

**INVESTIGATING THE ROLE OF GROUP DYNAMICS
ON SPORT FANS' TEAM APPAREL
CONSUMPTION BEHAVIOR**

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ABSTRACT

Sport team fans identify with a team and continually internalize their favorite team as part of their self-concept (Wann, Melnick, Russel, & Pease, 2001). However, individuals simultaneously act different from the group to fulfill a psychological need to be distinct and unique (e.g., Brewer, 1991). The majority of prior studies in sport consumption behavior have emphasized that the sense of belonging to a sport team significantly influences a fan's attitude toward the team and consequent sport consumption behaviors. Beyond the fan-team relationship, there has been limited research on why an individual fan behaves differently from others in the group, specifically why and how sport fans assert their personal and collective selves while in groups. Furthermore, fans attach not only to their favorite sport teams, but also to a fan community which support the team.

Under the optimal distinctiveness framework, group dynamics are conceptualized as perceived interchangeability of group inclusion to the same group and interindividual differences (Simon & Kampmeier, 2001). This notion highlights the opposing forces or needs between fan distinctiveness (FD), to be distinct from other group members, and fan inclusiveness (FI), to be similar to other group members, as mutual determinants of the interpersonal self. Thus, the purpose of this research is to explore the psychological mechanism through which sport fans in a fan group balance two conflicting needs of group dynamics to make a decision on team apparel consumption. This was accomplished through two studies.

Study 1 employed a survey design to confirm the established evidence on the effects of team identification on team merchandise consumption behaviors in prior sport

management studies. It also uncovered the role of group dynamics in sport fans' team apparel consumption behavior. Findings of Study 1 showed that the mechanism of group dynamics was induced by a level of FI, FD, or both. With a sequential association from university identification (UID) to team identification (TID), the group dynamics were shown to significantly influence team apparel consumption behavior. Study 2 replicated the findings of Study 1 with undergraduate students and National Football League (NFL) fans across group contexts. Study 2 was implemented with the same measurement items to investigate whether the effect of group dynamics on team apparel consumption are moderated by social visibility as a situational cue as well as a boundary condition. Study 2 provided additional evidence of the mechanism underlying the impact of group dynamics on team apparel consumption across two different research contexts.

The overarching theoretical implication is that the mediator (group dynamics) and moderators (social visibility and context) influence sport fans' team apparel consumption behaviors. The pendulum effect between the opposing forces of FI and FD in terms of group dynamics provide an insightful idea to extend optimal distinctiveness theory (ODT) framework and advance the theory. FD and FI play a key role in predicting fan unique team apparel consumption behavior. Moreover, if one of the needs, either FD or FI, are too dominate, the pendulum effect will help balance the needs out. The existing concept of group dynamics explains why sport fans seek unique team products, but cannot account for the traditional perspective of TID to consumption behavior models. Therefore, the current findings further understanding of why and how individuals within a group of fans consume team products based on their unique balance between group inclusiveness and personal distinctiveness. The findings will provide practical guidelines

for both teams and sports brand marketers to understand the desire of sophisticated consumers to signal their individuality and what products and services should be offered according to the context-specific need.

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CHAPTER 1: INTRODUCTION

Sport consumers join groups of like-minded fans and engage in collective behavior in order to express their group identity towards a team. Sport team fans identify with a team and continually internalize their favorite team as part of their self-concept (Wann et al., 2001). Sports fans are passionate about their team, express their support, follow games via various media platforms, and spend their resources on team-related merchandise and memorabilia (Goldman, 2014). However, individuals simultaneously act different from the group to fulfill a psychological need to be distinct and unique (e.g., Brewer, 1991). Existing sport consumer behavior research has examined attitudes and behaviors of individual consumers in isolation rather than different behavioral patterns of individuals within a group (i.e., fans who support the same sport team). In order to fill this knowledge gap, this research aims to understand the hypothesized association between team identification (TID) and conflicting needs for group inclusiveness and individual distinctiveness in a group of fans with respect to fans' team apparel consumption behavior.

Spectator behavior of a sporting event refers to the process involved when consumers select, purchase, use, and dispose of sport products and services to satisfy their needs (Funk, 2008). Existing literature has revealed that an individual's sense of belonging with a team is salient for guiding consumption behaviors. To account for the level of sports fandom and behavioral patterns in the spectating context, prior research has focused on a wide range of sport consumers' behaviors including game attendance, media consumption, team-licensed merchandise purchase, and sharing team supportive behaviors within a fan community (e.g., Doyle, Kunkel, & Funk, 2013; Fisher &

Wakefield, 1998; Funk & James, 2006; Kwon & Kwak, 2014; Pritchard & Funk, 2006). With the aforementioned fan behaviors, team apparel choice can be a key outcome to understand fans' team supportive behavioral patterns. Sport consumers display their connection with the team and other fans through consumption practices such as purchasing, wearing, or spending on team apparel. From a marketing perspective, it is estimated that consumers spent \$37 billion on spectator sports attendance and \$44 billion on sporting goods in 2014 in the United States alone (Plunkett Research, 2015). In 2016, retail sales of sport-related licensed merchandise totaled more than \$25 billion in the global market (Licensing Industry Merchandisers' Association, 2017) and approximately \$8 billion in the United States (Statista, 2017). More specifically, in 2014, sales of college licensed merchandise amounted to \$4.6 billion according to the Collegiate Licensing Company (Williams, 2015). Effectively, team merchandise has become a synergistic business for generating profits and licensing teams' logos has been a salient revenue source.

Sport team merchandise contributes to the significant revenues of professional sport and college athletic teams and helps build strong group identity ties between teams and fans. From a consumer standpoint, purchasing and possessing team merchandise reinforces a connection with other sports fans and sport teams and reflects consumption behaviors toward sport teams, leagues, or events (Fisher & Wakefield, 1998). Possessing sport team merchandise reflects a sense of belonging with the team as a focal aspect of one's own image. Based on a fan-team association, prior studies have highlighted that consumers make their team merchandise purchase decision by the extent to which fans feel a sense of belonging with the team and they are loyal to the team (Kwon &

Armstrong, 2006; Kwon, Trail, & James, 2007; Lee & Ferreira, 2011). It is evident from past research that understanding sport team-related merchandise preferences allows for a deeper understanding of a fan's behavior.

Beyond the fan-team relationship, there has been limited research on why an individual fan behaves differently from others in the group, specifically why and how sport fans assert their personal and collective selves while in groups. To capture this balancing act between the conflicting needs of assimilation and distinctiveness, Brewer (1991) introduced 'optimal distinctiveness', an extended view of Social Identity Theory (SIT). Optimal Distinctiveness Theory (ODT; Brewer, 1991) offers a framework to understand consumers' product evaluations and decision making processes. Besides highlighting in-group homogeneity as per SIT, ODT states that social identity is viewed as a combination of opposing needs for assimilation to and differentiation from others. However, there has yet to be a thorough understanding of the process of interpersonal identification within a group of fans. Individuals diverge from reference groups because they prefer signaling distinctive choices over shared group identity. Similar to the conflicting needs at a collective level, the needs for group inclusion or personal distinctiveness may operate at an individual level within groups (e.g., Brewer & Roccas, 2001; Pickett, Silver, & Brewer, 2002). The ODT provides a framework to understand how sports fans' need to be the same, yet different influence merchandise consumption. Hence, an individual's optimal distinctiveness helps to understand the significance of sports fans' group dynamics and the consequential team apparel consumption behaviors.

1.1 Statement of the Problem

Team merchandise has been recognized as a revenue stream for sport organizations and a means of understanding sport consumer behaviors. A considerable body of sport literature exists on the motives and needs associated with team merchandise consumption or the fan–team relationship in purchasing team merchandise in a sport setting. Prior research has demonstrated that the development of a strong team identity leads to consumption behaviors along with a relationship between sports fans and their favorite team (e.g., Kwon, Trail, & Anderson, 2006; Lee & Trail, 2012; Madrigal, 2000). Sport management literature has a long tradition based in consumer psychology, identifying that consumption behavior is a result of the process of social identification at the collective level. That is, reference groups have an impact on consumption preferences as a sports fan attempts to use in-group members as a source for evaluating his or her values. Kolbe and James (2003) argue that fans create affiliation with in-group team supporters and enhance distinctiveness from non-members. However, researchers in sport management have not paid significant attention to what makes sport consumers choose specific team apparel and what psychological mechanisms influence the team apparel purchase decision.

Previous research considering sport consumer behavior was grounded by SIT and TID and focused on intergroup relations. This research highlights the need for individual distinctiveness and group inclusiveness while in a group in terms of intragroup relations. Even though the opposing forces of conformity and distinctiveness in the group create tension, initial ODT perspectives overlooked the importance of individual distinctiveness within a collective of group members. The collective sense of self that interplays with a

sense of distinction of personal identity is unexplored, particularly when behaviors and attitudes toward a product are socially visible from others. Product evaluation depends on whether consumption takes place in a public situation and if the signal is easy to recognize (Dubois, Rucker, & Galinsky, 2012). Thus, this research aims to examine how a collective of sports fans balance their needs for group inclusiveness and personal distinctiveness while spectating sports and its application to team apparel consumption. In pursuing a deeper understanding of a fan's group dynamics, this research examines the process of how sports fans deal with the collective self and the personal self with other fans in a group. Understanding how and why some in-group fans take different actions or consumption behavior against other fans for establishing their uniqueness has important managerial implications.

1.2 Significance of the Study

Given the notion that “to have is to belong” (Wattanasuwan, 2005, p. 182), prior researchers report that sports fans express self-identities and feel a sense of belonging to a sport team through their team supportive behaviors (Kwon & Kwak, 2014). Sport consumers make consistent choices with in-group members in the process of TID. However, consumers also possess or display products for the purpose of distinguishing themselves from others and ensuring independent self-images at the personal level (e.g., Chan, Berger, & Van Boven, 2012; Moon & Sung, 2015; Tian, Bearden, & Hunter, 2001). Research of considering optimal distinctiveness has been overlooked in existing sport management literature. Hence, this research examines why sport consumers who support the same sport team purchase differentiated team apparel in order to belong, yet be distinct. Since this research considers the intersection of team identity and optimal

distinctiveness, it investigates the process through which sports fans reconcile their psychological needs for group inclusiveness and personal distinctiveness. Also, by drawing upon SIT as well as group identity formation, this research contributes to a better understanding of the team apparel purchase decision making process.

By investigating group inclusion and personal distinctiveness motives in terms of group dynamics in sport spectator contexts, findings provide insight for both teams and sports brand marketers to understand team apparel demands. Thus, the findings have important marketing implications. For example, creating multiple team merchandise options generates better fit with sport consumers' purchase decisions and also allows them to distinguish themselves from others (Chan et al., 2012; Lancaster, 1990). Sports apparel manufacturers can offer a wide range of product choice options as consumers customize clothing by the material, colors, and styles. This effort would signal group identity and satisfy uniqueness needs (Chan et al., 2012). Effectively, sports apparel manufacturers and marketers can better serve their consumers through this enhanced understanding of consumers' desires to simultaneously signal their individuality and conformity. Empirical findings help sport team apparel manufacturers and marketers identify which consumption situations or contexts interact with sport consumers during their decision making processes and understand what situational and contextual cues change the effect of group dynamics in a fan group.

