---|---|---|---|----------------|
14. How much do YOU dislike Memphis basketball's greatest rivals?
- | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---------|
| Do not dislike very much | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Dislike |
|--------------------------|---|---|---|---|---|---|---|---|---------|
15. How much do YOU dislike UMASS basketball's greatest rivals?
- | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---------|
| Do not dislike very much | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Dislike |
|--------------------------|---|---|---|---|---|---|---|---|---------|
16. How often do YOU display the Memphis basketball team's name or insignia on your automobile, where you live, or on your clothing?
- | | | | | | | | | | |
|-------|---|---|---|---|---|---|---|---|--------|
| Never | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Always |
|-------|---|---|---|---|---|---|---|---|--------|
17. How often do YOU display the UMASS basketball team's name or insignia on your automobile, where you live, or on your clothing?
- | | | | | | | | | | |
|-------|---|---|---|---|---|---|---|---|--------|
| Never | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Always |
|-------|---|---|---|---|---|---|---|---|--------|

Thanks. You will now be shown the beginning of a previously recorded basketball game between Memphis and the University of Massachusetts (UMASS). When you entered the classroom you were randomly given a playing card. If you received a BLACK playing card you have randomly been assigned Memphis. If you received a RED playing card you have randomly been assigned the University of Massachusetts (UMASS). In order to make this research more interesting your professor has agreed to let me adjust his standard 2 point extra credit format. Instead of rewarding everyone 2 extra credit points for participating in this study, you will earn either 1 or 3 extra credit points based on which team scores more points during this portion of the game you are about to watch. So if the University of Massachusetts (UMASS) outscores Memphis, red card holders will earn 3 extra credit points while black card holders will earn one extra credit point. Conversely, if Memphis outscores the University of Massachusetts (UMASS), black card holders will earn 3 point while red card holders will earn one point. At the conclusion of the study today you will need to turn your survey in with your playing card to receive extra credit points.

22. The ad is interesting	1	2	3	4	5	6	7
23. The ad is informative	1	2	3	4	5	6	7
24. I would enjoy seeing this ad again	1	2	3	4	5	6	7
25. The ad is good	1	2	3	4	5	6	7
26. I like Samsung	1	2	3	4	5	6	7
27. Samsung is satisfactory	1	2	3	4	5	6	7
28. Samsung is desirable	1	2	3	4	5	6	7

Next, you will be presented with 18 pairs of bipolar adjectives. Please circle a number between 1 and 7 based on YOUR current feelings in relation to each pair of words.

29. Relaxed	1	2	3	4	5	6	7	Bored
30. In control	1	2	3	4	5	6	7	Cared for
31. Aroused	1	2	3	4	5	6	7	Unaroused
32. Hopeful	1	2	3	4	5	6	7	Despairing
33. Autonomous	1	2	3	4	5	6	7	Guided
34. Wide awake	1	2	3	4	5	6	7	Sleepy
35. Contented	1	2	3	4	5	6	7	Melancholic
36. Important	1	2	3	4	5	6	7	Awed
37. Jittery	1	2	3	4	5	6	7	Dull

38. Satisfied	1	2	3	4	5	6	7	Unsatisfied
39. Influential	1	2	3	4	5	6	7	Influenced
40. Frenzied	1	2	3	4	5	6	7	Sluggish
41. Pleased	1	2	3	4	5	6	7	Annoyed
42. Dominant	1	2	3	4	5	6	7	Submissive
43. Excited	1	2	3	4	5	6	7	Calm
44. Happy	1	2	3	4	5	6	7	Unhappy
45. Controlling	1	2	3	4	5	6	7	Controlled
46. Stimulated	1	2	3	4	5	6	7	Relaxed

Please answer the following questions regarding your interest in college basketball.

47. I am a strong supporter of college basketball.
Strongly disagree 1 2 3 4 5 6 7 Strongly agree
48. I would want to attend college basketball games.
Strongly disagree 1 2 3 4 5 6 7 Strongly agree
49. I enjoy following coverage of college basketball.
Strongly disagree 1 2 3 4 5 6 7 Strongly agree

Please answer the following questions regarding your interest in the particular game and outcome you just observed.

