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Master's Thesis of Global Sport Management

**Coping with Team's Defeat:
the Effect of Imagination on
Postgame Emotions among Sports Fans**

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Abstract

Coping with Team's Defeat: the Effect of Imagination on Postgame Emotions among Sports Fans

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The growing professional sports industry in the present era has shed light on the importance of sports fans in sustaining and developing the spectator sports market. Sports fans manifest a wide range of values, attitudes, and behaviors which have attracted scholars for investigation. According to previous work, sports fans often tend to bask in the team's glory (BIRGing) or cut off from their failure (CORFing). Nevertheless, real-world observation demonstrates that sports fans also frequently remain loyal toward their team despite its low ranking or steady poor performance in the league. Research on this particular behavioral aspect of sports fans and how they cope with the team's failure, however, has rarely been conducted.

The current study is an attempt to provide insights regarding the mechanism of coping among the fans of the defeated team. Amid a number

of potential factors that can affect sports fans' postgame emotions, this study looked into fans' imagination. More specifically, the study observed the generation of counterfactual and prefactual thoughts-combinedly referred to as "imagination" in the current research- by the defeated fans. The primary objective of this study is twofold: first, to assess the imaginative thoughts generated by the defeated fans and second, to examine the relationship between sports fans' generation of imagination and their postgame emotions.

Results revealed that sports fans who were instructed to produce prefactual imagination generated more thoughts compared to those who generated counterfactual imagination. Also, both the counterfactual and prefactual imagination groups generated a greater number of upward than downward imaginations. Most importantly, results showed significant effect of generating imagination on the defeated fans' postgame emotions. Specifically, counterfactual imagination group exhibited weaker negative postgame emotion than the control group. Likewise, counterfactual and prefactual imagination groups displayed stronger positive postgame emotion than the control group.

The current study is one of the the first studies to deal with sports consumers' coping with their team's failure. This study will add useful knowledge to sport management literature by providing insights regarding

sport consumer behavior and psychology. As the first research to particularly focus on sports fans' generation of imaginations, this study will extend the literary scope of counterfactual and prefactual thinking as well. Lastly, understanding how the consumers cope with a sports team's poor performance can be significant in the managerial perspective because it can help marketers develop effective communication strategies and foster a long-term relationship with their fans.

Keywords: Imagination, Counterfactuals thoughts, Prefactuals thoughts, Sports Fan, Postgame Emotions, Consumer Coping, Emotion Modulation

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Introduction

Research Background

The growing professional sports industry in the present era has shed light on the importance of sports fans in sustaining and developing the spectator sports market. Thus, a comprehensive understanding about sport spectators and fans is deemed valuable for both the field and the literature of sport management. For this reason, spectators and fans are one of the most frequently investigated subjects in the study of sport management. Myriads of studies have explored diverse phenomena and features of sport consumption by sport spectators and fans. Various socio-psychological factors such as service quality satisfaction or (dis)confirmation of expectations have been discovered to either directly or indirectly affect sport consumption and fan-behavior.

Sports fans' behavioral or emotional reactions to the game outcome are topics that have been studied quite extensively. BIRGing, Basking in Reflected Glory, and CORFing, Cutting Off Reflected Failure, are the two concepts established as a result of the scholarly work on sports consumers' reaction to the game outcome. BIRGing illustrates how fans revel in the team's victory ("*We* won") whereas CORFing depicts how fans distance themselves with the team ("*They* lost") when the team loses in a game (Snyder et al., 1986; Snyder et al., 1983; Cialdini et al., 1976). Meanwhile,

studies have discovered that for the fans that highly identify themselves with a particular team, the team's failure in a game generally induces negative emotions, as if the fans themselves have been defeated. The stronger the individual identifies himself with the team, the worse he feels about the adverse outcome (Campbell et al., 2004; Shank & Beasley, 1998; Wann et al., 1994; Sloan, 1989; Schwarz et al., 1978).

Competition is the essence of sports and all sport matches inevitably accompany both the winner and the loser. At the same time, "there is no eternal victory", as the saying goes, and this is no exception to the world of sports. Such facts imply that all sports teams are destined to face the moment of defeat at some point in the course of time. In this regard, one of the most interesting attributes of sports fandom observed in the real world is that even the tailenders have their own loyal fans. In other words, fans oftentimes continuously support and advocate their team despite the constant bad mood aroused by the team's defeat.

Arguing along these lines and borrowing the expressions from the above concept of CORFing, sports fans' attitude of *not* cutting off the team's defeat is a facet not yet widely investigated by scholars. Nevertheless, while the coping mechanisms of the dissatisfied consumers have been the subject of a plethora of consumer-related studies in business and management areas, studies on unhappy sports fans has been very limited. Hence, investigation

on the coping strategy of fans can extend the literary scope of sport management.

Among the countless factors that can influence the postgame emotions of sports fans, the role of imagination has seldom attracted attention in sport-related studies. Individuals often produce imaginative thoughts that follow the structure of “if only... then...” (past-oriented) or “if...then...” (future-oriented). Each type of these thoughts is respectively referred to as counterfactual thinking and prefactual thinking. Counterfactual thoughts are the speculation about what actually has already happened, imagining a *different reality* to what took place and the prerequisites. On the other hand, prefactual thinking is about the future, and is related to conceiving what *could happen* together with the required conditions (Byrne & Egan, 2004; Epstude, Scholl, & Roese, 2016; McConnell et al., 2000; Sanna, 1996).

According to previous pieces of work on counterfactual and prefactual imagination, one of the major functions of these thoughts is to modulate emotions. Based on the findings of earlier studies, the current study looks into the emotion-modulating function of imagination among sports fans. More specifically, this study seeks to observe whether producing counterfactual or prefactual imagination can help modulate sports fans’ postgame emotions in face of the team’s failure. To investigate such unique aspect of sports fans by relating it to the function of imagination will be of a

valuable work that adds to the fields of psychology and sport management.

Research Objectives

The primary purpose of this study is to investigate whether producing counterfactual or prefactual imagination has an influence on sports fans' emotions provoked by their team's defeat in sports games. Producing imaginative thoughts have been suggested to play a role in modulating people's emotions in various situations. This study makes the first attempt to confirm whether this emotional function of counterfactuals and prefactuals can be detected among sports fans, especially after their team's loss. It also seeks to analyze the distinctive features and characteristics of the imagination generated before and after the game by sports fans. Thus, the objectives of this research are as follows:

- 1) To examine the features and characteristics of the imaginative thoughts generated by sports fans.

- 2) To investigate whether the generated imagination modulates the postgame emotions of sports fans.

Definition of Terms

Imagination. In the current study, imagination is the generic term for counterfactual and prefactual imagination. A dictionary definition of imagination is “1. The faculty or action of forming new ideas, or images, or concepts of external objects not present to the senses. 1.1. The ability of the mind to be creative or resourceful. 1.2. The part of the mind that imagines things. (Oxford English Dictionary)” In other words, any cognitive process regarding the un-reality can be included in the broad definition of imagination. Counterfactual thoughts (“if only... then...”) and prefactual thoughts (if..., then...”) fall under the category of imagination in that they are both the generation of results and their preconditions that are either opposite from what has already happened or what has not yet happened.

Although these psychological concepts have more commonly been referred to as “thinking” or “thoughts”- counterfactual thinking and prefactual thinking or counterfactual thoughts and prefactual thoughts-, this study employs the term “imagination” instead of thinking. This is based on the notion of a number of scholars who understand such thoughts as a type of imagination. Byrne, for example, adopts the term “counterfactual imagination” (2007, 2016). He uses the expression “*imagine*” to explain the process of thinking the alternative situation to the reality and describes the counterfactual as “*imagined alternative*”. Power (1995) and Wurgaft (2010)

are a few of other scholars who adopt the expression “*counterfactual imagination*” to indicate the concept. Furthermore, the expression “*imagined construction*” was used by some scholars to refer to the counterfactual outcome. Following a similar logic, the phrase prefactual thinking is substituted with prefactual imagination in this study (Roese, Sanna, & Galinsky, 2005; Apperley, 2013; Kahneman & Miller, 1986; Markman, Gavinski, Sherman, & McMullen, 1993).

Counterfactuals are different from reminiscence or regret, albeit related (e.g. Epstude, Scholl, & Roese, 2016), in that they are thoughts on an imagined actuality and its preconditions. Likewise, prefactuals are distinguished from wishful thinking or simple predictions as they incorporate detailed and feasible requirements for a certain future situation to come to pass. In accordance with earlier studies and to reflect the unique features described above, it can be concluded that counterfactuals and prefactuals belong to a type of imagination. Thus, the term imagination will be used to combinedly refer to counterfactual and prefactual thoughts in this study.

Postgame Emotions. Postgame emotions refer to the emotional responses of a fan about a sports team’s game outcome. The present study classifies the concept into positive emotion and negative emotion. Positive emotion is the extent to which a person feels enthusiastic, pleased, proud,

interested, satisfied, excited, inspired, happy, active, and confident. In his work on positive and negative affects, Watson (1988) defined negative affect as “a general dimension of subjective distress and unpleasurable engagement.” This study takes up a similar definition. Negative emotion in this study refers to the degree a person feels angry, sad, upset, dissatisfied, disappointed, ashamed, irritable, hostile, jittery, and nervous.

Team identification. The current study adopts one of the most widely accepted definitions of team identification. The term refers to the psychological attachment of a fan toward a team and the degree to which a fan identifies him or herself with that team (Gau, James, & Kim, 2009; Wann & Branscombe, 1993). The higher the identification level, the more likely the fan will think of oneself as a part of that team (Mael & Ashforth, 1992; Sutton, McDonald, & Milne, 1997).

Theoretical Background

Imagination

Counterfactual Imagination. Every now and then, individuals produce thoughts about the past event they have encountered. A portion of these thoughts are about what has not happened in the reality, that is, about how things might have turned out differently. These thoughts take the form of “if only..., then...” This if-only type of thought about the past is known as “counterfactual thinking”. The structure of counterfactual thoughts consists of two parts. One part (“then...”) is about an alternative consequence of the actual event that took place. The other part (“if only...”) is related to the preconditions of the imagined consequence (Kim & Hwang, 2010). In short, they are expressed as conditional sentences that include one or more conditional component and a consequence/outcome component (Han & Hwang, 2011).

They are counter-factual in that they are related to imaginary alternative incidents counter to the fact (e.g. Byrne, 2007, 2016; Kahneman & Miller, 1986; Roese & Olson, 1997). As Goodman (1983) has asserted, the cognitive process of transforming what has already occurred to what has not yet taken place is inherent in all counterfactual thoughts. Counterfactual imagination belongs to a sort of mental simulation that incorporates the subject’s cognitive act of imagining the alternative to the reality (Hilton &

Slugoski, 1986; Lipe, 1991).

Prefactual Imagination. Prefactual imagination is imagination about the outcome of a future event and its preconditions, before (“pre”) the event (“fact”) takes place (Sanna, 1996). Epstude and others (2016) have defined this future-oriented imagination as “a conditional proposition about an action-outcome linkage that may (or may not) take place in the future”. Initially conceptualized as a variation of counterfactual thinking, prefactual thinking falls under the broader umbrella construct of mental simulation and expectancy (Epstude, Scholl, & Roese, 2016). Nevertheless, it is distinguishable from simple predictions or expectations by its distinctive structure. It is imagining ‘what could, would, or might be’ in the future together with the specific preconditions for that anticipated outcome to occur (Byrne & Egan, 2004; Epstude et al., 2016). As Byrne (2016) points out, relatively little research has been conducted on prefactual imagination compared to counterfactual imagination.

Imagination in Sport-Related Contexts. Albeit seldom, counterfactual and prefactual imagination have been researched in sport-related studies. Some of these studies, in fact, played a crucial role in advancing the scholarly understanding of the counterfactuals. The study on Olympic athletes’ feeling of happiness, for instance, is one of the most

renowned counterfactual and prefactual imagination (Medvec et al., 1995; McGraw et al., 2005) and subsequent studies on counterfactual thinking among sports athletes has been conducted in a similar context. Studies on prefactual imagination have also been carried out. For instance, a research by Taylor and others (1998) have confirmed the positive impact of prefactual thinking on performance by examining the relationship between pre-game mental simulation and the actual performance of student athletes.