1.3 Purpose of the Study

The purpose of this study is to explore the mechanisms through which sport consumers balance needs for distinctiveness and assimilation with other in-group members which in turn influence collegiate team-licensed apparel. First, this research aims to confirm the

role of social identities toward a favorite team and between other in-group fans in order to signal group identity. Further, as per the signaling theory perspective (Spence, 1973), which highlights the importance of group identity, this research investigates how in-group members' needs for group inclusiveness influence team apparel choice. Thus, the findings will broaden and enrich the current knowledge of overall team merchandise consumption behaviors.

This research will also identify the mechanisms through which sport consumers achieve their needs for optimal distinctiveness through team apparel consumption in various contexts. If individuals satisfy with the need for group inclusiveness in their reference group, they desire to differentiate themselves in order to establish uniqueness from other group members. The excessive group cohesion may increase the need for personal distinctiveness. Therefore, this research extends existing sport management literature as it finds that fan behavior is affected by variations of signaling group identity and personal distinctiveness, as well as by situational cues. Despite the significance of team identity signaling, confirming prior sport management literature, it is possible to identify the processes through which individuals behave differently from other in-group fans in a group context. By using the optimal distinctiveness framework, this research provides a compelling reason why the group dynamics influence sport fans' team apparel consumption behavior and thus answering the following research questions:

RQ1. How do group dynamics (i.e., inclusiveness and distinctiveness) alter the influence of team identification (TID) for team apparel consumption behavior?

RQ2. What situational factors strengthen or attenuate group dynamics in a fan group?

1.4 Overview of Chapters

The content of this research is organized into six chapters. Chapter 1 provides the rationale and background of this research, specifically the value of understanding sports fans' dual needs for group inclusiveness and personal distinctiveness from an optimal distinctiveness perspective. To understand team apparel-related consumption behavior, the research problem, the purpose of this research, and research questions have been provided. Chapter 2 reviews the theoretical background for this research. It includes a review of prior sport management literature and research findings in TID and optimal distinctiveness. It discusses the assessment of fans' group dynamics in a spectating setting and then reviews the role of group dynamics on a wide range of collegiate and professional football team apparel consumption. It then addresses the limited attention paid to the identity formation process and links the literature surrounding the mechanism to adjust the two opposing needs: signaling group inclusiveness and personal uniqueness. It finishes by proposing a conceptual model of group dynamics between fan inclusiveness and the opposing need for fan distinctiveness. Following the literature review, Chapter 3 details the methods of the research, including research context, statistical procedures, participants, and measurement through which this research explores the role of fans' group dynamics and the proposed model developed in Chapter 2. The results of Study 1 and Study 2 are detailed in Chapter 4. Discussion of the findings across the two studies occurs in Chapter 5. This chapter calls attention to all findings of the two studies in a sport fan group context. This chapter also suggests theoretical implications, managerial implications, limitations, and possible future directions. Lastly, an overall conclusion is detailed in Chapter 5.

CHAPTER 2: LITERATURE REVIEW

This chapter outlines relevant theoretical and empirical works contributing to understanding the role of sports fans' group dynamics in their team apparel consumption. It opens with an overview of sports spectator consumption research in sport management. The considerable body of knowledge in sport consumer behavior has focused on team-fan association in relation to game attendance, media consumption, and team merchandise sales. Social and psychological perspectives regarding team apparel choices are following.

The next section outlines optimal distinctiveness theory (ODT). This section discusses the prior studies from initial ODT perspectives regarding the mixed results in psychology and marketing. Furthermore, this section reviews group dynamics, which represent inclusiveness in and distinctiveness from a group of fans. This section also reviews the complexity in reconciling, which is the process through which individuals vacillate from the need for a fan's group inclusiveness to personal distinctiveness on their team apparel consumption, and what the context-specific consumption situation is for prioritizing one of the competing needs.

In terms of sports fans' need for group dynamics, two research questions are presented: 1) How do sports fans' needs for group inclusiveness and personal distinctiveness alter the impact of team identification (TID) for team apparel consumption behavior? and 2) What situational cues strengthen or attenuate the effect of group dynamics among a collective of fans?

2.1 Sport Management Research

Recent contributors to the field have studied team-fan associations and their various implications. They demonstrated that individuals who identify as a fan of a team show a positive association with the post-attitude intention and behavioral involvement in terms of social alliances between fans and a team (Kwon et al., 2006; Lee & Trail, 2012; Madrigal, 2000). Sports fans' social psychological connections with a team are generally positively associated with game attendance (Doyle et al., 2013; Funk & James, 2006), the consumption of licensed team products (Kwon & Kwak, 2014), and media usage patterns (Doyle et al., 2013). More specifically, research in sport team merchandise consumption has shown the impacts of consumers' TID on team merchandise purchasing through perceived consumption value (Kwak, Kwon, & Lim, 2015; Kwon & Kwak, 2014; Kwon et al., 2007) and through judging the perceived product evaluation of sport team merchandise (Lee, Trail, Kwon, & Anderson, 2011; Lee, Trail, Lee, & Schoenstedt, 2013). In this research stream, sport context-specific features (e.g., team logo, team color) may enhance symbolic meanings as markers of group identity, and these meanings then shape team merchandise choices (e.g., Kwak & Kang, 2009).

Prior sport management researchers, however, have mainly focused on fan behaviors tied to a collective group identity within intergroup interactions, rather than interpersonal interactions within a collective of fans. Hence, this study examines how sports fans who desire to feel group inclusiveness consume team apparel; it also examines how the need for personal distinctiveness influences fans' team apparel consumption behaviors. Moreover, this study investigates how psychological mechanisms interplay with social visibility as situational cues during team apparel consumption.

2.2 Team Identification

Affiliation is the most basic concept of social interaction. In sports, fans follow various organizations that positively reflect on their self-construct. Team identification (TID) refers to a psychological connection based on a sense of belonging to a sports team, in terms of a social structure (Wann & Branscombe, 1991). TID reflects the sense of connectedness with and belongingness to a specific team. As TID is derived from social identity theory (SIT), individuals are unable to form self-images without their social identities derived from group affiliations (Tajfel, 1982). Highly identified fans are more likely to show favoritism toward other fans of their team and criticize fans of opposing teams. Individuals desire to belong to high-status groups because group membership confers a positive social identity to the members (Tajfel & Turner, 1979). Shared meanings in social interactions have a salient impact on product evaluation and consumption behavior. Highly identified members wear team-licensed merchandise, express the intention to purchase a product from team sponsors, watch and attend games, read the newspaper and sports-oriented websites frequently, and talk about the team more than other teams (Fisher, 1998; Heere & James, 2007; Madrigal, 2000). Thus, TID as a psychological connection with a sport team is a fundamental element of investigations into sport fans' group behaviors as well as their team apparel consumption behaviors.

2.3 Social Identity Theory

Social Identity Theory, or SIT, is a social psychological analysis of the role of self-concept in group membership, group processes, and intergroup relations (Hogg, 2006). Sports researchers have chosen SIT to develop the construct of team identity. SIT cognitively defines the individual self-concept as a group member. Through a process of

social categorization, people divide their world into *us* and *them*. SIT explores intergroup relations as members of one group (in-group) in comparison to another (out-group) (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Individuals are more likely to become identified with an organization (or team) when the group identity is salient.

Tajfel and Turner (1979) found that individuals classify themselves as belonging to a group, and they tend to compare a group they are in with other groups to which they do not belong. Therefore, social identity includes social comparisons within groups and differentiation among groups. Consistent with SIT, highly identified individuals are more likely to enhance their affiliation with a favorite sports team, thus arousing more favorable and positive consumption behaviors such as frequent purchases of team merchandise and spending more on team merchandise (Madrigal, 2001; Trail, Anderson, & Fink, 2005; Wann & Robinson, 2002). Through being immersed with other fans of the team, an individual's identification with a team and one's self-concept in fans of the teams can be strengthened (Postmes & Spears, 1998).

2.4 University Identification

Students and alumni purchase and wear the college licensed apparel to enhance the sense of belongingness to their respective university. Under the SIT framework, individuals are motivated by an underlying need for self-esteem (Tajfel & Turner, 1979) and make efforts to enhance the group's standing against other groups (Riketta & Landerer, 2005). In the same manner of TID and the original concept of SIT, when a person identifies with the university, the University Identification, or UID, influenced attitudes toward university-licensed apparel and purchase intentions (Kwon, Paek, & Lennon, 2002). As a specific type of identity with an associated community (i.e.,

university or college), by Mael and Ashforth's organization theory (1992), UID refers to the sense of belonging a person feels toward a university which they are attending, attended, or employed (Bass, Gordon, & Kim, 2012). Group affiliation with the university is pre-determined when being connected with the organization. In the college sport context, UID is closely linked with TID. Students and alumni who highly identify with the university are more likely to show positive behavior (e.g., participating in or attending university events; Bass et al., 2012; Heere & James, 2007). In the college sport context, UID is a significant concept to better understand team apparel consumption.

2.5 Group Identity Signaling in Team Apparel Consumption

A sense of belonging to and affiliation with a group of like-minded sport fans are key motives for sport apparel consumption. Under the notion that we are what groups we belong to, sports consumption experiences can be interpreted as *to have is to belong* in terms of symbolic meaning (Belk, 1988; Dittmar, 1992; Wattanasuwan, 2005). Group identity represents a sense of belonging to the social world (Turner et al., 1987). Team identity at a collective level represents how much sports fans fulfill the sense of belonging to share their group identity with a team. Thus, in terms of conspicuous consumption behaviors, sports fans consume team apparel to signal their identity with social status and competence and demonstrate how a person buys and wears a team shirt to belong to a favorable group. This concept accounts for how sport fans maintain the need for group inclusiveness, influencing sport team apparel consumption experiences.

2.5.1 Signaling Theory and Conspicuous Consumption

Consumers signal their social identity to others through products they use and wear (Berger & Heath, 2007; White & Dahl, 2007). Signaling theory is concerned with

understanding why certain signals are reliable (Spence, 1973). It articulates how a signal is relevant to the meaning it represents to both the sender and the receiver, and what are the reliable elements of the identity signal in product evaluation. Ideally, signaling assumes perfect communication, where what the signaler meant is the same as what the receiver interprets. Thus, signaling theory provides an opportunity to integrate symbolic communication and social benefits with materialist theories of individual strategic adaptation (Bliege Bird & Smith, 2005). Signaling theory provides a way to articulate the intangible social benefits that might be gained through symbolic representations of self, with more materialistic notions in product evaluation. In a similar vein, sport consumers prefer to purchase and wear team merchandise for their status-signaling importance (Inglessis, 2008).

A product can provide a better sense of self and boost a person's self-esteem (Belk, 1988; Dittmar, 1992). Veblen (1899) states that the tendency to purchase and exhibit expensive goods is conspicuous consumption. Conspicuous consumption is mostly linked with social status and competence. Conformity refers to a desire to gain social acceptance and status (Cialdini & Goldstein, 2004), as well as a desire to avoid negative sanctions, such as social disapproval (Kruglanski & Webster, 1991; Levine, 1989; Schachter, 1951). People use material objects and evaluate the products to signal their personal identity (Childs & Jin, 2015). Conspicuous consumption behaviors among individuals are connected with signaling theory (Connelly, Certo, Ireland, & Reutzel, 2011). They are observable, costly, and related to status; they also provide benefits to the signaler (Nelissen & Meijers, 2011). Conspicuous consumption and signaling theory both illustrate how consumers demonstrate their social position by belonging to favorable in-

groups and obtaining sport-related products, whether or not they are a fan. Wearing team apparel can facilitate social status because doing so communicates desired characteristics of the owner, such as prestige and status. Team apparel that symbolically represents a self-image enhances the owner's sense of group identity along with their favorite team identity.