50. Unimportant 1 2 3 4 5 6 7 Important
51. Of no concern 1 2 3 4 5 6 7 Of concern to me
52. Irrelevant 1 2 3 4 5 6 7 Relevant

The remaining questions are intended for classification purposes only.

53. What is your age? _____

54. What is your gender? Male Female

55. Do you recall having previously viewed the game you just saw video from?

	YES				NO				
56. I am in a good mood	1	2	3	4	5	6	7	I am in a bad mood	
57. I am annoyed	1	2	3	4	5	6	7	I am feeling pleased	
58. I am feeling happy	1	2	3	4	5	6	7	I am feeling unhappy	

Thank you for your participation in this experiment. The purpose of this experiment was to study the effects of affective states created through sports based on affiliation with a team, leading to a positive or negative sports viewing experience. In order to accomplish this it was necessary to create a rooting interest in each of the teams participating. In order to be fair to all participants however, everyone will receive 3 extra credit points for your class regardless of which team you were randomly assigned.

Now that you have learned the true and full purpose of the current study and know about the actual manipulations that took place as part of this study, do you wish to have your data included in this research project?

____ Yes, _____ (please sign here)

____ No, _____ (please sign here)

Please remember that this study will be going on for several days. Please help us maintain the integrity of the study by not discussing the experiment with your peers. We thank you again for your participation and you are free to leave.

APPENDIX B ACRONYM SUMMARY

Aad: Attitude toward the ad

Ab: Attitude toward the brand

ANOVA: Analysis of variance

BIRGing: Basking-In-Reflected Glory

CORFing: Cutting-Off-Reflected Failure)

CPM: Cost per thousand

DVRs: Digital video recorders

ELM: Elaboration Likelihood Model

IP: Involvement Profile

IRB: Institutional Review Board

MSSC: Motivation Scale for Sport Consumption

PAD: Pleasure, Arousal and Dominance

PAI: Points of Attachment Index

PCM: Psychological Continuum Model

PCT: Psychological Commitment to Team

PIA: Program induced affect

SAM: Self-Assessment Manikin

SEVA: Surgency, Elation, Vigor/Activation

SFQ: Sport fandom questionnaire

SII: Sport Interest Inventory

SSIS: Sport Spectator Identification Scale

REFERENCES

Allen, Natalie J., and John P. Meyer (1990), "The Measurement and Antecedents of Affective, Continuance and Normative Commitment to the Organization," *Journal of Occupational Psychology*, 63(1), 1-18.

Arora, Raj (1985), "Consumer Involvement: What it offers to advertising strategies," *International Journal of Advertising* 4(2):119-130.

Atkinson, Claire (2007, May 10), "Is Crucial Daypart Finally Past Its Prime?: Megabillion TV Jackpot is Evolving into Big Events (Sports, 'Idol') Vs. Time-Shifted on Demand (Everything Else)" *AdAge.com*, http://adage.com/print?article_id=116578, 1-4.

Ayelsworth, Andrew B., and Scott B. MacKenzie (1998), "Context Is Key: The Effect of Program-Induced Mood on Thoughts About the Ad," *Journal of Advertising*, 27 (2), 17-27.

Babin, Barry J., William R. Darden, and Laurie A. Babin (1998), "Negative Emotions in Marketing Research: Affect or Artifact?" *Journal of Business Research*, 42 (3), 271-285.

Bagozzi, Richard P., Mahesh Gopinath, and Prashanth U. Nyer (1999), "The Role of Emotions in Advertising," *Journal of the Academy of Marketing Science*, 27(2), 184-206.

Batra, Rajeev, and Michael L. Ray (1986), "Affective Responses Mediating Acceptance of Advertising," *Journal of Consumer Research*, 13 (2), 234-249.

Bruner II, Gordon C. (1998), "Standardization & Justification: Do Aad Scales Measure Up?" *Journal of Current Issues & Research in Advertising*, 20(1), 1-18.

_____, Paul J. Hensel, and Karen E. James (2005), "Marketing Scales Handbook Volume IV: A Compilation of Multi-Item Measures for Consumer Behavior & Advertising," Mason, Ohio: Thomson Corporation.

Burnett, John, Anil Menon, and Denise T. Smart (1993), "Sports Marketing: A New Ball Game with New Rules," *Journal of Advertising Research*, 33(5), 21-35.