Previous work on counterfactual and prefactual imagination in sport-related contexts, however, focused for the most part on sports players or participants. Only a few have studied counterfactuals thinking among coaches (Turman, 2005), or sports broadcasters (Sanna et al., 2006). Notably, to the best of the author's knowledge, there has not been any study on sport consumers that looks into the function and role of imagination. Thus, research on emotion moderating role of imagination among sports fans can possibly help extend the knowledge on counterfactual and prefactual imagination. Additionally, it may help to disclose the coping mechanism of sports fans.

Direction of Imagination. The direction of counterfactual comparison is one of the most typical ways to categorize counterfactual and prefactual imagination (e.g. Kim & Hwang, 2010; Roese, 1997). As an attempt to analyze and classify counterfactual and prefactual imaginative thoughts, researchers have borrowed the terminology and concept of ‘upward’ and ‘downward’ thoughts from the social comparison theory, which is suggested to be the philosophical origin of counterfactual thinking (Collins, 1996; Roese, 1994, 1997; Taylor, Buunk, & Aspinwall, 1990; Wood, 1989).

An upward social comparison is made when individuals compare themselves with superior others or when individuals compare their situations with those that are better off (Taylor & Lobel, 1989; Wills, 1981). In a similar manner, upward counterfactuals are made when a person produces imaginative thoughts about the past that ‘could have been’ or ‘would have been’ better than the reality (e.g. Markman, Gavanski, Sherman, & McMullen, 1993; McMullen, Markman, & Gavanski, 1995; Roese, 1994, 1997). Likewise, upward prefactuals are imagination about a better-than-the-present future situation and its antecedents (Epstude et al., 2016).

Past studies suggest that upward imagination is what motivates and moves people. For both the counterfactual and prefactual thoughts, individuals tend to take actions upon upward than downward imagination. Upward counterfactual imagination helps people think about the improvement of their current circumstances, therefore encouraging people

to act. Similarly, upward prefactual imagination better propels individuals to take actions than downward prefactuals as it “spells out a pathway to improve upon their current situation” (Epstude et al., 2016).

In contrast to upward social comparisons, making downward social comparisons is comparing oneself with others or situations considered to be worse off (e.g. Buunk, Ybema, Gibbons, & Ipenburg, 2001; Carmona, Buunk, Peiro, Rodriguez, & Bravo, 2006; Collins, 1996; Wills, 1981). Equivalently, imagination on how things could have turned out even worse than the actuality is known as downward counterfactual thinking (Bonifield & Cole, 2007; White & Lehman, 2005; McMullen & Markman, 2000; McMullen et al., 1995). The idea is applied correspondingly to downward prefactuals, which are the “contrast between the current state of affairs and an inferior outcome (Epstude et al., 2016).”

Emotions

Imagination and Emotions. Counterfactual thoughts are known to serve a number of key functions (e.g. Byrne, 2016): they explain the past by justifying (Markman et al., 2008), excusing (Markman & Tetlock, 2000; McCrea, 2008; Tyser et al., 2012), or derogating (Catellani & Covelli, 2013; Morris & Moore, 2000); they help people learn from mistakes and prepare for the future (e.g. Ferrante, Giorotto, Straga, & Walsh, 2013; Roese, 1994); or work out causal relations (McCloy & Byrne, 2002; Mandel & Lehman, 1996; Roese & Olson, 1995). Among these diverse functions of counterfactual imagination, functions related to emotions have been the subject of study by many scholars. Depending on the specific context, counterfactuals can both amplify or deflect negative and/or positive emotions (Kahneman & Miller, 1986).

The direction of counterfactuals and its close effect on emotion has been explored extensively (Johnson & Sherman, 1990). Kahneman and Miller (1986), for example, indicated that both negative (regret, guilt, and shame) and positive emotions (relief, satisfaction, and sympathy) can be amplified through the generation of counterfactual imagination in one of the earliest work on the association between counterfactuals and emotions. Overtime, their relationship has been examined more thoroughly and structurally. The *direction* of counter and prefactuals has been proved to be a profitable subject for investigating their emotional function.

In one of the early studies on the association between counterfactuals and emotions by Medvec, Madey and Gilovich (1995), participants were asked to judge and examine the degree of happiness expressed by the Olympic medalists (see also McGraw, Mellers, & Tetlock, 2005). Interestingly, results revealed that Olympic silver medalists were judged to look more unhappy than the bronze medalists when they found out the game results, even though their outcome was objectively superior.

The authors attributed this irony to the athletes' counterfactual thoughts. That is, silver medalists tended to make upward imagination by focusing on how they 'could have won' but missed the chance of winning the gold medal. On the other hand, bronze medalists were content with the fact that they earned an Olympic medal, making a downward comparison to a no-medal situation. This study was among the first to suggest the emotion modulating role of counterfactual thoughts. It was followed by additional researches on the association between counterfactual thoughts and performance satisfaction and emotion among athletes (Dray & Uphill, 2009; Grieve, Houston, Dupis, & Eddy, 1999; Price, McClure, & Siegert, 2000). The association between the direction of imagination and emotions is outlined in the ensuing section.

Direction of Imagination and Emotions.

(1) Upward Counterfactual Imagination

Comparing the past event with an imagined superior alternative can predict or amplify an individual's negative affect due to "an evaluative contrast effect" (Epstude et al., 2016). Guilt, regret, shame, and self-blame, for instance, are some the negative feelings that have been suggested to be amplified by upward counterfactual imagination in various settings (e.g. Niendenthal, Tangney, & Gavanski, 1994; Mandel & Dhimi, 2005; Zeelenberg & Pieters 2007).

Interestingly, however, these negative emotions provoked by upward counterfactuals can in turn lead to a positive, preparatory function for the future as the bad mood works as an "input" in re-setting the goal for future progress and improvement (Markman et al., 2008; Myers, McCrea, & Tyser, 2014). In addition, people are driven to create upward counterfactuals when they seek to improve their present status (Epstude & Jonas, 2015; Epstude & Roese, 2008; Smallman & Roese, 2009). For example, in the work by Epstude and Jonas (2015), counterfactual thoughts among HIV-positive individuals raised positive attitude towards future behavior.

(2) Downward Counterfactual Imagination

In general, downward counterfactuals are known to induce positive affect. Positive emotions such as relief and satisfaction tend to increase

following the construction of downward imagination, especially in situations like near misses or lucky wins (Larsen, McGraw, Mellers, & Cacioppo, 2004; Sanna & Turley, 1996; Sweeny & Vohs, 2012; Teigen & Jensen, 2011).

Moreover, a group of scholars pointed out how counterfactuals can avert negative emotions and help people feel better by comparing their reality to a even worse or the worst situations (e.g. Epstude & Roese, 2008; McMullen & Markman, 2000). Negative feelings such as guilt, regret, shame, and self-blame have been suggested to be deflected by downward imagination (e.g. Niendenthal et al., 1994; Mandel & Dhami, 2005; Zeelenberg & Pieters 2007).

(3) Upward Prefactual Imagination

For prefactual imagination, the contrast effect found in counterfactuals works similarly, but in the opposite way for upward and downward thoughts. Scholars have indicated an “assimilation effect” to explain the emotional function of prefactual imagination (e.g. Epstude et al., 2016). Imagining an enhanced future is predicted to bring more positive feelings such as joy because people anticipate a future improvement at the moment of thought production (Markman & McMullen, 2003; Wilson & Ross, 2000).

(4) Downward Prefactual Imagination

Although comparatively little research has been done on downward prefactual imagination, past scholarly work has found the negative effect of downward imagination on emotion. Imagining worse-than-the-present future situation operates negatively in individuals' emotional reactions. Thinking about the inferior future together with the conditions that could lead to such future can provoke more negative emotions because they are normally related to potential regret or guilt (Lockwood, 2002; Filiz-Ozbay & Ozbay, 2007; Sandberg & Conner, 2008; Zeelenberg, 1999).

In sum, upward counterfactuals and downward prefactuals are generally related to negative mood including regret, guilt, and blame. They, however, differ in that in the case of upward counterfactuals, the evoked negative affect can serve a constructive purpose later on. On the other hand, downward counterfactuals and upward prefactuals are associated with positive emotions such as relief, satisfaction, or joy. Table 1 outlines the above explanation and shows examples of each type of thoughts.

Table 1

Emotion Modulating Role of Counterfactual and Prefactual Imagination

| Example | Direction | Imgn. Type | Relevant Emotion |
|--|------------------|-------------------|-------------------------|
| <ul style="list-style-type: none"> • If only I had bought a snowblower last winter, then I would have saved much effort • If only I had made that goal, then my team could have won | Upward | Counterfactual | Guilt/Regret |
| <ul style="list-style-type: none"> • If I hadn't bought a new shovel, dealing with all of the snow would have been even more effortful • If I hadn't made that goal, then my team could have lost the game | Downward | Counterfactual | Relief/ Satisfaction |
| <ul style="list-style-type: none"> • If I buy a snowblower, I will save myself some effort next winter • If I go running next morning, I will feel much better that whole day | Upward | Prefactual | Joy/ Rejoicing |
| <ul style="list-style-type: none"> • If I buy a snowblower, it will prove disappointing and break down a lot • If I go running next morning, I will feel tired the whole day | Downward | Prefactual | Anticipated Regret |

Note. Table taken from Epstude et al. (2016).

Imagination and Consumer Emotions. Exploration of counterfactuals and prefactuals in association with consumer and marketing domains have started relatively recently, and thus, fewer literary works have been progressed (e.g. Roese, 2000). Among the few, Walchli and Landman (2003) have examined the association between post-consumption consumer emotions and counterfactual thinking. According to their study, negative outcomes in consumption experience were related to more active generation of counterfactual imagination. Moreover, more dramatic amplification in emotions followed the generation of counterfactual thought. Most interestingly, results indicated that consumer regret engendered both downward and upward counterfactual thoughts.

Most of the recent consumer researches with regard to counterfactual thinking have dealt with consumer satisfaction as the main topic. Counterfactuals can influence consumers' causal reasoning (McGill, 2000). Moreover, Cooke, Meyvis, and Schwarz (2001) have detected how satisfaction and post-purchase regret have a relationship with post-purchase counterfactual thinking: upward counterfactuals resulted in a lower level of satisfaction than downward counterfactuals, while consumers who produced downward counterfactuals were generally more satisfied with their consequence. In addition, counterfactual imagination ("post-purchase comparison") has been found to have a greater influence on both negative (regret) and positive (satisfaction) emotions than prefactual imagination

(“pre-purchase comparison”).

Other studies have examined the effect of upward counterfactuals on negative emotions. Upward counterfactual imagination resulted in dissatisfaction in the face of unsuccessful consumption experience (Na, Park, & Suk, 2008). Likewise, upward counterfactuals provoked by a failure in a consumption experience prompted feelings of regret, a type of negative emotion (Patrick, Lancellotti, & Hagtvedt, 2009). In both studies, these negative emotions of dissatisfaction and regret caused by upward counterfactual imagination were found to be the predictors of future behavioral intentions and future preparations.

Meanwhile, McConnell et al. (2000) examined in their preliminary investigation the relationship between the direction of prefactual imagination and feelings of regret. It is noticeable that according to the study, consumers normally created upward prefactuals when considering an important consumption. In their primary investigation on examining the effect of providing price guarantees on regret, it was hypothesized that offering price guarantees would lead to a decrease in the number of upward prefactual imagination and therefore reduce the feeling of regret.

Another study on prefactual thinking by consumers has found that prefactual thinking provoked by advertisements can be related to hedonic rationalization, a kind of justification of a consumption experience (Kemp, Bui, and Chapa, 2015). This can be seen as amplifying positive emotions, as

hedonic experience itself brings enjoyment in the short term, though it may possibly lead to “consumer guilt” in the long run. In addition, negative consumer emotion, consumption guilt in this case, was mitigated by the advertiser or marketer’s endeavor to shift the consumers’ attention to “guiltless hedonism”. Furthermore, some researches have taken a more functional approach to counterfactual thinking and consumer emotions and uncovered the dysfunctional role of counterfactuals (Yoon & Vargas, 2010). However, contrary to the study’s findings, it is predicted in the current study that counterfactuals will serve a beneficial function for sport consumers.