2.5.2 Signaling Group Identity

Due to the social benefits of conspicuous consumption, consumers are willing to purchase identity-related products to signal status in groups to which they belong. Conspicuous consumption (Veblen, 1899) and signaling theory (Spence, 1973) illustrate how consumers demonstrate their social position by belonging to favorable in-groups whose members obtain similar products. Thus, signaling theory in terms of conspicuous consumption perspectives is closely related to the concept of TID. Individuals who highly value being in their social groups tend to purchase a product reflecting symbolic denotation (Ibrahim & Najjar, 2008). Apparel preference differs according to various levels of socially recognized belonging when considering a sports team. Sports fans desire to be immersed with other fans of the team, as well as the team itself. Therefore, TID is a significant concept for signaling in the sense that value expressiveness toward sport team-licensed apparel reflects an individual's desire to enhance self-image by associating with the reference group (Bearden, Netemeyer, & Teel, 1989).

For example, on game day, Temple University football fans wear team-licensed shirts in college colors with the logo to feel a sense of belonging with the college and the team. TID represents how much sports fans fulfill assimilation needs in order to share their group identity with a team. This research examines the associations between team

identity and team apparel choices (i.e., likelihood of team apparel purchase, frequency of team apparel wearing, and unique product seeking).

2.5.3 Prior Sport Consumer Behavior Research

UID in the college context and TID regarding group identification and intergroup processes represent a sense of oneness with and belonging to a group (Ashforth & Mael, 1989). Previous works about TID have focused on intergroup relations and motives of group belonging (Goldman, Chadwick, Funk, & Wocke, 2016). From a social identity perspective, prior studies of TID in sport contexts have stated that individual uniqueness within groups diminishes group identification (Hornsey & Jetten, 2004). Consumers choose similar products as other in-group members to facilitate communication of desired group identities (Berger & Heath, 2007; Chan et al., 2012). However, this collective sense of self, resulting from assimilation with in-group members, may interplay with a sense of personal and collective identity distinction. Thus, individuals diverge from other members within the in-group because they seek individual distinctiveness. In this way, fans may be motivated by the need for group identity signaling and the need for personal distinctiveness at the same time.

2.6 Optimal Distinctiveness Theory

Optimal Distinctiveness Theory (ODT) argues that a personal-self differentiates the self from all others, and a social self reflects assimilation with others (Brewer & Gardner, 1996). ODT demonstrates that individuals need to fulfill two opposing needs—the need to belong and the need to feel distinct (Brewer, 1991; 1993). As the extended view of SIT, Brewer (1991) introduced *optimal distinctiveness*, in which people struggle to balance between two conflicting needs: the desire for sameness or inclusion satisfied

by group membership and the desire for distinctiveness or uniqueness satisfied by individuality. Hence, consumers pursue the desire for inclusiveness in the group as a group dynamic, but they pursue the desire for distinctiveness by distancing themselves from others as another force of group dynamics (Gómez, Jetten, & Swann, 2014). Thus, ODT provides a useful framework for answering how sport fans' group inclusiveness need and personal distinctiveness need work to determine team-licensed apparel consumption.

2.6.1 Original Definition and Assumptions

The original concepts of social identity and self-categorization (Tajfel, 1982; Turner et al., 1987) rely on the cognitive process of categorization. This explains why and how specific social categorizations and intergroup distinctions occur. However, it fails to explain optimal balance between assimilation and differentiation in the process of within-group identification (e.g., Leonardelli, Pickett, & Brewer, 2010). Individuals are “the same and different at the same time” (Brewer, 1991).

In optimal distinctiveness, social identity is viewed as a combination of opposite needs for assimilation and differentiation from others (Brewer, 1991). Individuals strive to achieve a level of similarity to others and also define themselves by distinct category memberships. The social self simultaneously has a sense of belonging in the group as well as a sense of distinctiveness from the group. According to the opposing fundamental needs for assimilation and differentiation by ODT (Brewer, 1991; Brewer & Roccas, 2001), the need for assimilation is the need to maintain the salience of group membership and the valence of group affection. On the contrary, the need for differentiation is the need to have a distinctive self-concept in relation to other members of the group (Jansen,

Otten, Van Der Zee, & Jans, 2014; Snyder & Fromkin, 1977; Turner et al., 1987). In this optimal distinctiveness model, equilibrium is conceptually the point at which satisfaction optimizes the degree of differentiation and assimilation.

As shown in Figure 2.1, Brewer's (1991) optimal distinctiveness model assumed that each point on the horizontal axis is associated with a particular point of intersection between the competing forces of assimilation and differentiation. ODT suggests that as the individual achieves greater assimilation within this group, the competing need for differentiation is activated in order to return to a point of equilibrium.

Within group boundaries, the satisfaction level is not fixed because assimilation and differentiation needs are subject to temporal influences. A fan determines the point between how much he or she desires to fit in and how much he or she wants to maintain individual uniqueness from the group. For example, Ian, as a fan of Temple football, meets his assimilation needs by wearing a team shirt to the stadium on game day. However, as the need for group inclusiveness was adequately satisfied within the group, the opposing need for differentiation will be activated to adjust his distinctiveness level. Now Ian may consider wearing unique style team shirts or putting on a face tattoo mask as fanatical behavior in order to stand out from other group members. Within a given group context, an individual is categorized along the dimensions of social distinctiveness-inclusiveness, ranging from total submersion in the group context to uniqueness (Brewer, 1991). Each spot in Figure 2.1 represents a particular level of activation in the opposing needs for either assimilation or differentiation.

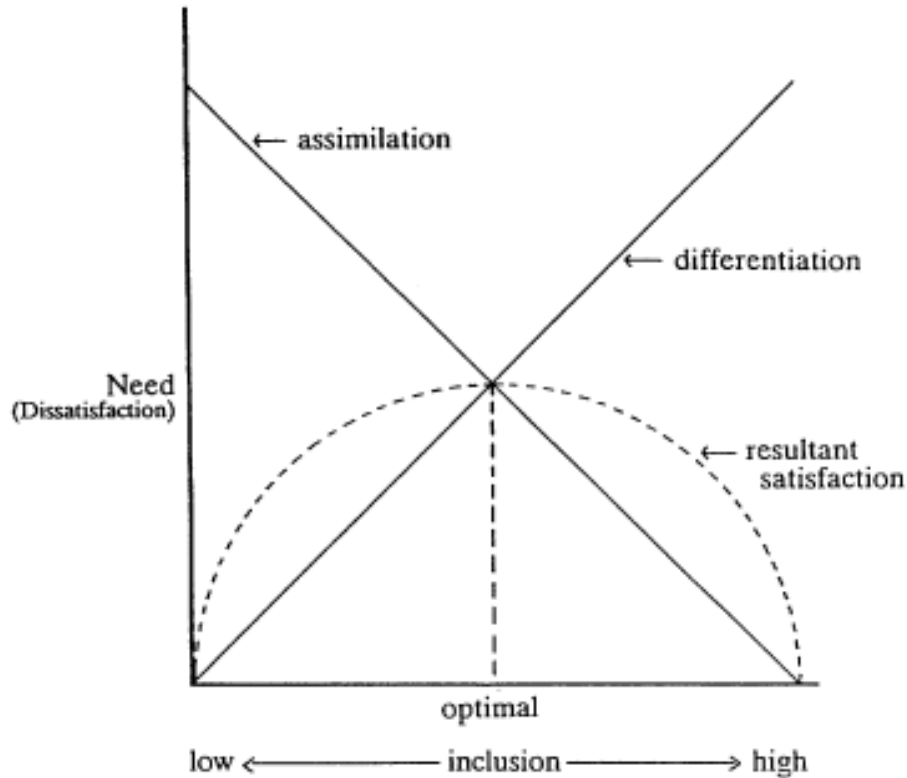


Figure 2.1. Optimal Distinctiveness Theory Model

2.6.2 The Role of Optimal Distinctiveness in Consumers' Choices

Consumers balance the tension that exists between signaling group membership and expressing personal distinctiveness. People often purchase products to signal who they are, but they also express distinctiveness by choosing products that are owned by few others. However, as group inclusiveness at the collective level and personal distinctiveness at the individual level are studied independently, there has been little attention on how to integrate the needs through consumer choice. Therefore, the theoretical framework of optimal distinctiveness suggests that consumers select a product that balances both needs for assimilation and differentiation within the group contexts.

During consumers' purchase decision making, assimilation operates as TID at the collective level within the group of fans; distinctiveness is the unique part at an individual level. ODT explains that consumers diverge at an individual level to feel unique, and they conform to in-group members on a collective level to maintain social identity (Chan et al., 2012). In exploring this theoretical framework in sports fans' behaviors, ODT is used to investigate psychological mechanisms by two different processes, between the collective self-identification and the personal self-identification.

Consumers, in general, reconcile two opposing needs. People tend to be similar to others and make consistent choices with their reference groups in order to express their shared identity (Berger & Heath, 2007). Conversely, people feel a countervailing need for distinctiveness. Individuals compare their group norms with other members and assume a unique role in their group that fulfills the need to belong as well as the need to feel distinct (Hornsey & Jetten, 2004). As group dynamics, the needs for assimilation and distinctiveness may operate together at the individual level within a collective of fans (e.g., Brewer & Roccas, 2001; Pickett et al., 2002). Increased needs for inclusion with a group are not necessarily accompanied by diminished needs for individual distinctiveness. ODT is conceptualized as the simultaneous satisfaction of inclusiveness and distinctiveness needs (Bettencourt, Molix, Talley, & Sheldon, 2006; Hornsey & Jetten, 2004; Shore, et al., 2011). Thus, ODT as a theoretical framework is feasible in studying how for individuals to assimilate to a group and to retain personal distinctiveness in the group.

In a sports setting, fans associated with a sports team vary in their degree of need for group inclusion and distinctiveness. In particular, the need for assimilation occurs

first; the need for distinctiveness occurs second. Therefore, this research aims to understand how group inclusiveness and personal distinctiveness each play a role in sport fans' team apparel consumption and how sports fans within a group of fans show different consumption behavioral patterns through group dynamics (i.e., opposing forces).

2.7 Group Dynamics

The construct of group dynamics refers to a system of behaviors and psychological processes occurring within a social group (Leach et al., 2008). Individuals are collectively influenced by other group members; simultaneously they desire to be distinct from other members within the group. In terms of the psychological process of collective and personal self-identification, ODT researchers have established that individuals can regulate their needs for affiliation versus distinctiveness within a given group by increasing or decreasing identification with that group.

In terms of consumer behaviors, product evaluations that individuals use to assimilate and differentiate themselves depends on the context (Brewer, 1991). In a social interaction, individuals are expected to act as a unique part within a group of members. In this research, ODT is applied to members of fandom by examining whether a combination of perceived group inclusiveness and perceived personal distinctiveness from other fans predicts why members in a group of fans express differentiated team apparel consumption behaviors.