Calder Bobby J., Lynn W. Phillips and Alice M. Tybout (1981), "Designing Research For Application," *Journal of Consumer Research*, 8(2), 197-207.

Chang, Chingching (2006), "Beating the News Blues: Mood Repair Through Exposure to Advertising," *Journal of Communication*, 56, 198-217.

Chebat, Jean-Charles, Pierre Filiatrault, Claire Gelinias-Chebat, Alexander Vanisky (1995), "Impact of Waiting Attribution and Consumer's Mood on Perceived Quality", *Journal of Business Research*, 34(3), 191-196.

Cho, Chang-Hoan, Jung-Gyo Lee, and Marye Tharp (2001), "Different Forced Exposure Levels to Banner Advertisements," *Journal of Advertising Research*, 41(4), 45-56.

Cialdini, Robert B., Richard J. Borden, Avril Thorne, Marcus R. Walker, Stephen Freeman, and Lloyd R. Sloan (1976), "Basking in Reflected Glory: Three (Football) Field Studies," *Journal of Personality and Social Psychology*, 34(3), 366-375.

Copeland, Robert, Wendy Frisby, and Ronald E. McCarville (1996), "Understanding the sport sponsorship process from a corporate perspective," *Journal of Sport Management*, 10(1), 32-48.

Coulter, Keith S. (1998), "The Effects of Affective Responses to Media Context on Advertising Evaluations," *Journal of Advertising*, 27 (4), 41-51.

Dahlen, Micael (2005), "The Medium as a Contextual Cue: Effects of Creative Media Choice," *Journal of Advertising*, 34(3), 89-98.

De Pelsmacker, Patrick, Maggie Geuens, and Pascal Anckaert (2002), "Media Context and Advertising Effectiveness: The Role of Context Appreciation and Context/Ad Similarity," *Journal of Advertising*, 31 (2), 49-61.

Dietz-Uhler, Beth, and Audrey Murrell (1999), "Examining Fan Reactions to Game outcomes: A Longitudinal Study of Social Identity," *Journal of Sport Behavior*, 22(1), 15-27.

DN Online (2009, March 24), "Study: More Students Using Smartphones." Retrieved on April 3, 2009, from <http://media.www.bsudailynews.com/media/storage/paper849/news/2009/03/24/Dnupdate/Study.More.Students.Using.Smartphones-3680661.shtml>

Eroglu, Sevgin A., Karen A. Machleit, Lenita M. Davis (2003), "Empirical Testing of a Model of Online Store Atmospherics and Shopper Responses," *Psychology and Marketing*, 20(2), 139-150.

Fact Pack (2005, February 28). Supplement to *Advertising Age*, 1-31, New York: Crain Communications Inc.

Faseur, Tim, and Maggie Geuens (2006), "Different Positive Feelings Leading to Different Ad Evaluations," *Journal of Advertising*, 35(4), 129-142.

Funk, Daniel C., and Jeffrey D. James (2001), "The Psychological Continuum Model: A Conceptual Framework for Understanding an Individual's Psychological Connection to Sport," *Sport Management Review*, 4(2), 119-150.

_____, Daniel F. Mahony, Makoto Nakazawa and Sumiko Hirakawa (2001), "Development of the Sport Interest Inventory (SII): Implications for Measuring Unique Consumer Motives at Team Sporting Events," *International Journal of Sports Marketing & Sponsorship*, 3(3), 291-316.

_____, _____, and Lynn L. Ridinger (2002), "Characterizing Consumer Motivation as Individual Difference Factors: Augmenting the Sport Interest Inventory (SII) to Explain Level of Spectator Support," *Sport Marketing Quarterly*, 11(1), 33-43.

_____, Lynn L. Ridinger, and Anita M. Moorman (2004), "Exploring Origins of Involvement: Understanding the Relationship Between Consumer Motives and Involvement with Professional Sport Teams," *Leisure Sciences*, 26, 35-61.

Gantz, Walter, and Lawrence A. Wenner (1995), "Fanship and the Television Sports Viewing Experience," *Sociology of Sport Journal*, 12, 56-74.

Gardner, Meryl P. (1985), "Mood States and Consumer Behavior: A Critical Review," *Journal of Consumer Research*, 12 (December), 281-300.