Indeed, counterfactuals have been reviewed and recommended as a theoretical approach for future sport marketing scholarship regarding sport consumer behavior (Kim, Magnusen, & Kim, 2014). Kim and others (2014) notably proposed that a sporting event can trigger the production of counterfactual imagination among sport consumers. In line with the literary findings that downward counterfactuals positively influence satisfaction and upward counterfactuals negatively, they have proposed that each of the downward and upward counterfactuals will positively and negatively influence sport consumer satisfaction respectively. Although prefactual imagination has not been explicitly mentioned as a potential framework for sports marketing scholarship, the overall literature review warrants empirical investigation on prefactual imagination among sport consumers.

Postgame Emotion among Sports Fans. Spectator emotion is an important concept in sport management because it is both directly and indirectly related to fan behavior and future intentions (Biscaia, Correia, Rosado, Maroco & Ross, 2012). In the study by Biscaia and others (2012), joy had direct and indirect effects on satisfaction and behavioral intentions. Parcelling results were found in other studies as well. For example, emotions such as arousal and pleasure acted as moderators in predicting the effect of service quality on spectators' perceived value (Moreno, Prado-Gascó, Hervás, Nunez-Pomar, & Sanz, 2015).

Postgame emotion is a more definitive term that specifically refers to sports fans emotions following a sports game. The wide range of a sports fan's postgame emotion from extreme happiness to extreme tension or violence can be attributed mostly to the nature of outcome uncertainty of sports games. In one of the earliest studies on sports fans' postgame emotions by Hirt and Zillmann (1985), home fans of a college basketball team exhibited positive emotions and confidence after the team won the game. Similarly, Schwarz, Strack, Kommer, and Wager (1987) have shown that German men reported significantly higher degree of satisfaction in life following the German national football (soccer) team's victory in the 1982 World Championship, compared to prior to the game.

On the other hand, a contrasting effect, an increase in negative

emotions among fans following a team's defeat has been observed by scholars. Anger, discouragement, sadness, and irritability are some of the negative emotions known to rise among fans after a loss (Sloan, 1979). Likewise, Schweitzer, Zillmann, Weaver, and Luttrell (1992) discovered that higher levels of tension were detected among the fans of a college football team after the team's defeat in a game.

Team Identification

Team identification refers to the psychological attachment of an individual toward his favorite team (Gau, James, & Kim, 2009; Wann & Branscombe, 1993). Some scholars explain the concept as “personal commitment” or “emotional involvement” that sport consumers have with a sports team or an organization (Kwon, Trail, & James, 2007; Robinson & Trail, 2005; Sutton, McDonald, Milne, 1997; Underwood, Bond, & Baer, 2001; Wann, 2006). Sport is unique in that fans oftentimes identify themselves with a particular team at different levels and define themselves as a part of that team (Mael & Ashforth, 1992; Sutton et al., 1997).

Team identification has been extensively explored in sport management studies. Sutton and others (1997) emphasized the importance of understanding the concept of team identification because “it may minimize the effects of team performance on long-term fiscal success and position in the sport entertainment hierarchy of its community.” According to their conceptual framework for team identification, there are two key benefits of identification from the managerial perspective. Firstly, the higher the fans are identified with the team, the less sensitive they become to the ticket prices. More importantly, highly identified fans are less sensitive about the performance outcome (Sutton et al., 1997). In other words, the more a fan identifies himself with a sports team, the less likely their future

behavior or intention will be affected by the team's poor performance.

Team Identification and Emotion. Team identification has been a useful tool in explaining the varying degrees of emotional responses displayed by fans. Highly identified fans showed, in a study by Branscombe and Wann (1992a), a steeper increment in physiological arousal when watching their team's game. Also, highly identified fans were more likely to demonstrate violence and act aggressively towards fans of the opposing team (Branscombe & Wann, 1992b). Branscombe and Wann (1991) also observed that regarding the media portraying a team, the higher the fan identified with the team, the stronger they reacted in response. Work by Wann, Dolan, McGeorge, and Allison (1994) supported the above findings, confirming that higher identification resulted in a more intense affective reactions.

In this study, team identification is included and assessed in the research model as a control variable. It was judged to be reasonable, as the first study to evaluate fans' imagination, to control the team identification variable in order to solely detect the direct effects of imagination on postgame emotions. This way, the relationship between the level of team identification and its effect on the degree of postgame emotion can be regulated and the effects of imagination on emotion could be clearly assessed.

Research Questions and Hypotheses

Research Questions. In order to fulfill the purpose of the study, the following research questions have been posed.

RQ1. What are the distinctive features and characteristics of imagination generated by sports fans?

RQ1a. When do sports fans generate more imagination? Before the game (prefactual imagination) or after the game (counterfactual imagination)?

RQ1b. Does the dominant direction of imagination (upward vs. downward) differ by imagination type (counterfactual vs. prefactual)?

RQ2. Does imagination affect sports fans' postgame emotions?

RQ2a. Does imagination affect sports fans' postgame negative emotions?

RQ2b. Does imagination affect sports fans' postgame positive emotions?

Hypotheses. Research hypotheses for the study have been formulated as demonstrated below. Two separate studies have been conceived to answer the above research questions accordingly.

Study 1: Analysis of Defeated Fans' Imagination

H1. Counterfactual imagination group will generate a greater number of imaginations than prefactual imagination group.

H2. Both groups will generate a greater number of upward imaginations than downward imaginations.

H2a. Counterfactual imagination group will generate a greater number of upward imaginations than downward imaginations.

H2b. Prefactual imagination group will generate a greater number of upward imaginations than downward imaginations.

Study 2: Relationship between Imagination and Postgame Emotion

H3. Generating imagination will weaken sports fans' negative postgame emotions.

H3a. Counterfactual imagination group will exhibit weaker negative emotion compared to the control group.

H3b. Prefactual imagination group will exhibit weaker negative emotion compared to the control group.

H4. Generating imagination will strengthen sports fans' positive postgame emotions.

H4a. Counterfactual imagination group will exhibit stronger positive emotion compared to the control group.

H4b. Prefactual imagination group will exhibit stronger positive emotion compared to the control group.

Methods

The purpose of this research was to investigate the general features of imaginative thoughts produced by sports fans and their effect on postgame emotions. This study specifically aims to examine the real-world setting in provoking imagination and assessing the postgame emotions of the fans of the defeated team of a game.

Procedure

After a thorough review of related literature, offline field survey was planned to be carried out. Pen and paper survey with self-administration method was decided to be most appropriate for the purpose and the contents of the study. Spectators of the Korean professional basketball league were selected as the subjects of this research.

Surveys were conducted at four different Korean Basketball League (KBL) regular season games in February 2018. The first game, held on February 04, 2018 between Samsung Thunders and DB Promy was won by Samsung 102 to DB 87. The second game on February 06, 2018 was a close game. Samsung Thunders beat the Orion Orions by 80 to 79. On February 09, 2018 Samsung lost the game against KCC Egis by 90 to 96. Lastly, game held on February 18, 2018 between Samsung Thunders and SK

Knights was a Seoul-Derby match. SK Knights won the game by 100 to 90.

In each of the game, 35, 60, 80, and 89 sets of surveys -a total of 264 surveys- were distributed to the spectators before (for prefactual imagination and control group surveys) and after (for counterfactual imagination surveys) the games. After removing unusable data, a total of 102 surveys were used in this research for analysis. It should be noted that due to the specific research question of this study to only investigate the fans of the teams that had lost the game, not only incompleted surveys but also completed surveys by the fans of the winners have been removed. Thus, although 225 sets of surveys were collected, only 102 surveys were utilized for the statistical analysis.

Moreover, in order to achieve the goal of this study, participants were divided into three groups: counterfactual imagination group, prefactual imagination group, and a control group. Thus, survey items to provoke and measure imagination were prepared differently for each of the groups. Table 2 below shows the result of data collection in details.

Table 2

Data Collection

| Date | Teams | Distributed | Surveys | | Survey Types (Used Only) | | |
|---------------|--------------------|-------------|-----------|------|--------------------------|----|----|
| | | | Collected | Used | A | B | C |
| Feb. 04, 2018 | Samsung vs. DB* | 35 | 26 | 9 | 4 | 5 | 0 |
| Feb. 06, 2018 | Samsung vs. Orion* | 60 | 44 | 14 | 0 | 7 | 7 |
| Feb. 09, 2018 | Samsung* vs. KCC | 80 | 75 | 44 | 3 | 14 | 27 |
| Feb. 18, 2018 | SK vs. Samsung* | 89 | 80 | 35 | 24 | 4 | 7 |
| Total | | 264 | 225 | 102 | 31 | 30 | 41 |

*Note. * indicates the defeated team.*

Materials

Three variables were included in the study: imagination as the independent variable, postgame emotions (negative and positive respectively) as the dependent variables, and team-identification as the control variable. A number of research topic-related literatures were reviewed for the development of pertinent survey questionnaires. Open-ended format questionnaires were adopted to assess the participants' generation of imagination. The survey included items that measure their team identification level, and postgame emotions. Items for collecting the participant's demographic data were also incorporated in the survey.

Generation of Imagination. Open-ended response format was designed after prior literature on counterfactual and prefactual thinking (Dunning & Parpal, 1989; Gavanski & Wells, 1989; N'gbala & Branscombe, 1995; Niendenthal, Tangney, & Gavanski, 1994; Roese & Olson, 1993a, 1993b; Wells & Gavanski, 1989; Wells, Taylor, & Turtle, 1987). The specific questions were modified to fit the context and the purpose of this study. Questions explicitly asked individuals to generate counterfactual or prefactual imagination. Participants were asked to write down any antecedents or consequences that they could think of and to record as many prefactual or counterfactual thoughts as they wished.

Two different types of surveys were designed for the respective

assessment of counterfactual and prefactual imagination. Survey type A was to assess generation of counterfactual imagination. Counterfactual imagination group consists of individuals who were approached right after the game to participate in survey A. On the other hand, survey type B instructed individuals to generate prefactual imagination. Thus, the participants of prefactual imagination group completed the survey before the game started.

“Please write down as many imaginative thoughts as you can generate in the blank provided below.

Thoughts can be about anything that is realistic or unreliable, for example about the team’s game strategy or referee calls to things that are beyond human control such as the weather or luck.”

As shown, respondents were instructed to write down their thoughts in the given blank box, as did in preceding studies on counterfactual thinking. Two sentences containing a bracket were provided to be filled in by the participants. Each of the sentences was formed to induce the respondents to generate a specific direction of imaginative thoughts. Further details are presented in Table 4 below.

Postgame Emotions. After further reviewing a degree of consumer-emotions related articles with the experts, the Positive Affect-Negative Affect Scale (PANAS) was selected as the basal scale to measure spectators' postgame emotions in this research. The original PANAS consists of ten positive (interested, excited, strong, enthusiastic, proud, alert, inspired, determined, attentive, and active) and ten negative (distressed, upset, guilty, scared, hostile, irritable, ashamed, nervous, jittery, and afraid) emotion (affect)-related adjectives (Watson, Clark, & Tellegen, 1988).

Since the Positive Affect-Negative Affect Scale was developed to assess affects and emotions in more general circumstances, some of the adjectives were judged to be improper for the research. To achieve the purpose of the study adjectives considered inappropriate for describing a sports fan's postgame emotions were removed after several in-depth discussions with the experts. These included four positive adjectives (strong, alert, determined, and attentive) and four negative adjectives (guilty, scared, distressed, and afraid).

Again through comprehensive review, they were substituted with adjectives from Sloan's scales that have been developed and utilized in a number of studies to measure sports fan-specific feelings and affective reactions to team competition or sporting events (Bizman & Yinon, 2002; Branscombe & Wann, 1991; Hirt, Zillmann, Erickson, & Kennedy, 1992; Russel, 1981; Sloan, 1979; Wann et al., 1994). For positive emotion,

pleased, happy, satisfied, and confident were added. Sad, unsatisfied, disappointed, and angry were included to measure negative emotion.

All of the terms were translated from English to Korean through careful review and discussion with the experts. Two Korean version of PANAS scales (K-PANAS) developed by Park and Lee (2016) and Lee, Kim, and Lee (2003) were consulted in the process but not repeated after. The final adjectives used for the study are shown in Table 5.