Prior literature in sports team merchandise has focused on the role of TID on merchandise sales, in isolation. Separated from intergroup differentiation and intragroup assimilation, researchers need to rethink the role of differentiation need from other group

members in a sports team setting. To belong to a favorite team highlights homogeneity with in-group members. On the other hand, people have the fundamental need to see themselves as differentiated beings (Hornsey & Jetten, 2004). In line with the concept of social identification process as a link between the individual self and a group to which person belongs to, individuals navigate a complex world of varied needs: the need to feel like an affiliated, relationally embedded ‘we’ and the need to feel like a distinctive, autonomous ‘me’ (Ellemers & Jetten, 2013; Slotter, Duffy, & Gardner, 2014). Therefore, group dynamics were conceptualized on the notion that individual needs for group inclusiveness involve expressing one’s personal distinctiveness from other fans in a group. The term *dynamic* was chosen to describe the processes and changes that take place in groups (Lewin, 1951). The concept of group dynamics accounts for why sport fans purchase unique team shirts over more popular and/or traditional team shirts; unique product consumption may be an effective way to signal self-expression (Rezenkrants, Wheeler, & Shiv, 2017). Hence, individuals’ identification as part of a group of fans fluctuates to satisfy the needs for group inclusiveness and personal distinctiveness (e.g., Slotter et al., 2014). A desire for individual-level identity expression increases the need for distinctiveness from a group, whereas a desire for group-level identity expression increases the need for inclusiveness with a group (Pickett et al., 2002).

Unlike ODT as an optimal balance between opposing needs, the concept of group dynamics implies that an increased sense of group inclusiveness is not necessarily accompanied by diminishing a sense of personal distinctiveness (Battencourt et al., 2006; Hornsey & Jetten, 2004). However, in the same manner of two opposing needs, group dynamics as a concept consists of two constructs of competing needs: 1) fan

inclusiveness (FI: group inclusion in a group of fans) and 2) fan distinctiveness (FD: personal distinctiveness from a group of fans). Fans associated with excessive inclusion among in-group members would lead to a feeling of lack of distinction within the group. Thus, sports fans are more likely to purchase and wear unique team apparel and support their team in a different way because of the need for differentiation. Sports fans who fulfill their needs to belong, as well as their needs to feel distinct at the same time, might not conform to their group characteristics, but maintain personal distinctiveness.

2.7.1 Fan Inclusiveness

Fan Inclusiveness (FI) refers to inclusiveness of the self in a fan group in order to assimilate other in-group fans' attitudes and behaviors; it also refers to social connectedness to perceived group affiliation and the alleviation of social isolation (Ashmore, Deaux, & McLaughlin-Volpe, 2004; Heere & James, 2007; Hogg, 2000). Group members utilize the need for group inclusiveness as a frame of reference about which attitudes and behaviors are appropriate in a given situation. The concept of FI implies group membership processing.

Consistent with a signaling theory perspective (Connelly et al., 2011), group membership refers to the perceived strength of connectedness between an individual and the group (Allport, 1954; Jansen et al., 2014). Group inclusion indicates that sports fans feel connected to other fans sharing their interests (Reysen & Branscombe, 2010). This concept can be captured in inclusion of other in the self and benefits of inclusiveness within a group of fans (Aron, Aron, & Smollan, 1992). The need for belonging can be fulfilled through group memberships as well as interpersonal relations (Hornsey & Jetten,

2004). Thus, sports fans tend to form strong fan group bonds and behave in biased ways to maintain the fan-team connection.

Fisher (1998) argued that individuals define themselves as group members and subsequently undertake group-derived consumption. This conformity with the group inclusiveness shows why a sports fan enhances a shared group affiliation and behaves in a similar way with others (Deutsch & Gerard, 1955). Therefore, when facing a product choice situation, people make choices consistent with their reference groups to express desired identities within a group. If consumers are individuals who feel socially excluded, they will want to reduce the distance from dissimilar group members (Berger & Heath, 2007; White & Dahl, 2007). Therefore, FI with respect to group dynamics is conceptualized as psychological signals sports fans receive from the fan group as a target of inclusion, and the signals that they relate to needs for inclusionary status.

2.7.2 Fan Distinctiveness

A fan pursues inclusiveness in a group of fans, yet the fan cannot ignore the need to be distinct (Goldman et al., 2016). People desire to be somewhat unique and distinct from others. Fan Distinctiveness (FD) serves a fundamental role in establishing the psychological mechanisms of individuals' self-identification. The self-concept change as a member of the reference group (i.e., fan group) has a social judgment impact as a sports fan compares the self with group members. Therefore, FD results in compensatory self-concept changes. In terms of a function of distinctiveness of the in-group, the need to be different is another fundamental human need, to see oneself as distinct for meaningful self-definition (Vignoles, Chryssochou, & Mreakwell, 2000). In the same line, sports fans within an in-group reconcile the needs for both group membership signaling and personal

distinctiveness. They focus their attention on the differentiation/distinctiveness of the self from other fans (Sheldon & Bettencourt, 2002). Essentially, the cognitive processes of individuals can magnify the motive to distinguish themselves from others.

FD also represents moving away from the norm and re-establishing differentness (Tian et al., 2001). Group membership might be valuable when avoiding similarity in the group as such amplification of differences primarily ensures the feeling of being distinct from others. Sports consumers want to activate distinctive self and social images (Tian et al., 2001). Individuals who experience a strong feeling of group inclusiveness perceive themselves as differentiated from others in out-groups (Pickett, Bonner, & Coleman, 2002). In contrast with differentiation needs described in ODT, FD (in terms of group dynamics) in this research project was conceptualized as personal distinctiveness needs within a group, instead of differentiation needs against out-groups.

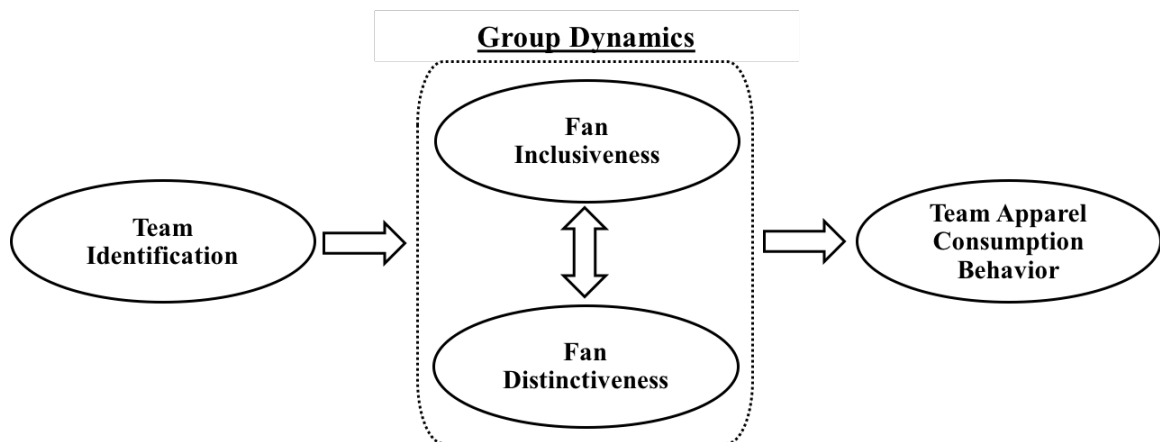


Figure 2.2. Conceptual Model

2.8 Conceptual Model

Before introducing a variety of outcome variables associated with team apparel consumption behaviors, the conceptual model was built upon the preceding literature review and the group dynamics framework (Figure 2.2). This research is useful in informing why a sports fan desires to stand out from other in-group members while he or she fits in with a group of fans. The theoretical framework demonstrates the dual needs for group inclusiveness and personal distinctiveness as opposing forces in group dynamics. TID as a psychological connection is the determinant of group dynamics and the effect of group dynamics initiating continuous need arousal between FI and FD influences team apparel consumption behavior. Furthermore, this research provides a theoretical foundation and empirical evidence for sport fan group dynamics in understanding of team apparel consumption.

2.9 Team Apparel Consumption Behavior

2.9.1 Frequency of Team Apparel Consumption

Sports fans' team apparel consumption behavior varies on a combination of FI and FD, as well as their group identity (i.e., TID and UID). This research examines the role of group dynamics on fans' team apparel consumption behaviors. Prior studies have shown that purchasing and wearing team merchandise strengthen the connection between fans and the team (e.g., Fisher & Wakefield, 1998). Possession of team merchandise can create a connection between fans and the sports property as an indicator of self-status (Fisher & Wakefield, 1998; O'Cass & Frost, 2002). To explore fan distinctiveness needs in relation to sports consumption behaviors, this study utilizes outcome variables associated with team apparel choices (e.g., likelihood of team apparel purchase, frequency of team apparel wearing, and unique product seeking).

Sports team apparel is an appropriate context in which to examine the collective consumption behaviors socially accepted by other people (Kim & Hong, 2011). In terms of consumption behaviors in a sport context, buying and wearing team merchandise shows group affiliation at the collective level and creates need for personal distinctiveness. Symbolic meanings attached to team apparel are an underlying determinant of consumption behaviors (Homer & Kahle, 1988). Sport environments, according to group dynamics of the contagion effect and collective crowd behavior, influence sport spectators' team apparel consumption behaviors (Mann, 1989). The likelihood of team apparel purchase and frequency of team apparel wearing were utilized to investigate the role of group dynamics on fans' team apparel consumption behaviors.

2.9.2 Unique Product Seeking

Interpersonal influences affect variety-seeking behavior (Ratner & Kahn, 2002). Consumers consider other options depending on what another person chooses to best express their uniqueness (Ariely & Levav, 2000). Fans associated with a sports team vary in their degree of need for group identity and uniqueness. Fans conform to team identity cues that signal in-group membership, and high needs for uniqueness attenuate the impact of assimilation on team apparel preferred by a majority of in-group members.

2.10 Social Visibility as a Situational Cue

As discussed in initial ODT studies, distinctiveness of a given social identity is context-specific (Brewer, 1991). Since Brewer introduced ODT in 1991, psychologists presented theories on how conflicting identification needs were balanced. However, there has been limited attention on when need satisfaction influences group identity signaling and uniqueness. Understanding consumers' team apparel consumption behaviors is useful

to consider the situations and circumstances of when and where they focus on positive and/or negative drives (Banister & Hogg, 2004). From that, marketers can consider different situational effects and figure out how responding to these differences helps to meet their needs. To understand how sport fans fulfill the opposing needs for group inclusion and personal distinctiveness in a specific situation, social visibility (i.e., public consumption vs. private consumption) is chosen to examine when inclusiveness or distinctiveness is prioritized. When being watched in a public situation (such as watching a game at a stadium or going to a watch party), social visibility temporarily overrides the need for personal distinctiveness (Dubois et al., 2012).

People tend to communicate identity in publicly visible domains (Belk, 1988; Berger & Heath, 2007). When a signal is more conspicuous, the signaler expects more counterbalancing needs from engaging in signaling. In public consumption priming, people behave in a different way or change their behavior when being watched compared to private settings (Dubois et al., 2012). According to the signaling perspective, sports fans in public consumption conditions (e.g., stadium, office, or restaurant) are more sensitive to whether products can signal greater status within the same in-group. The meaning or use of consumption goods depends highly on whether consumption takes place in social contexts (Dubois et al., 2012).