_____, and Ronald P. Hill (1988), "Consumers' Mood States: Antecedents and Consequences of Experiential versus Informational Strategies for Brand Choice" *Psychology & Marketing*, 5(2) 169-182.

Gemmill, Erin, and Michael Peterson (2006), "Technology Use among College Students: Implications for Student Affairs Professionals," *NASPA Journal*, 43(2), 280-300.

Goldberg, Marvin E., and Gerald J. Gorn (1987), "Happy and Sad Programs: How They Affect Reactions to Commercials," *Journal of Consumer Research*, 14 (3), 387-403.

Goldstein, Jeffrey H., and Robert L. Arms (1971), "Effects of Observing Athletic Contests on Hostility," *Sociometry*, 34 (1), 83-90.

Goodman, Gail S. (1980), "Picture Memory: How the Action Schema Affects Retention," *Cognitive Psychology*, 12(4), 473-495.

Gorn, Gerald, Michel T. Pham, and Leo Y. Sin (2001), "When Arousal Influences Ad Evaluation and Valence Does Not (and Vice Versa)," *Journal of Consumer Psychology*, 11 (1), 43-55.

Guttman, Allen (1986), "Sports Spectators." New York: Columbia University.

Gwinner, Kevin, and Scott R. Swanson (2003), "A model of fan identification: Antecedents and sponsorship outcomes," *Journal of Service Marketing*, 17(3), 275-294.

Havitz, Mark E., and Frédéric Dimanche (1990), "Propositions for Guiding the Empirical Testing of the Involvement Construct in the Recreational and Tourist Constructs," *Leisure Sciences*, 12(2), 179-196.

Havitz, Mark E., and Frédéric Dimanche (1997), "Leisure Involvement Revisited: Conceptual Conundrums and Measurement Advances," *Journal of Leisure Research*, 29(3), 245-278.

Havlena, William J., and Morris B. Holbrook (1986), "The Varieties of Consumption Experience: Comparing Two Typologies of Emotion in Consumer Behavior," *Journal of Consumer Research*, 13(3), 394-404.

Heckler, Susan E., and Terry L. Childers (1992), "The Role of Expectancy and Relevancy in Memory for Verbal and Visual Information: What is Incongruity?" *Journal of Consumer Research*, 18(4), 475-492.

Heere, Bob, and Jeffrey D. James (2007), "Stepping Outside the Lines: Developing a Multi-dimensional Team Identity Scale Based on Social Identity Theory," *Sport Management Review*, 10, 65-91.

Hiestand, Michael (2004, October 28), "Ads muscling into live TV events," *USA Today*, Sports, Pg. 11c.

Hill, Brad (2005), "Processing Pull-through Advertisements Screened During Sporting Telecasts: Effects of Advertisement Message Speed, Programme Context, and Repetition Priming," Unpublished Doctoral Dissertation, Griffith University.

Hirt, Edward R., Dolf Zillman, Grant A. Erickson, and Chris Kennedy (1992), "Costs and Benefits of Allegiance: Changes in Fans' Self-Ascribed Competencies After Team Victory Versus Defeat," *Journal of Personality and Social Psychology*, 63(5), 724-738.

Holbrook, Morris B., and John O'Shaughnessy (1984), "The Role of Emotion in Advertising," *Psychology and Marketing*, 1(2), 45-64.

IBM (2009, March 12) "IBM and Marist Survey Shows U.S. College Students Want Technology Skills to Compete for Jobs." Retrieved April 3, 2009, from <http://www.marketwire.com/press-release/Ibm-NYSE-IBM-960420.html>.

Kamins, Michael A., Lawrence J. Marks, and Deborah Skinner (1991), "Television Commercial Evaluation in the Context of Program Induced Mood: Congruency Versus Consistency Effects," *Journal of Advertising*, 20(2), 1-14.

Kerstetter, Deborah L., and Georgia M. Kovich (1997), "An involvement Profile of Division I Women's Basketball Spectators," *Journal of Sport Management*, 11, 234-249.

Kwon, Harry H., Galen T. Trail, and Dean S. Anderson (2005), "Are Multiple Points of Attachment Necessary to Predict Cognitive, Affective, Conative or Behavioral Loyalty?" *Sport Management Review*, 8(3), 255-270.