Table 4

Postgame Emotions Questionnaire Items

| Variable | Item | |
|---------------------|------------------|------------------|
| | Positive Emotion | Negative Emotion |
| Postgame Emotion | Enthusiastic | Angry |
| | Pleased | Sad |
| | Proud | Upset |
| | Interested | Dissatisfied |
| | Satisfied | Disappointed |
| | Excited | Ashamed |
| | Inspired | Irritable |
| | Happy | Hostile |
| | Active | Jittery |
| | Confident | Nervous |

Team Identification. Team identification is included as the control variable of this research. Team identification level is known to influence sports fans in regards to virtually all mental processes related to the team including postgame emotions, game satisfaction, revisit intention, etc. Thus, in order to clearly verify only the effects of imagination on fans' emotions, it was judged to be reasonable to control the team identification variable as it could possibly affect a fan's emotion. In other words, it was decided that assessing the direct effects of counterfactual and prefactual imagination exclusively by controlling fans' team identification level would better fit the purpose of the study.

Among the multiple scales developed to measure team identification, this study utilized the Korean version of team identification scale. Based on its original measurement scale by Wann and Branscombe (1993), this scale has been revised and adapted by Kim (2004). In this study, Kim's scale has been slightly modified in terms of wording and expressions so that the scale could follow the current trends in language usage. For example, "(condemnation by) the mass communication" was replaced by "hateful comments". Six items were presented on a seven point Likert-type scale. The measurement developed for team identification variable is shown in Table 3.

Table 5

Team identification Questionnaire Items

| Variable | Item |
|---------------------|--|
| Team identification | 1) I use the term “my team” to indicate this team. 2) I feel as if I am the winner when this team wins. 3) Compliments about this team make me feel as if I am getting the compliments. 4) Criticism about this team makes me feel as if I am getting the criticism. 5) I care about what other people think about this team. (I care about other people’s opinions about this team.) 6) I feel upset (displeased) when I see hateful comments about this team. |

Demographic Information. Basic demographic data was collected for analysis. Items on gender and age were included.

Results

Descriptive Analysis

Participants. Out of 264 surveys distributed, a total of 225 sets of surveys were collected from 4 different Korean Basketball League (KBL) regular season games. After removing unusable responses, 102 sets of surveys were used for the final analysis. It should be noted that the specific research question of this study was to investigate the postgame emotions among the fans of only the defeated team. Thus, 81 sets of surveys were deemed invalid for the final analysis because the respondents' of those surveys were fans of the team that had won the game. Additional 42 surveys were eliminated for they were incomplete.

Participants consisted of 63 (62%) male and 39 (38%) female respondents. The age range of the participants was primarily between the ages of 20 to 39 (75%). Participants were given one of the three types of surveys. Two of them were designed to provoke the generation and detect the impact of counterfactual and prefactual imagination on fans' postgame emotions. The third type of survey was conceived to form a control group. Detailed demographic information of the sample can be found in Table 6 below. The information by each survey groups is provided in Table 7.

Table 6

Demographics of Study Participants

| Variable | Category | N | % |
|-----------------|-----------------|----------|----------|
| Imagination | Counterfactual | 30 | 29.41 |
| | Prefactual | 31 | 30.39 |
| | Control Group | 41 | 40.20 |
| Total | | 102 | 100.00 |
| Gender | Male | 63 | 61.76 |
| | Female | 39 | 38.24 |
| Total | | 102 | 100.00 |
| Age | 19 and Under | 16 | 15.69 |
| | 20~29 | 56 | 54.90 |
| | 30~39 | 20 | 19.61 |
| | 40~49 | 8 | 7.84 |
| | 50 and Above | 2 | 1.96 |
| Total | | 102 | 100.00 |

Table 7

Demographics of Study Participants by Group

| Group | Variable | Category | N | % |
|--|-----------------|-----------------|----------|----------|
| Counterfactual Imagination Group | Gender | Male | 16 | 53.33 |
| | | Female | 14 | 46.67 |
| | Age | 19 and Under | 3 | 10.00 |
| | | 20~29 | 15 | 50.00 |
| | | 30~39 | 9 | 30.00 |
| | | 40~49 | 1 | 3.33 |
| | 50 and Above | 2 | 6.67 | |
| Subtotal | | | 30 | 100.00 |
| Prefactual Imagination Group | Gender | Male | 22 | 47.1 |
| | | Female | 9 | 52.9 |
| | Age | 19 and Under | 7 | 22.58 |
| | | 20~29 | 16 | 51.61 |
| | | 30~39 | 6 | 19.35 |
| | | 40~49 | 2 | 6.45 |
| Subtotal | | | 31 | 100.00 |
| Control Group | Gender | Male | 25 | 60.98 |
| | | Female | 16 | 39.02 |
| | Age | 19 and Under | 6 | 14.63 |
| | | 20~29 | 25 | 60.98 |
| | | 30~39 | 5 | 12.20 |
| | | 40~49 | 5 | 12.20 |
| Subtotal | | | 41 | 100.00 |
| Total | | | 102 | |

Descriptive Statistics. In order to identify the baseline characteristics of the key variables, descriptive analysis was carried out using the statistical package SAS 9.4. Minimum and maximum values, the mean, and standard deviation for variables team identification, positive emotion, negative emotion, and upward and downward imagination are included in the analysis as shown in Table 8. The number of upward and downward imaginations generated by individuals were counted and separately coded into the data by the researcher for the analysis of study 1. Moreover, the total number of generated imagination, the sum of the upward and the downward thoughts generated by each participant, was also separately coded by the researcher and utilized for analysis. The mean values of each variables and the mean total number of generated imagination by group are presented in Table 9.

Table 8

Summary of Key Variables

| Variable | N | Item # | Min. | Max. | M | SD |
|-----------------|----------|---------------|-------------|-------------|----------|-----------|
| | | 1 | 1 | 7 | 5.13 | 1.79 |
| | | 2 | 1 | 7 | 5.32 | 1.70 |
| Team | 102 | 3 | 1 | 7 | 4.73 | 1.78 |
| Identification | | 4 | 1 | 7 | 4.19 | 1.91 |
| | | 5 | 1 | 7 | 4.59 | 1.73 |
| | | 6 | 1 | 7 | 4.53 | 1.94 |

| | | | | | | |
|----------------------|-----|----|---|---|------|------|
| | | 1 | 1 | 7 | 4.43 | 1.82 |
| | | 2 | 1 | 7 | 4.13 | 1.82 |
| | | 3 | 1 | 7 | 4.28 | 1.75 |
| | | 4 | 1 | 7 | 4.50 | 1.80 |
| Negative Emotion | 102 | 5 | 1 | 7 | 4.25 | 1.79 |
| | | 6 | 1 | 7 | 3.48 | 1.90 |
| | | 7 | 1 | 7 | 4.10 | 1.88 |
| | | 8 | 1 | 7 | 3.47 | 1.94 |
| | | 9 | 1 | 7 | 3.46 | 2.02 |
| | | 10 | 1 | 7 | 3.74 | 1.88 |
| | | 1 | 1 | 7 | 3.35 | 1.83 |
| | | 2 | 1 | 7 | 3.06 | 1.79 |
| | | 3 | 1 | 7 | 3.23 | 1.90 |
| | | 4 | 1 | 7 | 3.22 | 1.85 |
| Positive Emotion | 102 | 5 | 1 | 7 | 3.52 | 1.90 |
| | | 6 | 1 | 7 | 3.25 | 1.86 |
| | | 7 | 1 | 7 | 2.93 | 1.72 |
| | | 8 | 1 | 7 | 3.24 | 1.78 |
| | | 9 | 1 | 7 | 3.38 | 1.82 |
| | | 10 | 1 | 7 | 3.19 | 1.80 |
| Upward Imagination | 61 | 1 | 0 | 7 | 2.08 | 1.35 |
| Downward Imagination | 61 | 1 | 0 | 5 | 1.29 | 1.02 |

Note. *SD* = Standard Deviation

Table 9

Mean Values by Group

| Variable | N | Counterfactual | Prefactual | Control |
|------------------------|----------|-----------------------|-------------------|----------------|
| Team Identification | 102 | 5.32 | 4.69 | 4.37 |
| Negative Emotion | 102 | 3.63 | 3.90 | 4.30 |
| Positive Emotion | 102 | 3.62 | 4.00 | 2.38 |
| Upward Imagination | 61 | 1.73 | 2.42 | - |
| Downward Imagination | 61 | 1.00 | 1.55 | - |
| Total # of Imagination | 61 | 2.73 | 3.97 | - |

Table 10

Correlation Analysis Results

| Variable | Identification | Up | Down | Total | Negative | Positive |
|-----------------|-----------------------|-----------|-------------|--------------|-----------------|-----------------|
| Identification | 1.00 | | | | | |
| Up | -0.07 | 1.00 | | | | |
| Down | -0.27 | 0.36** | 1.00 | | | |
| Total | -0.19 | 0.87*** | 0.77*** | 1.00 | | |
| Negative | 0.13 | 0.00 | 0.25* | 0.16 | 1.00 | |
| Positive | -0.05 | 0.14 | -0.19 | -0.00 | -0.36** | 1.00 |

* $p < .05$, ** $p < .01$, *** $p < .001$

Reliability Test

Reliability of a scale refers to the consistency of the scale and the measured results. It is also related to their accuracy and predictability. If the measurement is accurate and the same results can be obtained consistently with repeated measurements, then the scale is considered to be highly reliable. In the current study, Cronbach's Alpha coefficient method was employed to measure the reliability of the scales. Cronbach's Alpha value of 0.7 and greater is generally regarded as having relatively high reliability, and when Cronbach's Alpha coefficient is 0.8 or greater, the reliability is deemed significantly high.

Cronbach's Alpha values for this study are calculated for variables team identification, postgame negative emotions, and postgame positive emotions as shown in Table 11. All of the variables reported Cronbach's Alpha values of 0.9 and higher. Therefore, the reliability of the scales used in the current study is confirmed. Open-ended response format was utilized for the assessment of upward imagination and downward imagination.

Table 11

Cronbach's Alpha Reliability Test Results

| Variable | Number of Items | Cronbach's α |
|----------------------|------------------------|---------------------------------------|
| Team Identification | 6 | 0.90 |
| Positive Affect | 10 | 0.97 |
| Negative Affect | 10 | 0.94 |
| Upward Imagination | 1 | - |
| Downward Imagination | 1 | - |

Study 1: Analysis of Defeated Fans' Imagination

Independent Samples T-test.

H1. Counterfactual imagination group will generate a greater number of imaginations than prefactual imagination group.

The number of upward and downward imagination generated by individuals were counted and separately coded into the data by the researcher for analysis of study 1. The mean total number of generated imagination- the sum of upward and downward thoughts generated by individuals- of counterfactual imagination group and prefactual imagination group were compared to test the first hypothesis. The significance threshold for the present study was set at .05. As opposed to the prediction of the study, the independent samples t-test results showed that prefactual imagination group ($M=3.97$) generated greater number of imagination than the counterfactual imagination group ($M=2.73$). T-test confirmed the difference to be statistically significant, $t(59) = -2.57, p < .05$, satisfying the $p < 0.05$ level of significance. Thus, hypothesis 1 was rejected. Table 12 shows the results in detail.

Table 12

Independent Samples T-test Results for Total Number of Generated Imagination

| Sample (N) | Mean | 95% CL Mean | | Min. | Max. | SD | <i>t</i> | <i>p</i> |
|---------------------|-------------|--------------------|------|-------------|-------------|-----------|-----------------|-----------------|
| Counterfactual (31) | 2.73 | 2.16 | 3.30 | 1.00 | 8.00 | 1.53 | -2.57 | .0126* |
| Prefactual (30) | 3.97 | 3.17 | 4.75 | 0.00 | 10.00 | 2.15 | | |

Note. $df=59$, $*p<.05$

Paired Samples T-test.

H2. Both groups will generate a greater number of upward imaginations than downward imaginations.

H2a. Counterfactual imagination group will generate a greater number of upward imaginations than downward imaginations.

H2b. Prefactual imagination group will generate a greater number of upward imaginations than downward imaginations.