The unique social environment in a public consumption condition, such as at a stadium, unifies spectators and sparks their game engagement by wearing team shirts. *Color-outs* in collegiate games occur when fans are asked to wear white T-shirts and support their team while yelling loudly. For instance, some athletic teams establish a white-out game as an annual tradition to gain popularity. Thus, understanding consumers'

symbolic consumption behaviors is useful when considering situations and circumstances where they focus on positive or negative drivers (Banister & Hogg, 2004). People are more likely to actively manage their impression in public, and, as a result, observers infer identity signaling motives (Ferraro, Kirmani, & Matherly, 2010). Prior studies on sports team merchandise have only shown spectators' consumption behaviors in a given place (e.g., a stadium) or have ignored the situational contexts in which purchase decisions are made.

2.11 Research Hypotheses and Research Model

This research aims to answer questions regarding psychological mechanisms of group dynamics in sport team apparel consumption. In particular, it examines how sport fans within a collective of fans use two opposing needs for FI and FD; it also explores the mechanisms through which sport fans perceive the need for FI and activate need for FD at an individual level. Depending on the context, need for FI continually moves to the need for FD. In particular, FD along with pre-established FI accounts for how sport fans consume team apparel in the same manner or in a different manner. As it demonstrates sports fans' team apparel consumption behaviors through the concept of group dynamics in a fan group context, this research addresses seven hypotheses designed to address how sports fans consume their team apparel. A summary of the hypotheses tested in this study are presented in the research model (Figure 2.3).

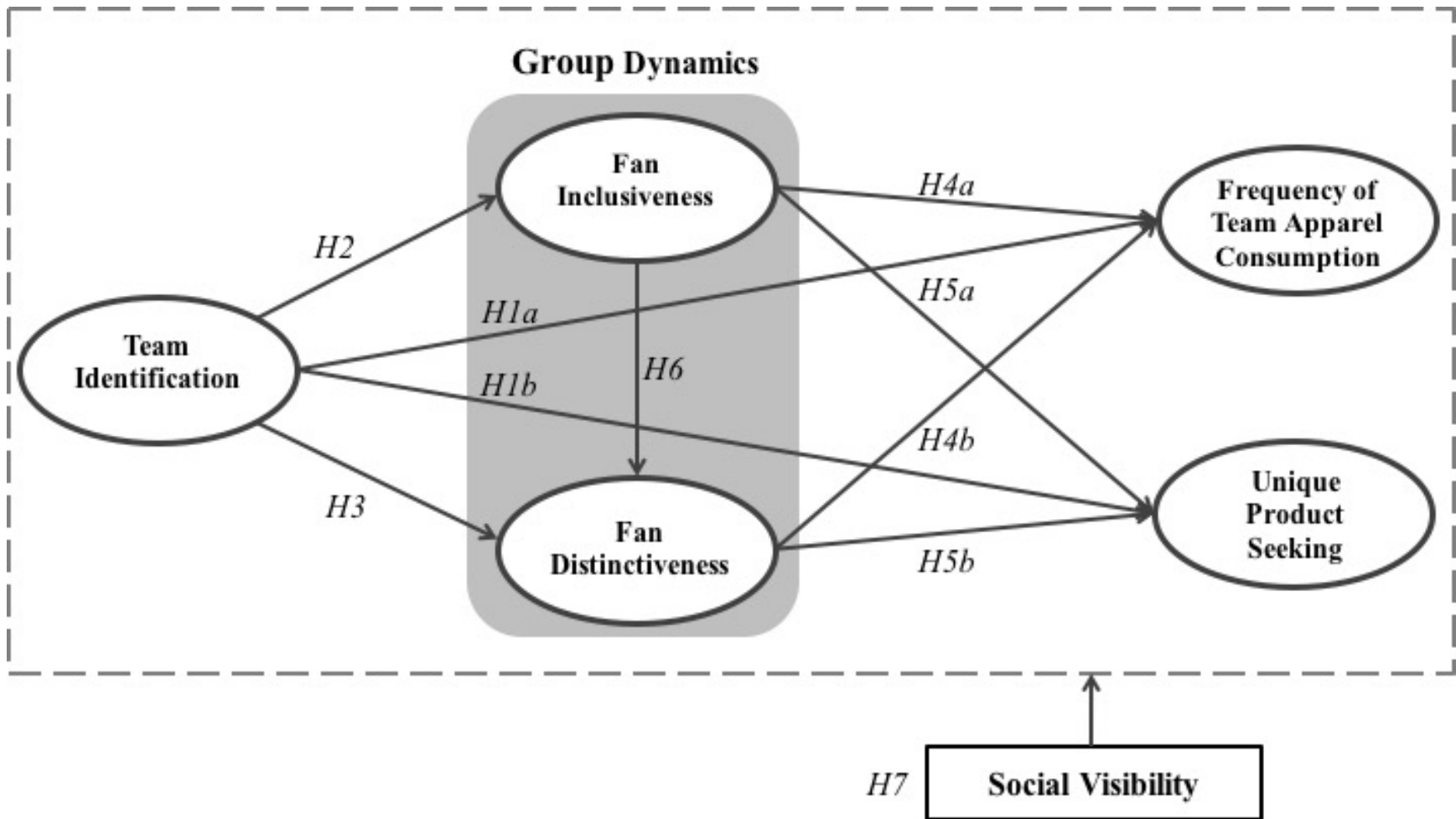


Figure 2.3. Research Model

In examining the direct effects of TID in team apparel consumption behaviors, this research addresses hypotheses which seek to confirm prior findings of the association between TID and sport fans' consumption behavior.

H1a: A sports fan's team identification positively influences the frequency of team apparel consumption.

H1b: A sports fan's team identification positively influences unique product seeking.

Because the construct of group dynamics is applied to understanding psychological mechanisms of sport fans' behaviors, especially in the case of team-licensed apparel consumption, the following hypotheses are addressed in relation to the associations between TID and group dynamics (i.e., FI and FD):

H2: A sports fan's team identification has a positive effect on fan inclusiveness.

H3: A sports fan's team identification has a positive effect on fan distinctiveness.

This study provides empirical evidence regarding how each of the opposing needs, in terms of group dynamics (i.e., FI and FD), impact team apparel consumption behaviors. Therefore, in examining the role of group dynamics, this research proposes the following hypotheses:

H4a: Fan inclusiveness in a group of fans positively influences the frequency of team apparel consumption.

H5a: Fan inclusiveness in a group of fans positively influences unique product seeking.

H4b: Fan distinctiveness in a group of fans positively influences the frequency of team apparel consumption.

H5b: Fan distinctiveness in a group of fans positively influences unique product seeking.

When applying group dynamics to sport fans' consumption behaviors, sequential effects between FI and FD in the group context were examined. The opposing forces between FI and FD in terms of group dynamics extend the ODT framework and can demonstrate the association between pre-established FI needs and consequential needs for FD in a given group context. Therefore, the following hypothesis was addressed:

H6: A sport fan's inclusiveness negatively influences fan distinctiveness.

Next, the impact on team apparel consumption would be enhanced when it takes place in public contexts and in the presence of others rather than in private contexts. With a situational cue, either FI or FD can be prioritized in a context-specific situation when a fan purchases and wears team apparel. Hence, the interaction effect of social visibility pursues the following hypothesis:

H7: Social visibility has a moderating effect on the relationships between team identification and team apparel consumption through group dynamics (i.e., fan inclusiveness and fan distinctiveness).

Together, these research hypotheses are meant to add understanding to the knowledge of the psychological processes through which sport fans' group inclusiveness and personal distinctiveness needs, within a collective of fans (i.e., other fans of the team), influence team apparel consumption decisions.

CHAPTER 3: METHOD

The purpose of this research is to examine the role of group dynamics in explaining team-licensed apparel consumption in sport management. To investigate whether in-group dynamics are empirically substantiated in a sport context, this research theoretically establishes sport fans' need for group inclusiveness and personal distinctiveness. This chapter outlines methods used in this research: (1) research context; (2) survey research design; (3) procedure; (4) measures; (5) participants; and (6) data analysis. The research examines the relationships among sport consumers' affiliation with their university and the football team, in-group dynamics, and team-licensed apparel consumption behaviors. This research contributes understanding on why sport fans consume differentiated team apparel to conform while being distinct.

Two studies were performed within the present research to examine the proposed hypotheses. Study 1 confirmed the established evidence on the effects of team identification on team merchandise consumption behaviors in prior sport management studies. Also, Study 1 uncovered the role of group dynamics on team apparel consumption behavior by college football fans on the representativeness of samples generated through Mechanical Turk (MTurk). Study 2 replicated the findings of Study 1 with undergraduate students from a large university in the eastern United States and National Football League (NFL) fans across the group contexts. Study 2 was implemented with the same measurement items but with fans of a specific collegiate football team and general population among NFL fans to cross validate the findings derived from Study 1. This study enhances external validity of the present research. In

addition, social visibility as a situational consumption cue varies the relationships among team identification, group dynamics, and team apparel consumption behaviors.

3.1 Research Context

Sports clothing consumption was chosen because of the nature of team-supportive-consumption behaviors. Since the level of belongingness felt toward a sport team as a sport fan positively influences sport product consumption, purchasing and possessing team-licensed merchandise reinforces the connection between sport fans and a sports organization and reflects consumption behavior toward sport teams, leagues, or events (Fisher & Wakefield, 1998).

At the collegiate level, the psychological connection or identification a person has with a university and its sport teams has been linked to their consumption of team-licensed merchandise (e.g., Kwak & Kang 2009; Kwon & Armstrong, 2002; Kwon & Kwak, 2014). The Collegiate Licensing Company estimated the retail sales of collegiate-licensed merchandise at \$4.6 billion (Williams, 2015). Collegiate-licensed apparel sales are a major source of revenue for an academic institution and its athletic departments and a tool to exhibit the spirit and love for a team with a group of fans. The key segment for collegiate-licensed merchandise tends to be college students and adults who have an affiliation with an institution (Dosh, 2013; Hyllegard, Ogle, Yan, & Kissell, 2016). There are a variety of factors influencing the purchase of university-licensed merchandise. Generally speaking, highly involved sport consumers are likely to engage in future behaviors such as acquiring a membership, game re-patronage, basking in reflected glory, use of media to follow sport, and purchasing licensed merchandise (e.g., Kwon et al., 2007, Lee & Trail, 2011). A consumer's psychological attachment to a university team,

such as team identification and group dynamics in a group of fans, has been identified as a key determinant of his/her consumption of team-licensed products (Kwak & Kang 2009; Kwon & Armstrong, 2002; Kwon & Kwak, 2014). Thus, fans and spectators who support a collegiate sport team are suitable to examine the role of in-group dynamics in their team apparel consumption.

In terms of league popularity, the NFL remains ahead of other professional sports leagues in retail sales. Its revenue was estimated at \$14 billion in 2017 (Kaplan, 2017). The sales of licensed products accounted for about one-third of total NFL sales (“Sports up 4.3% in 2016 to reach \$15.4 billion in sales”, 2017). The NFL is a professional American football league consisting of 32 teams. Football is the most watched sport in the U.S., and fans not only watch games at home but also attend them by the thousands (Sharma, 2016). The NFL is therefore an appropriate spectator sport context to explore the dynamics of fan distinctiveness on fan behaviors. Moreover, the NFL is recently gaining in popularity in global markets by playing regular season games in London or Mexico City. Noticing the league’s large fan base and popularity, marketers are working to meet sport fans’ needs and offering unique wearables. Also, team apparel sales are a major revenue source for the league and its teams and a tool to buttress a sense of camaraderie and spirit with teams among fans. Thus, fans and spectators who support an NFL team are suitable to validate sport fans’ group dynamics scale and to examine the role of group dynamics in fans’ team-related behaviors.