Lang, Peter J. (1980), "Behavioral Treatment and Bio-Behavioral Assessment: Computer Applications in Technology." In *Mental Health Care Delivery Systems*, Joseph B. Sidowski, James H. Johnson, and Thomas A. Williams, eds. Norwood, NJ: Ablex.

Laurent, Gilles, and Jean-Noël Kapferer (1985), "Measuring Consumer Involvement Profiles," *Journal of Marketing Research*, 22(1) 41-53.

Lutz, Richard J., Scott B. MacKenzie, and George E. Belch (1983), "Attitude Toward the Ad as a Mediator of Advertising Effectiveness: Determinants and Consequences," in *Advances in Consumer Research*, 10, 532-539.

Lyberger, Mark R., and Larry McCarthy (2001), "An analysis of volume consumption, consumer interest and perceptions of sport sponsorship as they relate to the Super Bowl," *International Journal of Sports Marketing and Sponsorship*, 3(4), 429-448.

- MacKenzie, Scott B., and Richard J. Lutz (1989), "An Empirical Examination of the Structural Antecedents of Attitude toward the Ad in an Advertising Pretesting Context," *Journal of Marketing*, 53(2), 48-65.
- Mackie, Diane M. and Leila T. Worth (1989), "Processing Deficits and the Mediation of Positive Affect in Persuasion," *Journal of Personality and Social Psychology*, 57(1), 27-40.
- Madrigal, Robert (2003), "Investigating an Evolving Leisure Experience: Antecedents and Consequences of Spectator Affect During a Live Sporting Event," *Journal of Leisure Research*, 35(1), 23-48.
- Mahony, Daniel F, Robert Madrigal, and Dennis Howard (2000), "Using the Psychological Commitment to Team (PCT) Scale to Segment Sport Consumers Based on Loyalty," *Sport Marketing Quarterly*, 9(1), 15-25.
- Martin, Brett A.S. (2003), "The Influence of Gender on Mood Effects in Advertising" *Psychology in Marketing*, 20(3), 249-273.
- McKinley Jr., James C. (2000, August 11), "Sports Psychology; It Isn't Just a Game: Clues to Avid Rooting." *New York Times*, Vol. 149, Issue 51477, pA1.
- Meenaghan, Tony (2001), "Understanding Sponsorship Effects," *Psychology & Marketing*, 18(2), 95-122.
- Mehrabian, Albert, and James A. Russell (1974), *An Approach to Environmental Psychology*, Cambridge: MIT Press.
- Milne, George R., and Mark A. McDonald (1999), *Sport Marketing: Managing the Exchange Process*. Sudbury, MA: Jones and Bartlett Publishers.
- Mintel International Group Limited. (2007, July) Sports Enthusiasts, U.S.
- Mitchell, Andrew A., and Jerry C. Olson (1981), "Are Product Attribute Beliefs the only Mediator of Advertising Effects on Brand Attitude," *Journal of Marketing Research*, 18(3), 31-332.
- Mitchell, Monique M., Kenneth M. Brown, Melinda Morris-Villagran, and Paul D. Villagran (2001), "The Effects of Anger, Sadness and Happiness on Persuasive Message Processing: A Test of the Negative State Relief Model," *Communication Monographs*, 68 (4), 347-359.
- Morris, Jon D. (1995) "Observations: SAM: the Self-Assessment Manikin: an Efficient Cross-cultural Measure of Emotional Response" *Journal of Advertising Research*, 35(6), 63-68.
- _____, and James S. McMullen (1994), "Measuring Multiple Emotional Responses to a Single Television Commercial," *Advances in Consumer Research*, 21(1), 175-180.

_____, Chongmoo Woo, James A. Geason, and Jooyoung Kim (2002), "The Power of Affect: Predicting Intention," *Journal of Advertising Research*, 4(3), 7-17.

Murry, John P., John L. Lastovicka, and Surendra N. Singh (1992) "Feeling and Liking Responses to Television Programs: An Examination of Two Explanations for Media-Context Effects" *Journal of Consumer Research*, 18(4), 441-451.

Muehling, Darrel D. (1987), "An Investigation of Factors Underlying Attitude-Toward Advertising-in-General," *Journal of Advertising*, 16(1), 32-40.