Results from the two separate paired samples t-tests showed significant differences between upward and downward imagination generated by each of the counterfactual and prefactual groups. According to the test results participants in the counterfactual imagination group produced more upward counterfactual imagination ($M=1.73$) than downward counterfactual imagination ($M=1.00$). This difference was statistically significant with $t(29) = 4.10$, and $p < .05$. H2a, therefore, was accepted. Table 15 shows the results in detail.

Similar conclusion could be drawn from the paired samples t-test for the prefactual imagination group. Results showed that this group also produced more upward prefactual imagination ($M=2.42$) than downward prefactual imagination ($M=1.55$), $t(30) = 2.91$, $p < .05$. Thus, H2b was accepted, thereby rendering the second hypothesis of study 1 acceptable.

Table 13

Paired Samples Statistics: Counterfactual Imagination Group

| Direction | Mean | N | SD | SEM |
|------------------|-------------|----------|-----------|------------|
| Upward | 1.73 | 30 | .98 | .179 |
| Downward | 1.00 | 30 | .83 | .152 |

Note. df=29; SD=Standard Deviation, SEM= Standard Error of the Mean

Table 14

Paired Samples Statistics: Prefactual Imagination Group

| Direction | Mean | N | SD | SEM |
|------------------|-------------|----------|-----------|------------|
| Upward | 2.42 | 31 | 1.57 | .281 |
| Downward | 1.55 | 31 | 1.12 | .201 |

Note. df=30; SD=Standard Deviation, SEM= Standard Error of the Mean

Table 15

Paired Samples T-test Results: Counterfactual Imagination Group

| Direction | Mean | 95% CL | | Min. | Max. | SD | t | p |
|----------------------|-------------|---------------|-------------|-------------|-------------|-----------|----------|----------|
| | | Mean | Mean | | | | | |
| Upward - Downward | 0.73 | 0.37 | 1.10 | -1.00 | 3.00 | 0.98 | 4.10 | <.000*** |

*Note. df=29, ***p<.000*

Table 16

Paired Samples T-test Results: Prefactual Imagination Group

| Direction | Mean | 95% CL | | Min. | Max. | SD | t | p |
|----------------------|-------------|---------------|-------------|-------------|-------------|-----------|----------|----------|
| | | Mean | Mean | | | | | |
| Upward - Downward | 0.87 | 0.25 | 1.48 | -1.00 | 7.00 | 1.67 | 2.91 | .0068** |

*Note. df=30, **p<.01*

Study 2: Relationship between Imagination and Emotion

H3. Generating imagination will weaken sports fans' negative postgame emotions.

H3a. Counterfactual imagination group will exhibit weaker negative emotion compared to the control group.

H3b. Prefactual imagination group will exhibit weaker negative emotion compared to the control group.

To test the hypotheses for study 2, linear regression analysis with dummy variables was conducted. Results indicated significant differences in the dependent variable postgame negative emotion between counterfactual imagination group and the control group. Counterfactual imagination group displayed significantly weaker negative emotion compared to the control group. Specifically, when team identification variable was controlled, individuals who generated counterfactual imagination reported 0.92 unit weaker postgame negative emotion ($\beta = -0.92$, $t(98) = -2.55$, $p < .05$). H3a, therefore, was accepted.

Meanwhile, prefactual imagination group also exhibited 0.49 unit weaker negative postgame emotion when team identification variable was controlled. However, this number was not statistically significant with the p-value of .16 ($p > .05$). Thus, H3b was rejected.

Table 17

Model Fit: Negative Emotion

| Source | df | SS | MS | F | p |
|-----------------|-----------|-----------|-----------|----------|----------|
| Model | 3 | 21.45 | 7.15 | 3.44 | .02* |
| Error | 98 | 203.97 | 2.08 | | |
| Corrected Total | 101 | 225.41 | | | |

Note. SS=sum of squares, MS=Mean Square

| Source | df | SS | MS | F | p | R-square |
|----------------|-----------|-----------|-----------|----------|----------|-----------------|
| Group | 2 | 13.75 | 6.87 | 3.30 | .04* | 0.10 |
| Identification | 1 | 13.32 | 13.32 | 6.40 | .01* | |

*Note. SS=Type 3 Sum of Squares, *p<.05*

Table 18

Regression Analysis Results: Negative Emotion

| Parameter | Estimate | SE | t | p |
|------------------|-----------------|-----------|----------|----------|
| Intercept | 3.18 | 0.50 | 6.37 | .02* |
| Identification | 0.26 | 0.10 | 2.53 | .01* |
| Counterfactual | -0.92 | 0.34 | -2.55 | .01* |
| Prefactual | -0.49 | 0.34 | -1.41 | .16 |
| Control Group | 0.00 | - | - | - |

*Note. SE=Standard Error, *p<.05*

H4. Generating imagination will strengthen sports fans' positive postgame emotions.

H4a. Counterfactual imagination group will exhibit stronger positive emotion compared to the control group.

H4b. Prefactual imagination group will exhibit stronger positive emotion compared to the control group.

A separate regression analysis was conducted to investigate H4. Postgame positive emotion was regressed on imagination. According to the analysis results, both the counterfactual and prefactual imagination groups exhibited significantly higher levels of postgame positive emotions than the control group. Counterfactual imagination group displayed 1.31 unit stronger positive emotions than the control group ($\beta = 1.31$, $t(98) = 3.62$, $p < .05$). Prefactual imagination group reported 1.64 unit stronger postgame positive emotion compared to the control group ($\beta = 1.64$, $t(98) = 4.72$, $p < .05$). Hence, H4a and H4b were both accepted. As a result, H4 was also accepted.

Table 19

Model Fit: Positive Emotion

| Source | df | SS | MS | F | p |
|-----------------|-----------|-----------|-----------|----------|----------|
| Model | 3 | 53.64 | 17.88 | 8.45 | .000*** |
| Error | 98 | 207.33 | 2.12 | | |
| Corrected Total | 101 | 260.97 | | | |

*m of Squares, MS=Mean Square, ***p<.001*

| Source | df | SS | MS | F | p | R-square |
|----------------|-----------|-----------|-----------|----------|----------|-----------------|
| Group | 2 | 53.58 | 26.79 | 12.66 | .00*** | 0.21 |
| Identification | 1 | 1.10 | 1.10 | 0.52 | .47 | |

*Ss=Type 3 Sum of Squares, ***p<.001*

Table 20

Regression Analysis Results: Positive Emotion

| Parameter | Estimate | SE | t | p |
|------------------|-----------------|-----------|----------|----------|
| Intercept | 2.70 | 0.50 | 5.37 | .00*** |
| Identification | -0.07 | 0.10 | -0.72 | .47 |
| Imagination A | 1.31 | 0.36 | 3.62 | .00*** |
| Imagination B | 1.64 | 0.35 | 4.72 | .00*** |
| Imagination C | 0.00 | - | - | - |

*SE=Standard Error, ***p<.001*

Discussion

The current study began with the macroscopic question on the potential effect of producing imaginative thoughts on the emotions of sports fans. This study investigated two types of imagination: counterfactual and prefactual imagination. Moreover, postgame negative emotion and postgame positive emotion were separately examined as the dependent variables. The primary purpose of this study was twofold. First, to examine the characteristics of counterfactual and prefactual imaginations generated by sports fans. Second, to provide an observation on how provoking imaginative thoughts among sports fans, specifically the fans of the defeated team, affects their postgame emotions.

Findings

Study 1: Analysis of Defeated Fans' Imagination. Study 1 investigated the general attributes of the imaginative thoughts generated by sports fans. The study hypothesized that fans of the defeated team will generate more imaginative thoughts after the defeat (counterfactuals), than before the game when the negative game outcome is not yet known to the fans (prefactuals). Such inference was based on the supposition that individuals will actively produce thoughts in response to a stimulus, in this case the team's loss. It was predicted that fans would make an attempt, either

conscious or unconscious, to alter their mood by making excuses for the team's defeat and by blaming the external factors as they did in a study by Mann (1974). This is expressed in the present study in the form of imagining an alternative reality. Generation of imagination prior to an event or a stimulus was predicted to be more limited.

Intriguingly, as opposed to the the current study's prediction, results indicated that more thoughts were generated by individuals in prefactual imagination group than counterfactual imagination group. According to the results, sports fans produced more imagination before the tip-off compared to after the game when they are aware of their team's failure. These results, however, should be interpreted with much caution. One possible explanation, for example, is that the adverse outcome affected fans' behavioral intention of 'writing down' their thoughts as instructed in the survey. In other words, fans' negative emotion induced by their team's poor performance might have adversely influenced their willingness to actively follow the instructions in the survey. In this case, it would be inappropriate to make hasty conclusions that sports fans 'produced' less counterfactual imagination.

Second hypothesis predicted more upward imagination to be generated by defeated sports fans than downward imagination in both imagination groups. As hypothesized, both the counterfactual and prefactual imagination groups generated more upward imaginative thoughts about their

team's game outcome. The association between a negative consequence and upward counterfactual thoughts has been detected in studies by a number of scholars (Markman, Gavanski, Sherman, & McMullen, 1993; Rose & Olson, 1995; Sanna et al., 1999). Roese and Olson (1995), for example witnessed how outcome valence can provoke different directions in counterfactual comparisons and discovered negative outcome tends to prompt upward comparisons. It is possible that the results of this research could be interpreted along these lines. In all likelihood, the team's defeat, negative outcome, may have prompted sports fans' upward imagination.

A few more explanations may be considered in comprehending the results. Upward counterfactuals are known to encourage positive attitude towards future behavior. Thus, it may be likely that producing upward counterfactuals may justify and encourage the fans' behavior of continuing to support their team. Studies have also found that when opportunities for future actions do not exist, upward counterfactuals can deflect negative feelings (Epstude & Roese, 2008; McMullen & Markman, 2000; Teigen & Jensen, 2011). This may also serve an explanation for the results, as there is not much chance fans can do anything about the loss.

Participants in the prefactual imagination group also produced a significantly greater number of upward thoughts than downward thoughts. Despite the relatively small amount of prior work on the direction of

prefactuals, it could be predicted that more upward prefactuals would be generated than downward prefactual imagination. Since prefactual thinking is producing imagination before an event, the team's loss in this specific study, fans would anticipate a good performance and therefore a positive outcome. Conforming to prior studies, it was predicted that such positive expectation and anticipation about the game will lead fans to imagine an optimistic future for the team. Therefore, more upward prefactual imagination was hypothesized to be generated (Markman & McMullen, 2003; Wilson & Ross, 2000). The results of the analysis of this study confirmed the study's prediction and the prior work on prefactual thinking.

Study 2: Relationship between Imagination and Emotion. The analysis results of study 2 illustrated that counterfactual imagination and prefactual imagination may indeed contribute to modulating sports fans' postgame negative and positive emotions. Study participants in counterfactual and prefactual imagination groups exhibited weaker negative postgame emotion and stronger positive postgame emotions compared to those of the control group. Negative emotion was significantly weaker in the counterfactual group (Negative emotion: Counterfactual Group < Control Group) while positive emotion was significantly stronger in both the counterfactual and prefactual groups. Individuals in the group that generated

prefactual imagination exhibited stronger positive emotion than those who produced counterfactual imagination (Positive Emotion: Prefactual Group > Counterfactual Group > Control Group).

Results also implied that counterfactual imagination may possibly be effective in deflecting the level of negative emotion. At an occurrence of a negative event, imagining an alternative outcome and its preconditions may help individuals cope with negative feelings prompted by the event. Especially when considering the role of upward counterfactuals to drive and encourage people to reset the goal for betterment, results may imply the fans' psychological connection toward the team. Because fans unconsciously think there is no more they can do to change the outcome of the game, they may spontaneously create upward counterfactual thoughts which consequently help to deflect negative feelings and to set new goals as proven in a study on a more extreme case of survivors of 2004 Tsunami (Teigen & Jensen, 2011).

According to the results, prefactual imagination was the most effective in intensifying positive emotion among the fans even after the team's poor performance. This conclusion can be deemed significant in two respects. First, it confirms that negative game outcome does not only prompt negative emotion. Unlike common-sense intuitions, fans may feel excited and aroused after the game despite the team's loss. More importantly, it shows how creating diverse imaginative thoughts about the imminent game can

foster the fans' positive attitude and emotion even in the face of their team's failure. Although fans *produced* more thoughts about winning the game by making upward prefactual thoughts than losing the game, considering a possible negative (downward) situation may also help them cope with an adverse outcome. Further studies, however, are warranted to validate the aforementioned interpretation.