3.2 Survey Research Design

The primary methodology utilized was survey research. A survey or questionnaire is most effective when examining a given group by the representativeness of the sample.

Sport management literature has been commonly used for this research design in a self-administered nature. Therefore, the survey questions, methods, sampling techniques, or population of interest can be adopted from the prior literature. This study utilized online surveys, which have advantages over other traditional methods, such as speaking face to face or using the telephone. Advantages of online surveys are ease of data collection, convenience for respondents to complete surveys, and the scalability (Dillman, Smyth, & Christinan, 2009). This approach is beneficial to interpret and evaluate the potential errors of validity whether instruments measure what is being intended to measure and reliability whether instruments measure the construct consistently (e.g., Burns, 2000).

3.3 Study 1: Group Dynamics and Collegiate-Licensed Apparel Consumption

Study 1 aimed to explore the role of group dynamics that measures sport consumers' need for personal distinctiveness along with signaling their group inclusiveness on collegiate-apparel consumption behavior. There has been a consistent theoretical corpus that explains the conditions in which individuals tend to reconcile two opposing needs—being the same and being different—in attitude formation or related behaviors. As a definition of an optimal distinctiveness framework developed by Brewer (1991), optimal distinctiveness theory (ODT) has been applied to different contexts and subjects over the past 25 years. However, sport management research has focused on a one-sided perspective in terms of in-group homogeneity and intergroup differentiation—fan behaviors supporting the same team. Therefore, to understand why a sport fan supports the same team but wants to be distinct from other fans in a group within constructs related to sport spectators' psychological needs, the purpose of Study 1 was designed to explore the role of group dynamics in collegiate-licensed apparel

consumption—more precisely, frequency of purchase/wearing and unique product seeking. In Study 1, a pilot study which aimed to investigate the dimensionality and validity of FI and FD and assess the feasibility was conducted before a main study.

3.3.1 Pilot Study

Prior studies in team merchandise have attempted to investigate the impact of sport fans' team identification on their team merchandise consumption behavior. However, they have not included the role of group dynamics, which is the fans' individual needs in the fan community in terms of social interaction, in team merchandise consumption. This research was conducted for group-level determinants that influence team merchandise consumption and decision making. To obtain survey participants who had prior experience with team apparel purchase(s) and game attendance, two screening questions were asked: "Have you ever purchased any sport team apparel?" and "Have you ever attended any college-level football game (i.e., live game at the stadium)?"

The survey was pilot tested on an approximately 100-person sample of the general population of college football fans to test the reliability of group dynamics. An online questionnaire was created in Qualtrics, and the participants were recruited from Amazon's MTurk service. Survey-based items to measure in-group dynamics were developed by selecting appropriate measures from existing literature. Modifications were made to existing scales to make items more suitable for the current collegiate-sport context. Hence, each of the eight items of fans' group inclusiveness and personal distinctiveness by a seven-point Likert scale were addressed to measure group dynamics (refer to Table 3.1). As a result, an initial group of measurement items for in-group dynamics were generated for further factorial analysis.

3.3.2 Main Study

Collegiate football fans were recruited from the national online pool MTurk. As MTurk has a more demographically diverse workforce and is representative of the general U.S. population, it has been utilized for consumer behavior research in recent years (e.g., Fan, Mattila, & Zhao, 2015; Ghose, Ipeirotis, & Li, 2014; Paolacci, Chandler, & Ipeirotis, 2010). Each participant read a brief introduction of the study's purpose and directions for completing the survey, and they were asked to sign a consent form. All participation through an online-survey platform was confidential and anonymous. Survey participants were given screening questions about whether they are fans of a college football team and their previous team apparel-purchase experience based on inclusion/exclusion criteria. Participants who were not fans of a collegiate football team and who never purchased sports-team-related apparel were excluded. All participants were adult native English speakers in the U.S. from the online panel, and they voluntarily participated in the survey. For each survey, participants received a nominal compensation through the MTurk payment system. In the present study, Institutional Review Board (IRB) approval was received from Temple University (Appendix A).

3.3.3 Measures

Through a pilot study, in-group dynamics dimensionality was tested, and the item selections were considered. The two dimensions of group dynamics were fan inclusiveness (FI) and fan distinctiveness (FD), modifying the counterbalancing needs between assimilation and differentiation by Brewer's original ODT work (1991). Therefore, the conceptualized definitions of in-group dynamics focused on the individual fan's need for inclusiveness in a group of fans and distinctiveness from the group. In this

research, group dynamics refer to a system of behaviors and psychological processes occurring within a social group in terms of intragroup dynamics. Thus, group dynamics in a sports spectating context is defined as the sport fans' psychological mechanism that determines how the need for group inclusiveness and personal distinctiveness activate and interact with each other. By specifying the consumption behavior of sport fans in the fan-group context, each dimension of group dynamics addresses subcategories based on conceptual frameworks and the existing literature. All items of group dynamics that were adapted from existing literature and modified in the sport context are presented in Table 3.1.

Fan Inclusiveness. The construct of FI was derived from assimilation needs in ODT. Assimilation is the inclusion of the self and others in social categories defined by shared features or common interests (Brewer, 1993, p.157). In a similar manner to assimilation derived from ODT, group inclusion as one force of needs for group dynamics is secured when other group members are similar to one another. In the conceptualization of group dynamics, humans have fundamental needs to be satisfied in a group context (Jansen et al., 2014). Group inclusion is not a given but relies on connectedness between an individual and other group members (Jansen et al., 2014). Hence, FI closely resembles the need for assimilation identified in ODT. The perception of FI is determined by the signals that a fan receives from the fan group. The construct of FI represents how much a sport fan perceives social connectedness as a group member. The perception of social inclusion will ensure group affiliation, alleviate social isolation, and coincide with group norms (e.g., Ashmore et al., 2004; Heere & James, 2007; Hogg, 2000). Therefore, FI were measured with items in which the fan group is the target of

inclusion, such as “How included do you feel in this fan group?” Even though an individual identifies with the group that consists of other group members who he/she has never met, FI need requires interaction with other group members (Ellemers & Jetten, 2013).

Fan Distinctiveness. As another-sided need of group dynamics, the construct of FD was derived from differentiation needs in ODT. Differentiation is the exclusion of others from the definition of self (Brewer, 1993, p.157). This notion mirrors the differentiation or distinction between the self and the other fans in a group (e.g., Sheldon & Bettencourt, 2002). Similar to valuing differentiation or distinctiveness in ODT, FD is allowed to be distinct from each other in a group context. In addition, FD need is an opposing force to FI with respect to group dynamics. The strength of individual distinctiveness needs means the extent to which one expresses the need to be distinct from others and to avoid similarity with other in-group members (Tian et al., 2001). In contrast to differentiation needs in ODT, FD in terms of group dynamics in this research is conceptualized as personal distinctiveness needs within a group, instead of differentiation needs against out-groups.

All measurement items in FI and FD were measured on seven-point Likert scales composed of seven equally appearing intervals with a neutral midpoint and anchored by *1=strongly agree* and *7=strongly disagree*. Some measures that used five-point Likert scales from the existing literature were modified to seven-point Likert scales during the item scaling to increase the response range to maximize the variance on a measure and to increase the validity and reliability (Harrison & McLaughlin, 1991; Mueller, 1986). The scale format allowed measuring a greater dimensionality in response to items and reduced

inflation of chi-square goodness-of-fit indexes (Green, Akey, Fleming, Hershberger, & Marquis, 1997).

Table 3.1. *Measures of Group Dynamics*

List of Items	
<i>Fan Inclusiveness (FI)</i>	
While in a group of my [University Name] football fans,	
FI_1.	It is important to me that I behave like other [University Name] football fans.
FI_2.	How included do you feel in this fan group?
FI_3.	I feel well integrated into this fan group.
FI_4.	I feel a sense of belonging with a group of [University Name] football fans.
FI_5.	I really feel as if the team's problems were my own.
FI_6.	I think that I could easily become as attached to another team as I am to this one.
FI_7.	The group of [University Name] football fans has a great deal of personal meaning to me.
FI_8.	To what extent do you believe that you share commonalities with other group members around you?
<i>Fan Distinctiveness (FD)</i>	
While in a group of my [University Name] football fans,	
FD_1.	I tend to associate with people who are different and unique.
FD_2.	It is important for me to be different, unique, and unconventional.
FD_3.	I think that I am different from the other fans of my team.
FD_4.	I feel like I stand out from this fan group.
FD_5.	I feel unique as I participate in this fan group.
FD_6.	It is important that I feel distinct and separate from the other fans of my team.
FD_7.	I do not feel like 'part of the family' in my fan group.
FD_8.	I do not feel 'emotionally attached' to this fan group.

Sources: Aron et al., 1992; Brewer, 1991;1993; Lee, Draper, & Lee, 2001; Sheldon & Bettencourt, 2002; Tropp & Wright, 2001

University Identification. Derived from organizational identification by Mael and Ashforth (1992), university identification (UID) refers to individuals who affiliate with a university or college. Group affiliation with the university or college typically lasts four years, but a college student's bond to his/her alma mater endures longer. Alumni as well as current college students have a psychological connection to their university for their lifetimes. For the measures of UID as the extended concept of organization identification, six Likert scale items (*1=strongly disagree* to *7=strongly agree*) were adopted from Mael and Ashforth (1992). The measurement consists of the following items: "When someone criticizes my university, it feels like a personal insult"; "I am very interested in what others think about my university"; "When I talk about my university, I usually say 'we' rather than 'they'"; "My university's successes are my successes"; "When someone praises my university, it feels like a personal compliment.

Team Identification. Team identification (TID) refers to the psychological connection that fans perceive with their favorite team (Wann & Branscombe, 1991). In this study TID is a significant concept because the sense of shared group identity reflects an individual's desire to enhance his/her sense of belonging by association with the reference group—a sport team. Three Likert scale items (*1=strongly disagree* to *7=strongly agree*) were adopted from Trail and James (2001). This measurement consists of "I consider myself to be a real fan of the team"; "Being a fan of the team is very important to me"; and "I would experience a loss if I had to stop being a fan of the team."

Team Apparel Consumption Behavior. Team apparel consumption is an effective tool of self-expression derived from the social-identification process. This research utilized a variety of measures in team-licensed apparel consumption behavior to

examine the psychological mechanism of FI and FD in terms of group dynamics and the associations with TID and UID. As the consequence of group dynamics, team apparel consumption behavior consists of three constructs: frequency of purchase/wearing team apparel and desire for unique products. The frequency of team apparel consumption was asked as how likely the respondent would purchase team-licensed apparel and how often the respondent would wear a team t-shirt on non-game days, using a scale from 1=*never* to 7=*always* (Pritchard & Funk, 2006). Unique-product seeking was measured using three Likert scale items (1=*strongly disagree* to 7=*strongly agree*) adopted from Lynn and Harris (1997). This measurement consists of “I actively seek to develop my personal uniqueness by buying special products or brands”; “I have often gone against the understood rules of my social group regarding when and how certain products are properly used”; and “I often try to avoid products or brands bought by the general population.”