Murry, John P., John L. Lastovicka, and Surendra N. Singh (1992), "Feeling and Liking Responses to Television Programs: An Examination of Two Explanations for Media-Context Effects" *Journal of Consumer Research*, 18(4), 441-451.

_____, and Peter A. Dacin, "Cognitive Moderators of Negative-Emotion Effects: Implications for Understanding Media Context," *Journal of Consumer Research*, 22(4), 439-447.

Newell, Stephen J, Kenneth V. Henderson, Bo T. Wu (2001), "The Effects of Pleasure and Arousal on Recall of Advertisements during the Super Bowl," *Psychology and Marketing*, 18(11), 1135-1152.

Norris, Claire E., Andrew M. Colman (1993), "Context Effects on Memory for Television Advertisements," *Social Behavior and Personality*, 21(4), 279-296.

Olney, Thomas J., Morris B. Holbrook, and Rajeev Batra (1991), "Consumer Responses to Advertising: The Effects of Ad Content, Emotions, and Attitudes toward the Ad on Viewing Time," *Journal of Consumer Research*, 17(4), 440-453.

Park, Se-Hyuk, and Yong-Man Kim (2000), "Conceptualizing and Measuring the Attitudinal Loyalty Construct in Recreational Sport Contexts," *Journal of Sport Management*, 14(3), 197-207.

Pavelcahk, Mark, John H. Antil, James M. Munch (1988), "The Super Bowl: An Investigation into the Relationship among Program Context, Emotional Experience, and Ad Recall," *Journal of Consumer Research*, 15(3), 360-367.

Petty, Richard E., and John T. Cacioppo (1981), *Attitudes and Persuasion: Classic and Contemporary Approaches*, Dubuque, IA: William C. Brown.

Pham, Michel Tuan (1996), "Cue Representation and Selection Effects of Arousal on Persuasion," *Journal of Consumer Research*, 22(1), 373-387.

_____, Joel B. Cohen, John W. Pracejus, and G. David Hughes (2001), "Affect Monitoring and the Primacy of Feelings in Judgment," *Journal of Consumer Research*, 28(2), 167-188.

Plutchik, Robert (1980), *Emotion: A Psychoevolutionary Synthesis*. New York: Harper & Row.

Pyun, Do Young (2006), "The Proposed Model of Attitude Toward Advertising Through Sport," Unpublished Doctoral Dissertation, Florida State University.

Raghunathan, Rajagopal, and Michel T. Pham (1999), "All Negative Moods Are Not Equal: Motivational Influences of Anxiety and Sadness on Decision Making," *Organizational Behavior and Human Decision Processes*, 79 (1), 56-77.

_____, and Galen T. Trail (2005), "Relationships Among Spectator Gender, Motives, Points of Attachment, and Sport Preference," *Journal of Sport Management*, 19, 58-80.

_____, _____, Ronald J. Dick, and Andrew J. Gillentine (2005), "Fans vs. Spectators: An Analysis of Those Who Attend Intercollegiate Football Games," *Sport Marketing Quarterly*, 14(1), 43-53.

Roese, Neal J., and Sameep D. Maniar (1997), "Perceptions of Purple: Counterfactual and Hindsight Judgments at Northwestern Wildcat Football Games," *Personality and Social Psychology Bulletin*, 23, 1245-1253

Russell, James A., and Lisa Feldman Barrett (1999), "Core Affect, Prototypical Emotional Episodes, and Other Things Called Emotion: Dissecting the Elephant," *Journal of Personality and Social Psychology*, 76(5), 805-819.

_____, Anna Weiss, and Gerald A. Mendelsohn (1989), "Affect Grid: A Single Item Scale of Pleasure and Arousal," *Journal of Personality and Social Psychology*, 57(3), 493-502.

Schumann, David W. (1986), "Program Impact on Attitude Toward TV Commercials," in *Proceedings of the Division of Consumer Psychology*, Joel G. Saegert, ed., Washington, DC: American Psychological Association, 67-73.

Schurr, K. T., Ruble, V. E., & Ellen, A. S. (1985), "Myers-Briggs Type Inventory and Demographic Characteristics of Students Attending and not Attending a College Basketball Game" *Journal of Sport Behavior*, 8, 181-194.