Implications

Theoretical Implications. The present study looked into one possible mechanism of coping with team's failure among sports fans. By examining the role of counterfactual and prefactual imagination on postgame emotions, the study adds to the work of sport management in two aspects. First, it provides new insights on sports consumers by observing spectator emotion from a new perspective. Existing studies that have dealt with spectator emotion either focus on the types of emotion following a sports event or its relationship with other variables including consumer satisfaction and behavioral intention. This study, however, attempted to investigate whether the postgame emotions among fans are liable to change instead of regarding it in a one dimensional sense. Such goal was embodied in the study by grouping the participants into two experimental and one control group and comparing the postgame emotions between the three groups.

The present study extends the sport management literature also by suggesting a potential ‘coping strategy’ of sports consumers. The specific subject of this study was fans of the defeated team. These individuals can be regarded similar to a group of consumers facing a service failure. According to prior studies, the team’s loss in a sports game prompts negative emotions among the fans. The results of the current study suggest generating imagination before or after a sports match can modulate these fans’ postgame negative and positive emotions.

This study also adds to the field of counterfactual and prefactual thinking. It is the first study to look into sports fans’ generation of counterfactual and prefactual imagination about a sports game outcome. Study 1 specifically examined when sports fans generate imaginative thoughts and what the prevailing direction of those thoughts is. It was witnessed that more imagination was generated before the game and that upward thoughts were dominant in both the counterfactual and prefactual groups. Study 2 reported that the defeated fans’ production of counterfactual imagination and prefactual imagination may actually affect their postgame emotions. Thus, these results can provide interesting future research topic and contribute to the existing literature on the emotion modulating function of imagination.

Practical Implications. Sports consumers play a fundamental role in the development of spectator sports market, especially the professional sports market. Long term relationship with sports consumers leads to fiscal success of the teams or clubs in the microscopic perspective and of the whole sports industry in the macroscopic view. Thus, this study's contribution to a deeper understanding of spectator emotion can provide a valuable insight in the practical sense, for spectator emotion is directly and indirectly associated with fans' sports consumption such as revisit and (ticket) purchase intentions. Moreover, this research is also significant because "defeat" is a universal phenomenon that virtually all existing sports teams and their fans can face in the world of professional sports where competition and losing is inevitable.

This study could provide sport marketers with insights into how sports fans cope with their postgame emotions triggered in response to the negative game outcome. It can lay a cornerstone for developing various marketing and promotion strategies utilizing the imagination of fans. Encouraging fans to imagine various game situations before its start or to imagine alternative realities after a loss could help fans modulate their emotions, as the results of the current study suggest. For example, existing pre-game events like "who's going to make the first goal?" can be refined with more delicacy and sophistication so that fans can produce more diverse imagination about the game.

Future Research Directions

Although assessing the real-world production of imaginative thoughts was one of the strengths of this study, future studies may arrange and carry out the study in an experimental setting. A well-designed experiment will effectively control external factors that were judged to influence the variables in an unplanned way, while maintaining the core framework of the current study. Most existing studies have analyzed counterfactual or prefactual imagination through thoroughly designed experiments and they have advantage in collecting data in a sufficient amount and of a higher quality.

Moreover, an experimental study will have an advantage over the current study as it may be able to more easily provide incentives for the participants, thereby helping to overcome a limitation of the present study. One of the major limitations of the current study was the high ratio of incomplete responses. Out of 264 sets of surveys distributed to the spectators at the basketball game, only 102 sets were usable for statistical analysis (39%). This high incomplete- or non-response rate (61%), in all possibilities, may have derived from the research setting. That is, conducting the survey on-site made it difficult to scrupulously guide and instruct the participants and guarantee their dedication.

Furthermore, subsequent studies could further consider the unique

nature or context of spectator sports to design a more sophisticated research that can look into the imagination of sports fans in different angles. For instance, the relative difference in rankings or standings between the two opposing teams might be taken into consideration. In this case, it could be tested whether the emotion modulating function of imagination is moderated by the ranking difference between the two teams. This way, conditions of the real world could be more vividly reflected in the study. Whether such moderating effect intensifies in more important games such as the playoffs or the finals can also be raised as a research question. Furthermore, examining the fans of different sports leagues and comparing the effect of imagination on emotion between them may serve as additional relevant and valuable research question for future studies.

References

- Apperley, T. (2013). Modding the historians' code: Historical verisimilitude and the counterfactual imagination. In Kapell, M. W. & Elliot, A. B. R. (Eds.) *Playing with the past: Digital games and the simulation of history* pp. New York, NY, US: Bloomsbury Publishing USA.
- Biscaia, R., Correia, A., Rosado, A. Maroco, J., & Ross, S. (2012). The effects of emotions on football spectators' satisfaction and behavioral intentions. *European Sport Management Quarterly*, 12(3), 227-242.
- Bizman, A. & Yinon, Yoel. (2002). Engaging in distancing tactics among sport fans: Effects on self-esteem and emotional responses. *The Journal of Social Psychology*, 142(3), 381-392.
- Bonifield, C., Cole, C. (2007) Affective Responses to Service Failure: Anger, Regret, and Retaliatory versus Conciliatory Responses. *Marketing Letters: A Journal of Research in Marketing*, 18, 85-99.
- Branscombe, N. R. & Wann, D. L. (1991). The positive social and self-concept consequences of sport team identification. *Journal of Sport and Social Issues*, 15, 115-127.
- Branscombe, N. R. & Wann, D. L. (1992a). Physiological arousal and reactions to outgroup members during competitions that implicate an important social identity. *Aggressive Behavior*, 18, 85-93.
- Branscombe, N. R. & Wann, D. L. (1992b). Role of identification with a

- group, arousal, categorization processes, and self-esteem in sport spectator aggression. *Human Relations*, 45, 1013-1033.
- Buunk, B. P., Ybema, J. F., Gibbons, F. X., & Ipenburg, M. L. (2001). The Affective Consequences of Social Comparison as Related to Professional Burnout and Social Comparison Orientation. *European Journal of Social Psychology*, 31(4), 337-351.
- Byrne, R. M. J. (2007). Précis of The Rational Imagination: How people create Alternatives to Reality. *Behavioral and Brain Sciences*, 30, 439-453.
- Byrne, R. M. J. (2016). Counterfactual Thought. *Annual Review of Psychology*, 67, 135-157.
- Byrne, R. M. J. & Egan, S. M. (2004) Counterfactual and prefactual conditionals. *Canadian Journal of Experimental Psychology*, 58(2), 113-120.
- Campbell Jr., R. M., Aiken, D. & Kent, A. (2004). Beyond BIRGing and CORFing: Continuing the Exploration of Fan Behavior. *Sport Marketing Quarterly*, 13(3), 151-157.
- Carmona, C., Buunk, A. P., Peiro, J. M., Rodriguez, I., & Bravo, M. J. (2006). Do Social Comparison and Coping Styles Play a Role in the Development of Burnout? Cross-Sectional and Longitudinal Findings. *Journal fo Occupational and Organizational Psychology*, 79(1), 85-99.

- Catellani, P. & Covelli, V. (2013) The Strategic Use of Counterfactual Communication in Politics. *Journal of Language and Social Psychology, 32*(4), 480-489.
- Cialdini, R. B., Borden, R. J., Thorne, A., Walker, M. R., Freeman, S., & Sloan, L. R. (1976). Basking in Reflected Glory: Three (football) field studies. *Journal of Personality and Social Psychology, 34*(3), 366-375.
- Collins, R. L. (1996). For better or worse: The impact of upward social comparison on self-evaluations. *Psychological Bulletin, 16*, 74-89.
- Cooke, A. D. J., Meyvis, T., & Schwartz, A. (2001). Avoiding future regret in purchase-timing decisions. *Journal of Consumer Research, 27*(4), 447-459.
- Dray, K. & Uphill, M. A. (2009). A survey of athletes' counterfactual thinking: Precursors, prevalence, and consequences. *Exercise and Sport Sciences Reviews, 5*(1), 16-26.
- Dunning, D. & Parpal, M. (1989). Mental addition versus subtraction in counterfactual reasoning: On assessing the impact of personal actions and life events. *Journal of Personality and Social Psychology, 57*(1), 5-15.
- Epstude, K. & Jonas, K. J. (2015). Regret and counterfactual thinking in the face of inevitability. *Social Psychological and Personality Science, 6*(2), 2015.

- Epstude, K. & Roese, N. J. (2008). The functional theory of counterfactual thinking. *Personality and Social Psychology Review*, 12(2), 168-192.
- Epstude, K. Scholl, A. Roese, N. J. (2016). Prefactual thoughts: Mental simulations about what might happen. *Review of General Psychology*, 20(1), 48-56.
- Ferrante, D., Giorotto, V., Straga, M., & Walsh, C. (2013) Improving the Past and the Future: A Temporal Asymmetry in Hypothetical Thinking. *Journal of Experimental Psychology*, 142(1), 23-27.
- Filiz-Ozbay, E. & Ozbay, E. Y. (2007). Auctions with anticipated regret: Theory and experiment. *American Economic Review*, 97(4), 1407-1418.
- Gau, L. S., James, J. D., & Kim, J. C. (2009). Effects of team identification on motives, behavior outcomes, and perceived service quality. *Asian Journal of Management and Humanity Sciences*, 4, 76-90.
- Gavanski, I. & Wells, G. L. (1989) Counterfactual processing of normal and exceptional events. *Journal of Experimental Social Psychology*, 25(4), 314-325.
- Goodman, N. (1983). *Fact, Fiction, and Forecast* (4th edition). Cambridge, MA: Harvard University Press.
- Grieve, F. G., Houston, D. A., Dupuis, S. E., & Eddy, D. (2006). Counterfactual production and achievement orientation in competitive athletic settings. *Journal of Applied Social Psychology*,

29(10), 2177-2199.

Hilton, D. J. & Slugoski, B. R. (1986). Knowledge-based causal attribution: The abnormal conditions focus model. *Psychological Review*, 93(1), 75-88.

Hirt, E. R. & Zillmann, D. (1985). The effects of team outcome on fan's estimates of their own performance. *Midwestern Psychological Association*.

Hirt, E. R., Zillman, D., Erickson, G. A., & Kennedy, C. (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.

Imagination. (n.d.). In *Oxford English Dictionary*. Retrieved from <https://en.oxforddictionaries.com/definition/imagination>.

Johnson, M. K. & Sherman, S. J. (1990). Constructing and reconstructing the past and the future in the present. In E. T. Higgins & R. M. Sorrentino (Eds.), *Handbook of motivation and cognition: Foundations of social behavior*, Vol.2, pp.482-526. New York, NY, US: Guilford Press.

Kahneman, D. & Miller, D. T. (1986). Norm Theory: Comparing reality to its alternatives. *Psychological Review*, 93(2), 136-153.

Kemp, E., Bui, M., & Chapa, S. (2015). The role of advertising in consumer emotion management. *International Journal of Advertising*, 31(2),

339-353.

Kim, J. W., Magnusen, M., & Kim, Y. K. (2014). A critical review of theoretical and methodological issues in consumer satisfaction research and recommendations for future sport marketing scholarship. *Journal of Sport Management, 28*, 338-355.

Kwon, H. H., Trail, G., & James, J. D. (2007). The mediating role of perceived value: Team identification and purchase intention of team-licensed apparel. *Journal of Sport Management, 21*(4), 540-554.

Larsen, J. T., McGraw, A. P., Mellers, B. A., & Cacioppo, J. T. (2004). The agony of victory and thrill of defeat. *Psychological Science, 15*(5), 325-330.

Lee, J. S. & Kang, J. H. (2015). Effects of Sport Event Satisfaction on Team Identification and Revisit Intent. *Sport Marketing Quarterly, 24*(4), 225-234.

Lipe, M. J. (1991). Counterfactual Reasoning as Framework for Attribution Theories. *Psychological Bulletin, 109*(3), 456-471.