3.3.4 Data Analysis

Measurement Assessment. To ensure content validity of group dynamics, or FI and FD, in a spectating-sport context, measurement items adapted from prior literature were reviewed by a panel of experts. In line with the theoretical understanding of optimal distinctiveness constructs, the expert panel had expertise in sport marketing and management. Searching for internal consistency of measurement improved the reliability presented in each factor across all dimensions (DeVellis, 2003; Nunnally, Bernstein, & Berge, 1994). Content validity was assessed to check the degree to which measurement instruments are relevant to and representative of the construct (Haynes, Richard, &

Kubany, 1995). Thus, a panel of experts judged clear definitions of each construct domain and provided suggestions on how to ensure representativeness.

Exploratory Factor Analysis. Exploratory factory analysis (EFA) was conducted to identify items that represent the content domain of the proposed constructs. Initially, the Kaiser-Meyer-Olkin (KMO) indices and the Bartlett Spherical test were conducted. The calculated KMO greater than .50 and the Bartlett test at $p < .001$ denote the suitability of EFA in the generated items. A principal axis factoring was utilized because it assumes random measurement errors in the observed variables (Ford, MacCallum, & Trait, 1986). The number of factors relied on both theoretical background and empirical results. Eigenvalues greater than 1 or a scree plot test of the percentage of variance determined the number of factors to retain. In the characteristics of group dynamics as a latent construct, an oblique rotation was used, as the factors are assumed to be correlated. The decision rule was a loading of greater than .40 and a loading twice as strong on the appropriate factor as on another factor. Sixty percent of the total item variance served as a minimum acceptable range. Items loading inappropriately in a factor were omitted, and this analysis was repeated until a clear factor structure with a high percentage of total item variance was obtained.

Confirmatory Factor Analysis. Construct validity was assessed through the analysis of the results of confirmatory factor analysis (CFA). CFA is a deductive approach to test hypothesized associations between constructs of a model or theory. Thus, the purpose of CFA is to examine whether the relationships between constructs in the hypotheses resemble the relationships in the observed data (Meyers, Gamst, & Guarino, 2006). IBM SPSS AMOS 25 and IBM SPSS Statistics 25 were chosen to confirm the

measurement model fit. Maximum likelihood estimation was used to measure the construct validity. CFA is a type of structural equations analysis designed to assess the goodness of fit of alternative models. Chi-square statistics permitted acceptable model fit. The smaller the chi-square, the better the fit of the model. However, chi-square is sensitive to the sample size (Bollen, 1989). Therefore, the significance of chi-square may not be problematic if other fit indices are adequate.

Once the overall fit of the model was examined, additional interpretation was necessary. The root mean standard error approximation (RMSEA) was included, as the chi-square test is sensitive to sample size and increases the probability of type I and type II errors (Jöreskog, 1969). An RMSEA value that is less than .08 indicates an acceptable model fit, and an RMSEA value over .10 suggests an unacceptable model fit (Browne & Cudeck, 1992; Hu & Bentler, 1999).

The standardized root mean squared residual (SRMR) was examined using Hu and Bentler's (1999) recommendation that a value of less than .08 represents an acceptable fit. The incremental or comparative fit of the model was examined using indices that are not sensitive to sample size, including the comparative fit index (CFI), Tucker–Lewis index (TLI), and normed fit index (NFI; Hu & Bentler, 1999). Even though the recommended cutoff criterion is greater than .95, a drawback to this index is that it is sensitive to the sample size, especially underestimating fit for fewer than 200 samples (Mulaik et al, 1989; Bentler, 1990). The TLI is a more appropriate fit index to avoid this issue of small sample size (Bentler, 1990; Tabachnick & Fidell, 2007). An earlier convention commonly recommended a .90 benchmark for a good fitting model, but more recent suggestions state that the cutoff criteria should be $\geq .95$ (Hu & Bentler,

1999).

Furthermore, validity of focal constructs in the measurement model was assessed. To check consistency reliability, outer loadings were squared and examined against a preferred level of above 0.4 (Hulland, 1999). To assess internal consistency, Cronbach α scores above recommended values of .70 and composite reliabilities greater than the recommended cutoff of .60 were assessed (Bagozzi & Yi, 1988; Nunnally et al., 1994; Peterson & Kim, 2014). Construct validity was established by convergent and discriminant validity for validating newly constructed scales. Convergent validity is the degree to which given measures are related in the construct, whereas discriminant validity is the degree to which different subscales are distinguishable (Bagozzi, Yi, & Phillips, 1991; Fornell & Larcker, 1981). To check convergent validity, each latent variable's average variance extracted (AVE) was evaluated to determine whether it ranged above the suggested threshold of .50 (Hair, Ringle, & Sarstedt, 2011). Discriminant validity was established if the square root of AVE for each latent factor exceeded the correlation between constructs (Fornell & Larcker, 1981). Construct correlations were used to examine whether a specific construct was more correlated with the measures than any other construct.

Hypothesis Testing. The hypotheses tested in Study 1—*H1a*, *H1b*, *H2*, *H3*, *H4a*, *H5a*, *H4b*, *H5b*—explored the role of FI and FD in the construct of group dynamics in collegiate team apparel consumption. The proposed structural model was analyzed with structural equation modeling (SEM) using AMOS. Items and structures within the selected measurement model were examined for fit to examine the impact of group dynamics on team merchandise consumption (likelihood of team apparel purchase,

frequency of team apparel wearing, and unique product seeking). Recommended fit indices to assess goodness of fit of the structural models were the same as the criteria for CFA, using the previously stated benchmarks (Hu & Bentler, 1999).

Sample Size. The essential sample size was based on considerations of the number of factors in the measurement model. Approximately 150 respondents were recruited for Study 1. Loehlin (1992) recommends that sample sizes of between 100 and 200 are sufficient for two- to four-factor models. However, increases in sample size may improve statistical significance. With larger samples, smaller differences tend to be detectable as more than mere sampling fluctuation (Hayduk, 1987).

3.4 Study 2: The Role of Group Dynamics and a Moderating Effect of Social Visibility on Team Apparel Consumption

The purpose of Study 2 was to examine the impact of TID and group dynamics on team apparel consumption in different consumption situations, specifically public versus private. With the validity of group dynamics confirmed in Study 1, Study 2 contributes to understanding how sport fans choose team apparel through their distinctiveness needs and what needs for either group inclusiveness or personal distinctiveness are prioritized within a group of fans. Thus, to investigate an interaction effect between group dynamics and social visibility, this study included both private consumption and public consumption settings, such as at the stadium with friends. In addition, Study 2 was performed to compare the role of group dynamics on team apparel consumption in both collegiate and professional NFL contexts. Two different contexts were utilized to compare whether the difference between two contexts is significant and to rule out the contextual influence on each fan's team apparel consumption.

3.4.1 Participants and Procedure

Temple IRB approval for additional data collection was obtained prior to Study 2 data collection (Appendix A). Two different datasets of college students from a large university and NFL fans recruited from a national online pool were collected during the football season. Data in the collegiate context were collected in November 2017, and data on the NFL were collected in January 2018. A total of 400 collegiate football fans were recruited from a large eastern university in a metropolitan city in the United States. The fans who were current college students at the time the survey was conducted consisted of freshmen to seniors enrolled in various courses of sport management and hospitality management and registered in Sona Systems in the school of business at the same university. Sona Systems enables recruitment of participants in a cloud-based environment. Participants earned extra credits for their participation based on the average duration of the study. Other groups of participants were recruited from the national online pool Amazon MTurk because of its convenience to reach a broad range of respondents. Participation was targeted to NFL fans. Three screening questions on prior team apparel purchase experience, actual game experience, and favorite NFL team were asked before starting the main questionnaire; approximately 400 NFL fans, who each had a favorite team, completed the questionnaire. The procedure in the survey was similar to Study 1. However, in Study 2, all participants were randomly assigned to read a hypothetical scenario about either public or private settings to determine the interaction effect of social visibility and group dynamics on team apparel consumption. The consumption situation of both scenarios contained a short description of each situation. For the public setting, participants read the following scenario: “Please imagine that you are at the stadium to

watch your college football game [your favorite NFL team game] with your friends on Sunday. You and your friends received 5 free game tickets. It is a bright and breezy day, just like nice September weather. To support the team, you wear a team shirt on game day.”

The scenario for the private setting read: “Please imagine that you are watching your college football game [your favorite NFL team game] on TV alone on Sunday. To support the team, you wear a team shirt on game day.” After reading the scenario, all team apparel consumption behaviors were assessed. Finally, a demographic questionnaire was completed.

3.4.2 Measures

All constructs in the proposed model were the same as measures in Study 1. Each instrument used has been shown previously in the literature or in Study 1 to be a valid and reliable scale. All of the test constructs in Study 2 were described with their respective measures and anchors. UID for the college students only, TID, and FI and FD in-group dynamics were asked on a seven-point Likert scale. The outcome variables of team apparel consumption behavior were identical to items used in Study 1 and were utilized to test the role of group dynamics throughout different consumption situations.

3.4.3 Data Analysis

The proposed structural model was analyzed with structural equation modeling (SEM) using AMOS. After the role of group dynamics in team apparel consumption, as evidenced in Study 1, was determined, a further examination of the causal relationships between the proposed constructs and team apparel consumption was performed. Due to potential difficulties caused by common method variance and ensuring construct validity,

it was appropriate to use an independent sample to enhance the generalizability of the group dynamics in the group context. Thus, two different contexts (i.e., college sport fans and professional sport fans) were utilized and the scale testing process with context-specific consequences were assessed in Study 2. The replication should also include CFA, internal consistency reliability, convergent validity, and discriminant validity assessment.

Measurement Invariance Test. Data in Study 2 were collected from two different samples to rule out contextual factors. Before merging them into one dataset, a measurement invariance test was conducted. IBM SPSS AMOS allows users to compare data from different samples across the same measurement items and constructs, in this case, college students in a collegiate sport context versus an online panel in a professional sport context. The purpose of testing for measurement invariance across different samples was to determine whether the same structural model was applicable across groups. The measurement invariance between the unconstrained model for combined groups and the constrained model with equal parameters between the groups showed that the model had measurement invariance across groups (Hair, Black, Babin, & Anderson, 2009). Based on the chi-square difference of two models across datasets, it was determined whether the original model as a baseline was non-invariant across the two sample groups.

Confirmatory Factor Analysis. Construct validity was assessed by CFA. Maximum likelihood estimation ensures measurement model fit. The chi-square statistic was checked for an acceptable model fit. The recommended cutoff criteria for fit indices were used as with the previously stated benchmarks in Study 1. The validity of all constructs in the measurement model was assessed in the same manner as Study 1.

Hypotheses Testing. The multi-group analysis by AMOS 25 was conducted to examine the hypotheses—*H1a*, *H1b*, *H2*, *H3*, *H4a*, *H5a*, *H4b*, *H5b*, *H6*, *H7*—in Study 2. In the moderated mediation model, Study 2 examined the sequential effect from FI to FD (i.e., *H6*) in terms of the construct of group dynamics in team apparel consumption according to the contextual characteristics of sport fans (college football versus professional football) and the interaction effect of social visibility (moderator) influencing team apparel consumption. Moderated mediation refers to structural models in which mediated effects vary with the levels of moderator variables.

In emphasizing the salience of FD need, this study suggests that sport fans are likely to rely on their distinctiveness need and group inclusiveness in continuous moves when they are fans of a team and consequently engage in apparel purchase decision processing. To determine the causal relationships, path coefficients and the overall model fit were estimated. Recommended fit indices to assess goodness of fit of the structural models used the same benchmarks in Study 1.