Shank, Mathw D., and Fred M. Beasley (1998), "Fan or Fanatic: Refining a Measure of Sports Involvement," *Journal of Sport Behavior*, 21(4), 435- 443.

Shapiro, Stewart, Deborah J. MacInnis, and C. Whan Park (2002), "Understanding Program-Induced Mood Effects: Decoupling Arousal from Valence," *Journal of Advertising*, 31 (4), 15-26.

Sherif, Muzafer, and Carl I. Hovland (1961), *Social Judgment: Assimilation and Contrast Effects in Communication and Attitude Change*. New Have, CT: Yale University Press.

Sloan, Lloyd R. (1979), "The Function and Impact of Sports for Fans: A Review of Theory and Contemporary Research," In J. H. Goldstein (ed.), *Sports, games, and play: Social and psychological viewpoints*, 219-262. New York: Erlbaum.

Snyder, C.R., Maryanne Lassegard, and Carol E. Ford (1986), "Distancing After Group Success and Failure: Basking in Reflected Glory and Cutting Off Reflected Failure," *Journal of Personality and Social Psychology*, 51(2), 382-388.

Stout, Patricia A., and John D. Leckenby (1986), "Measuring Emotional Response to Advertising," *Journal of Advertising*, 15(4), 35-42.

Sutton, William A, Mark A. McDonald, and George R. Milne (1997), "Creating and Fostering Fan Identification in Professional Sports," *Sport Marketing Quarterly*, 6(1), 15-22.

Tobar, David (2006), "Affect and Purchase Intentions of Super Bowl XL Television Spectators: Examining the Influence of Sport Fandom, Age, and Gender," *Sport Marketing Quarterly*, 15, 243-252.

Trail, Galen T., Dean F. Anderson, and Janet S. Fink (2000), "A Theoretical Model of Sport Spectator Consumption Behavior," *International Journal of Sport Management*, 1, 154-180.

Trail, Galen T., and Jeffrey D. James (2001), "The Motivation Scale for Sport Consumption: Assessment of the Scale's Psychometric Properties," *Journal of Sport Behavior*, 24, 108-127.

_____, Matthew J. Robinson, Ronald J. Dick, and Andrew J. Gillentine (2003), "Motives and Points of Attachment: Fans Versus Spectators in Intercollegiate Athletics," *Sport Marketing Quarterly*, 12(4), 217-227.

Wann, Daniel L. (1995), "Preliminary validation of the Sport Fan Motivation Scale," *The Journal of Sport & Social Issues*, 19, 377-396.

_____ (2002), "Preliminary Validation of a Measure for Assessing Identification as a Sport Fan: The Sport Fandom Questionnaire," *International Journal of Sport Management*, 3(2), 103-115.

_____, and Nyla R. Branscombe (1990), "Die-Hard and Fair-Weather Fans: Effects of Identification on BIRGing and CORFing Tendencies," *Journal of Sport and Social Issues*, 14(2), 103-117.

_____, and _____ (1993), "Sports Fans: Measuring Degree of Identification with Their Team," *Journal of Sport Psychology*, 24(1), 1-17.

_____, and Thomas J. Dolan (2001), "Attributions of Highly Identified Sports Spectators," *The Journal of Social Psychology*, 134(6), 783-792.

_____, _____, Kimberly K. McGeorge, Julie A. Allison (1994), "Relationships Between Spectator Identification and Spectators' Perceptions of Influence, Spectators' Emotions, and Competition Outcome," *Journal of Sport & Exercise Psychology*, 16(4), 347-364.

_____, and Stephanie Pierce (2003), "Measuring Sport Team Identification and Commitment: An Empirical Comparison of the Sport Spectator Identification Scale and the

Psychological Commitment to Team Scale," *North American Journal of Psychology*, 5(3), 365-372.

Zaichkowsky, Judith L (1985), "Measuring the involvement construct." *Journal of Consumer Research*, 12, 341-352.

Zillmann, Dolf, Bryant J. Jennings, and Barry S. Sapolsky (1979) "The Enjoyment of Watching Sports Contests." In J. H. Goldstein (ed.), *Sports, Games, and Play: Social and Psychological Viewpoints*, 297-335. New York: Erlbaum.

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