Lockwood, P. (2002). Could it happen to you? Predicting the impact of downward comparisons on the self. *Journal of Personality and Social Psychology, 82*(3), 343-358.

Mael, F. & Ashforth, B. E. (1992). Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of organizational behavior, Journal of Organizational*

Behavior, 13(2), 103-123.

- Magnusen, M., Rhee, Y. C., & Kim, Y. K. (2010). The Effect of Team Identification and Game Satisfaction on Revisit Intention: A Case of Korean Basketball League Spectators. *International Journal of Human Movement Science*, 4(2), 23-47.
- Mandel, D. R., & Lehman, D. R. (1996). Counterfactual thinking and ascriptions of cause and preventability. *Journal of Personality and Social Psychology*, 71(3), 450-463.
- Mandel, D. R. & Dhami, M. K. (2005). "What did I" versus "What I might have done": Effect of factual versus counterfactual thinking on blame, guilt, and shame in prisoners. *Journal of Experimental Social Psychology*. 41(6), 627-635.
- Markman, K. D., Gavanski, I., Sherman, S. J., & McMullen, M. N. (1993) Gavinski, Sherman, & McMullen. The Mental Simulation of Better and Worse Possible Worlds. *Journal of Experimental Social Psychology*, 29(1), 87-109.
- Markman, K. D., Gavanski, I., Sherman, S. J., & McMullen, M. N. (1995). The Impact of Perceived Control on the Imagination of Better and Worse Possible Worlds. *Personality and Social Psychology Bulletin*, 21(6), 588-595.
- Markman, K. D. & McMullen, M. N. (2003). A reflection and evaluation model of comparative thinking. *Personality and Social Psychology*

Review, 7(3), 244-267.

Markman, K. D., McMullen, M. N., & Elizaga, R. A. (2008). Counterfactual thinking, persistence, and performance: A test of the reflection and evaluation model. *Journal of Experimental Social Psychology*, 44(2), 421-428.

Markman, K. D. & Tetlock, P. E. (2000). 'I Couldn't Have Known': Accountability, Foreseeability and Counterfactual Denials of Responsibility. *British Journal of Psychology*, 39(3), 313-325.

Matsuoka, H., Chelladurai, P., & Harada, M. (2003). Direct and Interaction Effects of Team Identification and Satisfaction on Intention to Attend Games. *Sport Marketing Quarterly*, 12(4), 244-253.

McConnell, A. R., Niedermeier, K. E., Leibold, J. M., El-Alayli, A. G., Chin, P. P., & Kuiper, N. M. (2000). What if I find it cheaper someplace else?: Role of prefactual thinking and anticipated regret in consumer behavior. *Psychology & Marketing*, 17(4), 281-298.

McCloy, Byrne, R. J. M. (2002). Semifactual "even if" thinking. *Thinking & Reasoning*, 8(1), 41-67.

McCracken, G. D. (2005). *Culture and Consumption 2: Markets, Meaning and Brand Management*, Bloomington, Indiana: Indiana University Press.

McCrea, S. M. (2008). Self-Handicapping, Excuse Making, and Counterfactual Thinking: Consequences for Self-esteem and Future

- Motivation. *Journal of Personality and Social Psychology*, 95(2), 274-292.
- McGill, A. L. (2000). Counterfactual reasoning in causal judgments: Implications for marketing. *Psychology and Marketing*, 17(4), 323-343.
- McGraw, A. P., Mellers, B. A., & Tetlock, P. E. (2005). Expectations and emotions of Olympic athletes. *Journal of Experimental Social Psychology*, 41, 438-446.
- McMullen, M. N. & Markman, K. D. (2000). Downward Counterfactuals and Motivation: The Wake-Up Call and the Pangloss Effect. *Personality and Social Psychology Bulletin*, 26(5), 575-584.
- McMullen, M. N., Markman, K. D., & Gavanski, I. (1995). Living in Neither the Best Nor Worst of All Possible Worlds: Antecedents and Consequences of Upward and Downward Counterfactual Thinking. In Roese, N. J., & Olson, J. M. (Eds), *What Might Have Been: The Social Psychology of Counterfactual Thinking* (133-167). Mahwah, NJ: Lawrence Erlbaum.
- Medvec, V. H., Madey, S. F., & Gilovich, T. (1995). When less is more: Counterfactual thinking and satisfaction among Olympic medalists. *Journal of Personality and Social Psychology*, 69(4), 603-610.
- Moreno, F. C., Prado-Gascó, V., Hervás, J. C., Nunez-Pomar, J., & Sanz, V. A. (2015). Spectator emotions: Effect on quality, satisfaction, value, and

- future intentions. *Journal of Business Research*, 68(7), 1445-1449.
- Morris, M. W. & Moore, P. C. (2000). The Lessons We (Don't) Learn: Counterfactual Thinking and Organizational Accountability after a Close Call. *Administrative Science Quarterly*, 45(4), 737-765.
- Myers, A. L., McCrea, S. M., & Tyser, M. P. (2014). The role of thought-content and mood in the preparative benefits of upward counterfactual thinking. *Motivation and Emotion*, 38(1), 166-182.
- Na, J. H., Park, J. W., & Suk, K. (2008). Unsuccessful purchase experiences and future consumer decisions: Effects of initial goal setting processes and counterfactual thoughts. *Advances in Consumer Research*, 35, 276-281,
- N'gbala, A. & Branscombe, N. R. (1995). Mental simulation and causal attribution: When simulating an event does not affect fault assignment. *Journal of Experimental Social Psychology*, 31(2), 139-162.
- Niendenthal, P. M., Tangney, J. P. & Gavanski, I. (1994). "If I weren't" versus "If only I hadn't: Distinguishing shame and guilt in counterfactual thinking. *Journal of Personality and Social Psychology*, 67(4), 585-595.
- Patrick, V. M., Lancellotti, M., & Hagtvedt, H. (2008) Getting a second chance: the role of imagery in the influence of inaction regret on behavioral intent. *Journal of the Academy of Marketing Science*,

37(2), 181-190.

Plunkett Research (2017). Sports Industry Statistic and Market Size Overview.

Retrieved from <https://www.plunkettresearch.com/statistics/Industry-Statistics-Sports-Industry-Statistic-and-Market-Size-Overview/>

Power, M. K. (1995). Habermas on Law and Democracy: Critical Exchanges:

Law's Reconstruction, Justification, and Application: Habermas and the counterfactual imagination. *Cardozo Law Review*, 17, 1005-2153.

Price, J., McClure, J., & Siegert, R. J. (2000). What might have been and why

it wasn't: Counterfactual thinking and attributions in competitive tennis players. *New Zealand Journal of Sports Medicine*, 28(2), 24-35.

Robinson, M. J. & Trail, G. T. (2005). Relationships among spectator gender,

motives, points of attachment, and sport preference. *Journal of Sport Management*, 19(1), 58-80.

Roese, N. J. (1994). The Functional Basis of Counterfactual Thinking.

Journal of Personality and Social Psychology, 66(5), 805-818.

Roese, N. J. (1997). Counterfactual Thinking. *Psychological Bulletin*, 121(1),

133-148.

Roese, N. J. (2000). Counterfactual thinking and marketing: Introduction to

the special issue. *Psychology and Marketing*, 17(4), 277-280.

Roese, N. J. & Olson, J. M. (1993a). Self-esteem and counterfactual thinking.

Journal of Personality and Social Psychology, 65(1), 199-206.

- Roese, N. J. & Olson, J. M. (1993b). The structure of counterfactual thought. *Personality and Social Psychology Bulletin*, 19(3), 312-319.
- Roese, N. J. & Olson, J. M. (1995). Functions of counterfactual thinking. In N. J. Roese & J. M. Olson (Eds.), *What might have been: The social psychology of counterfactual thinking* (169-197). Hillsdale, NJ, US: Lawrence Erlbaum Associates, Inc.
- Roese, N. J. & Olson, J. M. (1997). Counterfactual Thinking: The Intersection of Affect and Function. *Advances in Experimental Social Psychology*, 29, 1-59.
- Roese, N. J., Sanna, L. J., & Galinsky, A. D. (2005). The mechanics of imagination: Automaticity and control in counterfactual thinking. In Hassin, R. R., Uleman, J. S., & Bargh, J. A. (Eds.), *The new unconscious* (pp. 138-170). New York, NY, US: Oxford University Press.
- Sandberg, T. & Conner, M. (2010). Anticipated regret as an additional predictor in the theory of planned behavior: A meta-analysis. *British Journal of Social Psychology*, 47(4), 589-606.
- Sanna, L. J. (1996). Defensive pessimism, optimism, and simulating alternatives: Some ups and downs of prefactual and counterfactual thinking. *Journal of Personality and Social Psychology*, 71(5), 1020-1036.
- Sanna, L. J. & Turley, K. J. (1996). Antecedents to spontaneous

- counterfactual thinking: Effects of expectancy violation and outcome valence. *Personality and Social Psychology Bulletin*, 22(9), 906-919.
- Schwartz, N., Strack, F., Kommer, D., & Wagner, D. (1987). Soccer, rooms, and the quality of your life: Mood effects on judgments of satisfaction with life in general and with specific domains. *European Journal of Social Psychology*, 17(1), 69-79.
- Schweitzer, K. Zillmann, D., Weaver, J. B., & Luttrell, E. S. (1992). Profile: Perception of threatening events in the emotional aftermath of a televised college football game. *Journal of Broadcasting & Electronic Media*, 36(1), 75-82.
- Shank, M. D. & Beasley, F. M. (1998). Fan or Fanatic: Refining Measure of Sport Involvement. *Journal of Sport Behavior*, 21(4), 435-443.
- Sloan, L. 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. Cambridge, England: Cambridge University Press.
- Sloan, L. R. (1989). The Motive of Sports Fans. In J. H. Goldstein (Ed.), *Sports, Games, and Play: Social and Psychological Viewpoints*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Smallman, R. & Roese, N. J. (2009). Counterfactual thinking facilitates behavioral intentions. *Journal of Experimental Social Psychology*, 45(4), 845-852.

- Snyder, C. R., Higgins, R. L., & Stucky, R. J. (1983). Excuses: Masquerades in search of grace. New York, NY, US: John Wiley & Sons.
- Snyder, C. R., Lassegard, M. A., & Ford, C. E. (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.
- Sutton, W. A., McDonald, M. A., & Milne, G. R. (1997). Creating and fostering fan identification in professional sports. *Sport Marketing Quarterly*, *4*(1), 15-22.
- Sweeny, K. & Vohs, K. D. (2012). On near misses and completed tasks. *Psychological Science*, *23*(5), 464-468.
- Taylor, S. E., Buunk, B. P., & Aspinwall, L. G. (1990). Social Comparison, Stress, and Coping. *Personality and Social Psychology Bulletin*, *16*, 74-89.
- Taylor, S. E. & Lobel, M. (1989). Social Comparison Activity Under Threat: Downward Evaluation and Upward Contacts. *Psychological Review*, *96*(4), 569-575.
- Teigen, K. H. & Jensen, T. K. (2011). Unlucky victims or lucky survivors? *European Psychologist*, *16*, 48-57.
- Tyser, M. P., McCrea, S. M., & Knupfer, K. (2012). Pursuing Perfection or Pursuing Protection? Self-evaluation Motives Moderate the Behavioral Consequences of Counterfactual Thoughts. *European*

Journal of Social Psychology, 42(3), 372-382.

Taylor, S. E., Pham, L. B., Rivkin, I. D., & Armor, D. A. (1998). Harnessing the imagination: Mental simulation, self-regulation, and coping. *American Psychologist*, 53(4), 429-439.

Underwood, R., Bond, E., & Baer, R. (2001). Building service brands via social identity: Lessons from the sports marketplace. *Journal of Marketing Theory and Practice*, 9(1), 1-13.

Walchli, S. B., & Landman, J. (2003). Effects of counterfactual thought on postpurchase consumer affect. *Psychology and Marketing*, 20(1), 23-46.

Wann, D. L. (2006). Understanding the positive social psychological benefits of sport team identification: The team identification-social psychological health model. *Group Dynamics: Theory, Research, and Practice*, 10(4), 272-296.

Wann, D. L. & Branscombe, N. R. (1993). Sports fans: Measuring degree of identification with their team. *International Journal of Sport Psychology*, 24(1), 1-17.

Wann, D. L., Dolan, T. J., McGeorge, K. K., & Allison, J. A. (1994). Relationships between Spectator Identification and Spectators' Perceptions of Influence, Spectators' Emotions, and Competition Outcome. *Journal of Sport & Exercise Psychology*, 16(4), 347-364.

Watson, D. (1988). Individual and interindividual analyses of positive and

- negative affect: Their relation to health complaints, perceived stress, and daily activities. *Journal of Personality and Social Psychology*, 54(6), 1020-1030.
- Watson, D. Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063-1070.
- Wells, G. L. & Gavanski, I. (1989). Mental simulation of causality. *Journal of Personality and Social Psychology*, 56(2), 161-169.
- Wells, G. L., Taylor, B. R., & Turtlte, J. W. (1987). The undoing of scenarios. *Journal of Personality and Social Psychology*, 53(3), 421-430.
- White, K. & Lehman, D. R. (2005). Looking on the Bright Side: Downward Counterfactual Thinking in Response to Negative Life Events. *Personality and Social Psychology Bulletin*, 31(10), 1413-1424.
- Wills, T. A. (1981). Downward Comparison Principles in Social Psychology. *Psychological Bulletin*, 90(2), 245-271.
- Wilson, A. E. & Ross, M. (2000). The frequency of temporal-self and social comparisons in people's personal appraisals. *Journal of Personality and Social Psychology*, 78(5), 928-942.
- Wood, J. V. (1989). Theory of Research Concerning Social Comparisons of Personal Attributes. *Psychological Bulletin*, 106, 231-248.
- Wu, S. H., Tsai, C. Y. D., & Hung, C. C. (2012). Toward Team or Player? How Trust, Vicarious Achievement Motive, and Identification Affect

- Fan Loyalty. *Journal of Sport Management*, 26(2), 177-191.
- Wurgaft, B. A. (2010). The uses of Walter: Walter Benjamin and the Counterfactual Imagination. *History and Theory*, 49(3), 361-383.
- Yoon, S. Vargas, P. T. (2010). Feeling happier when paying more: Dysfunctional counterfactual thinking in consumer affect. *Psychology and Marketing*, 27(12), 1075-1100.
- Zeelenberg, M. (1999) Anticipated regret, expected feedback and behavioral decision making. *Journal of Behavioral Decision Making*, 12(2), 93-106.
- Zeelenberg, M. & Pieters, R. (2007). A theory of regret regulation 1.0. *Journal of Consumer Psychology*, 17(1), 3-18.

Appendix

설 문 지 A

안녕하십니까?

본 설문은 경기 결과에 대한 스포츠 팬의 인지작용과 감정의 관계를 연구하기 위한 것입니다.

각 질문을 읽고 문항에 답하여 주시면 감사하겠습니다.

본 조사를 통해 수집된 여러분의 개인적 사항이나 응답 내용 등은 통계법 제8조 및 제9조의 규정에 의하여 무기명으로 처리되며, 본 연구 목적 외에는 절대 사용되지 않음을 약속드립니다.

설문에 참여해주셔서 대단히 감사합니다.

서울대학교 체육교육과
글로벌스포츠매니지먼트 전공

지도교수 : 김유겸

석사과정 : 배한결

E-mail : hankyulbae@snu.ac.kr

○ 하단의 빈 칸에, 괄호()에 해당될 수 있는 표현을 떠올릴 수 있는 대로 모두 기입해주세요.

※ 선수, 감독, 전략, 심판, 상대팀에 관한 것에서부터 운이나 날씨, 천재지변과 같은 비현실적인 조건들까지 무엇이든 좋습니다.

※ 두 칸에 같은 개수를 작성하실 필요는 없으며, 비슷한 내용의 것일 필요도 없습니다.

| 만약 () 했다면/이었다면 오늘 경기를 이겼을 것이다. | 만약 () 했다면/이었다면 오늘 경기를 더 크게 졌을 것이다. |
|------------------------------------|--|
| | |

○ 다음은 오늘의 경기 결과에 대한 귀하의 감정에 관한 질문입니다.

경기 결과에 대한 귀하의 감정을 나타내는 알맞은 숫자에 표시하여 주십시오.

| | 항목 | 전혀 그렇지 않다 매우 그렇다 | | | | | | |
|----|-----------|---|---|---|---|---|---|---|
| | | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 1 | 화가 난다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 2 | 슬프다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 3 | 속상하다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 4 | 불만족스럽다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 5 | 실망스럽다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 6 | 부끄럽다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 7 | 짜증난다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 8 | 적개심이 든다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 9 | 초조하다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 10 | 긴장된다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 11 | 신난다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 12 | 기쁘다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 13 | 자랑스럽다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 14 | 만족스럽다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 15 | 흥미진진하다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 16 | 흥분된다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 17 | 고무된다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 18 | 행복하다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 19 | 활기차다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |
| 20 | 자신감이 생긴다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |

<설문에 응답해 주셔서 진심으로 감사드립니다.>

설문지 B

안녕하십니까?

본 설문은 경기 결과에 대한 스포츠 팬의 인지작용과 감정의 관계를 연구하기 위한 것입니다.

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※ 두 칸에 같은 개수를 작성하실 필요는 없으며, 비슷한 내용의 것일 필요도 없습니다.

| 만약 () 한다면/이라면 오늘 경기를 이길 수 있을 것이다. | 만약 () 한다면/이라면 오늘 경기를 질 것이다. |
|---------------------------------------|---------------------------------|
| | |

해당 문항의 경우, 경기가 모두 끝난 후 답변하여 주십시오

○ 다음은 오늘의 경기 결과에 대한 귀하의 감정에 관한 질문입니다.

경기 결과에 대한 귀하의 감정을 나타내는 알맞은 숫자에 표시하여 주십시오.

| | 항목 | 전혀 그렇지 않다 | | | | | | | 매우 그렇다 |
|----|-----------|-----------|---|---|---|---|---|---|--------|
| | | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 1 | 화가 난다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 2 | 슬프다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 3 | 속상하다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 4 | 불만족스럽다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 5 | 실망스럽다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 6 | 부끄럽다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 7 | 짜증난다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 8 | 적개심이 든다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 9 | 초조하다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 10 | 긴장된다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 11 | 신난다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 12 | 기쁘다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 13 | 자랑스럽다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 14 | 만족스럽다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 15 | 흥미진진하다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 16 | 흥분된다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 17 | 고무된다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 18 | 행복하다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 19 | 활기차다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 20 | 자신감이 생긴다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |

<설문에 응답해 주셔서 진심으로 감사드립니다.>

설문지 C

안녕하십니까?

본 설문은 경기 결과에 대한 스포츠 팬의 인지작용과 감정의 관계를 연구하기 위한 것입니다.

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설문에 참여해주셔서 대단히 감사합니다.

서울대학교 체육교육과
글로벌스포츠매니지먼트 전공

지도교수 : 김유겸

석사과정 : 배한결

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해당 문항의 경우, 경기가 모두 끝난 후 답변하여 주십시오

○ 오늘의 경기 결과에 대한 귀하의 감정을 나타내는 알맞은 숫자에 표시하여 주십시오.

| | 항목 | 전혀 그렇지 않다 | | | | | | | 매우 그렇다 |
|----|-----------|-----------|---|---|---|---|---|---|--------|
| | | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 1 | 화가 난다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 2 | 슬프다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 3 | 속상하다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 4 | 불만족스럽다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 5 | 실망스럽다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 6 | 부끄럽다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 7 | 짜증난다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 8 | 적개심이 든다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 9 | 초조하다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 10 | 긴장된다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 11 | 신난다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 12 | 기쁘다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 13 | 자랑스럽다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 14 | 만족스럽다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 15 | 흥미진진하다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 16 | 흥분된다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 17 | 고무된다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 18 | 행복하다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 19 | 활기차다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |
| 20 | 자신감이 생긴다. | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | |

<설문에 응답해 주셔서 진심으로 감사드립니다.>

국문초록

본 연구의 핵심 목표는 팀의 패배에 대한 스포츠 팬의 감정적인 반응을 새로운 각도에서 살펴봄으로써 스포츠 팬에 대한 이해를 확장하는 데에 있다. 이에 따라 본 연구의 목적은 첫째, 스포츠 팬들이 경기 결과에 대해 떠올리는 다양한 상상(imagination)의 특성을 분석하고, 둘째, 그러한 상상의 생성(generation)이 팬들의 감정에 미치는 영향을 검증하는 것이다. 특히 본 연구는 패배한 팀의 팬들을 연구의 대상으로 설정하였다. 이를 통해 팀의 패배에 직면한 스포츠 팬의 감정적인 반응에 대한 이해를 넓히고자 하였다.

본 연구에서는 프로농구연맹(KBL) 정규시즌 경기의 팬들을 대상으로 네 차례의 오프라인 설문조사를 실시하였다. 참여자들은 설문지의 종류에 따라 무작위로 사후상상집단과 사전상상집단, 그리고 통제집단을 구성하였다. 두 집단은 각각 경기 이후(사후상상집단)와 경기 이전(사전상상집단)에 경기 결과에 대한 다양한 상상을 자유롭게 떠올리도록 유도되었다. 또한 감정에 대한 상상의 효과 검증을 위해 상상의 유발 없이 경기 결과에 대한 감정만을 측정하는 설문을 통해 통제집단이 형성되었다.

연구의 목적을 효과적으로 달성하기 위하여 본 연구는 크게 두 개의 세부 연구로 구성되었다. 연구1은 심리학 분야에 속하는 사후가정사고와 사전가정사고 연구에 기반하여 설계되었다. 해당 선행연구에서 정립된 상향식/하향식사고의 개념을 차용하여 가설이 설립되었으며, 방법론적으로도 상기(上記) 연구를 따랐다. 수집된 자료 중 사후상상집단과 사전상상집단의 분석을 통해 스포츠 팬이 상상을 생산하는 지배적인 시점과 생산된 상상의 지배적인 방향을 확인하였다. 연구2는 더미변수를 활용한 선형적회귀분석을 통해 팀

패배 후 팬의 부정적, 긍정적 감정의 강도에 있어 세 집단 간의 차이를 비교분석하여 팬의 감정에 있어 상상의 효과를 검증하였다.

연구의 결과는 다음과 같다. 첫째, 스포츠 팬들의 상상은 경기 이후보다 경기 이전에 더 많이 생성된다. 즉, 분석 결과에 따르면 사후상상집단에 비해 사전상상집단이 더 많은 수의 사고를 생성하였다. 둘째, 사후상상집단과 사전상상집단 모두에서 더 많은 상향식 상상이 생성되었다. 스포츠 팬들은 상상의 시점과 관계 없이, 경기 결과에 대한 부정적인 상상(하향식)보다는 승리와 관련된 긍정적인 상상(상향식)을 떠올리는 경향이 있는 것이다. 마지막으로, 통계 결과는 팀 패배 후 팬의 감정에 있어 집단 간 유의미한 차이를 밝혔다. 사후상상집단은 통제집단에 비하여 유의미하게 약한 부정적 감정을 보였다. 또한, 사후상상집단과 사전상상집단은 통제집단에 비하여 유의미하게 강한 긍정적 감정을 보였다.

연구의 결과는 팀의 패배에 대한 스포츠 팬의 부정적 감정을 완화하고 긍정적 감정을 증폭시키는 상상의 효과를 암시한다. 향후 연구는 보다 정밀하게 설계된 실험을 통해 상상이 스포츠 팬의 감정에 미치는 효과를 보다 명백히 검증할 수 있을 것이다. 스포츠 팬은 프로스포츠리그로 대표되는 관람스포츠시장을 지탱하는 근본이다. 본 연구는 심리학 분야의 ‘상상’ 개념을 차용하여 스포츠 팬들에 대한 이해를 새로운 각도로 확장시켰다는 점에서 학문적 의의를 지닌다. 나아가, 팬들과의 장기적이고 우호적인 관계는 스포츠 팀들의 경제적 성공을 위한 초석이다. 이러한 관점에서 스포츠 팬들의 본 연구는 실무적으로도 중요한 의미를 지닌다.

주요어: 상상, 스포츠 팬, 감정, 사후가정사고, 사전가정사고

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