Sample Size. The determination of sample size was based on considerations of the number of factors in the measurement model. Inadequate or excessive sample sizes continue to affect the accuracy and quality of research (Bartlett, Kotrlik, & Higgins, 2001). To generalize findings from recruited survey respondents back to a population within the limits of random error, determining correct sample size was essential. In particular, preferable sample sizes for SEM run in the 200 to 400 range for models with 10 to 15 indicators to be able to cause parameter estimates and to test statistical significance (Siddiqui, 2013). Furthermore, Loehlin's (1992) rule of thumb is to use at least 50, more than eight times the number of variables in the model. A total of 635

respondents were recruited for Study 2 ($N=236$ from college students and $N=399$ from NFL fans).

CHAPTER 4: RESULTS

4.1 Study 1 Results

4.1.1 Pilot Study

A pilot study was conducted prior to the main study as an initial test of dimensionality and validity of fan inclusiveness (FI) and fan distinctiveness (FD). A sample with prior sports apparel purchase experience and actual game attendance experience in collegiate football was identified. Initially 171 participants were recruited for further analysis, but 73 participants were excluded by the two filtering questions. The sample consisted of 98 college football fans, who represented national samples of U.S. residents over 18 years of age, from the national online pool Amazon MTurk, in September 2017.

An exploratory factor analysis (EFA) was performed because of complemented measures of group dynamics adopted and modified from existing items that measure similar concepts. The group dynamics measures initially consisted of each of the eight items of FI and FD that were measured by a seven-point Likert-type scale (see Table 3.1). As a result of the EFA, a preliminary indication of the factorial construct of FI and FD was obtained, and initial items were reduced into a more parsimonious set of group dynamics. After excluding items with the recommended threshold of lower factor loadings, or $<.50$, and 60% of the total item variance was explained as a minimum, three items of fan inclusiveness on one factor and three items of fan distinctiveness were reliably loaded on one factors. The calculated KMO was $.75$ and the Bartlett test was at $p <.001$, exceeding the recommended thresholds. The factor loadings of the selected items are presented in Table 4.1.

Table 4.1. *Exploratory Factor Analysis for Identification Items*

Item	Component Loadings	
	FI	FD
How included do you feel in this fan group?	.89	
I feel well integrated into this fan group.	.93	
I feel a sense of belonging with a group of [University Name] football fans.	.92	
It is important for me to be different, unique, and unconventional.		.58
I think that I am different from the other fans of my team.		.53
I feel like I stand out from this fan group.		.78
I feel unique as I participate in this fan group.		.77

Notes. Extraction Method: Principal Component Analysis; Rotation Method: Oblimin with Kaiser Normalization; Total Sum of Squared % of Variance = 65.99%; FI=Fan Inclusiveness Measures; FD=Fan Distinctiveness Measures.

The convergent validity for FI and FD in terms of in-group dynamics was assessed (Fornell & Lacker, 1981). Cronbach's α values of the selected FI and FD were .91 and .60, respectively. The composite reliability (CR) exceeded the recommended cutoff levels for both constructs (FI: CR=.94; FD: CR=.76). Average variance extracted (AVE) estimates of the FI and FD constructs were .83 and .46, respectively. The AVE of FD was met the recommended cutoff level, but the four scales were selected based on other criteria, such as the CR and factor loading values, for further analysis. The pilot-testing results provided a sound rationale for moving forward with the main study.

4.1.2 Participants of the Main Study

A total of 149 collegiate football fans were recruited from the national online pool, Amazon Mechanical Turk. In total, 549 respondents participated in the survey, but 400 were excluded from the present study by three filtering questions about prior team

apparel-purchase experience and actual game experience. A summary of the survey respondents' demographic characteristics is as follows: 57.7% were male; average age was 36.2 years old; 21.5% were current college students; 63.1% were college alumni; 94% have completed at least some college-level education; and 42.3% of annual household income was between \$40,000 and \$80,000. The participants perceived the importance of feeling similar to other fans of their favorite team ($M=4.42$, $SD=1.40$) and the importance of feeling distinct from other fans of their favorite team ($M=4.11$, $SD=1.44$), anchored by 1=*Strongly Agree* and 7=*Strongly Disagree*. On average, they spent \$152.97 on team apparel purchases in the last 12 months and \$106.93 on their favorite team' apparel purchases in the same period.

4.1.3 Confirmatory Factor Analysis Results

To assess construct validity and to test hypothesized focal associations, confirmatory factor analysis (CFA) was performed on the measurement items of the four latent variables including university identification (UID), team identification (TID), FI, and FD and the outcome variables. Previously, EFA results in the pilot study indicated three items of FI and four items of FD. The identical scales based on the pilot test results were selected for the main study. The CFA model yielded an acceptable fit of $\chi^2[df]=302.209[174]$, $\chi^2/df=1.74$, $p<.01$; RMSEA=.071; SRMR=.069; CFI=.92; IFI=.92; TLI=.90. The measurement model showed that all factor loadings were significant and above the recommended .5 level (Hair et al., 2006, Hulland, 1999). All of the measurement items and the factor loadings (λ) are presented in Table 4.2.

Table 4.2. *Measurement Items and Factor Loadings (λ)*

Variables and Items	λ
<i>University Identification (UID)</i>	
When someone criticizes [University Name], it feels like a personal insult.	.67
I am very interested in what others think about [University Name].	.53
When I talk about [University Name], I usually say “we” rather than “they”	.74
[University Name]’s successes are my successes.	.82
When someone praises [University Name], it feels like a personal compliment.	.90
If a story in the media criticized [University Name], I would feel embarrassed.	.65
<i>Team Identification (TID)</i>	
I consider myself to be a real fan of the [University Name] football team.	.80
Being a fan of the [University Name] football team is very important to me.	.96
I would experience a loss if I had to stop being a fan of the [University Name] football team.	.64
<i>Fan Inclusiveness (FI)</i>	
How included do you feel in this fan group?	.89
I feel well integrated into this fan group.	.79
I feel a sense of belonging with a group of [University Name] football fans.	.87
<i>Fan Distinctiveness (FD)</i>	
It is important for me to be different, unique, and unconventional.	.58
I think that I am different from the other fans of my team.	.81
I feel like I stand out from this fan group.	.81
I feel unique as I participate in this fan group.	.71
<i>Frequency of Collegiate-Licensed Apparel Consumption (FREQ)</i>	
Purchase frequency	.87
Spending frequency	.78
<i>Unique Product Seeking (UPS)</i>	
I actively seek to develop my personal uniqueness by buying special products or brands.	.77
I have often gone against the understood rules of my social group regarding when and how certain products are properly used.	.74
I often try to avoid products or brands bought by the general population.	.76

Notes. All factor loadings are significant ($p < .001$).

4.1.4 Reliability and Validity of the Measurement Model

The finalized measures based on the CFA results were subjected to reliability and validity assessment. To check internal consistency, Cronbach α scores above recommended values of .70 and composite reliabilities greater than .60 were assessed (Bagozzi & Yi, 1988; Nunnally et al., 1994; Peterson & Kim, 2013). AVEs that were greater than .50 demonstrated the convergent validity (Fornell & Larcker, 1981; Hair et al., 2011). Discriminant validity was checked to determine whether the square root of AVEs exceeded the correlation between constructs (Fornell & Larcker, 1981). These results are presented in Table 4.3, and the finalized measurement model was therefore retained and utilized to validate the structural model.

Table 4.3. *Reliability and Validity for the Measurement Model*

Constructs	α	CR	AVE	Correlations of Constructs					
				UID	TID	FI	FD	FREQ	UPS
UID	.851	.858	.513	.716					
TID	.830	.848	.656	.653	.810				
FI	.883	.887	.725	.555	.541	.851			
FD	.807	.820	.537	.139	.160	.058	.733		
FREQ	.808	.812	.684	.490	.555	.460	.258	.827	
UPS	.800	.800	.572	.159	.144	-.013	.732	.312	.756

Goodness-of-fit Statistics:

$$\chi^2[174]=302.209$$

$$\chi^2/df=1.74, p<.01$$

$$CFI=.92; IFI=.92; TLI=.90$$

$$RMSEA=.071; SRMR=.069$$

Notes. UID=University Identification; TID=Team Identification; FI=Fan Inclusiveness; FD=Fan Distinctiveness; α =Cronbach's α ; CR=Composite Reliability; AVE=Average Variance Extracted; Diagonal elements in the correlation of constructs matrix are the square root of AVE.

Table 4.4. *Descriptive Statistics of Survey Items*

Construct & Items	<i>M</i>	<i>SD</i>
<i>University Identification (UID)</i>	<i>4.53</i>	<i>1.20</i>
When someone criticizes my university, it feels like a personal insult.	4.36	1.75
I am very interested in what others think about my university.	4.44	1.52
When I talk about my university, I usually say “we” rather than “they.”	4.77	1.62
My university’s successes are my successes’.	4.62	1.45
When someone praises my university, it feels like a personal compliment.	4.70	1.46
If a story in the media criticized my university, I would feel embarrassed.	4.28	1.70
<i>Team Identification (TID)</i>	<i>5.07</i>	<i>1.20</i>
I consider myself to be a real fan of my favorite college football team.	5.40	1.24
Being a fan of my favorite college football team is very important to me.	5.01	1.41
I would be disappointed if I had to stop being a fan of my favorite college football team.	4.82	1.51
<u>Group Dynamics</u>		
<i>Fan Inclusiveness (FI)</i>	<i>5.46</i>	<i>.97</i>
How included do you feel in this fan group?	5.58	1.01
I feel well integrated into this fan group.	5.40	1.08
I feel a sense of belonging with a group of [University Name] football fans.	5.41	1.14
<i>Fan Distinctiveness (FD)</i>	<i>4.17</i>	<i>1.14</i>
It is important for me to be different, unique, and unconventional.	4.58	1.56
I think that I am different from the other fans of my team.	3.99	1.40
I feel like I stand out from this fan group.	3.81	1.48
I feel unique as I participate in this fan group.	4.38	1.38

Table 4.4. (Continued)

Construct & Items	<i>M</i>	<i>SD</i>
<u>Outcomes</u>		
<i>Frequency of Collegiate-Licensed Apparel Consumption (FREQ)</i>	<i>4.11</i>	<i>1.44</i>
Purchase frequency	4.18	1.15
Spending frequency	4.40	1.07
<i>Unique Product Seeking (UPS)</i>	<i>4.19</i>	<i>1.28</i>
I actively seek to develop my personal uniqueness by buying special products or brands.	4.48	1.45
I have often gone against the understood rules of my social group regarding when and how certain products are properly used.	4.17	1.57
I often try to avoid products or brands bought by the general population.	3.91	1.51

Notes. UID, TID, FI, FD, Frequency of Collegiate-Licensed-Apparel Consumption, and Unique Product Seeking: 7-point Likert Scales.

4.1.5 Descriptive Analysis

The descriptive analysis for the measured items in the research model are shown in Table 4.4. An assessment of the descriptive statistics revealed that some measures had non-normal distributions. This, in turn, indicates a potential violation of the multivariate normality assumption in structural equation models (SEM). To address this possibility, maximum likelihood estimation with robust standard errors was utilized for further SEM analysis, which has been shown to provide robust parameter estimates in such conditions (Muthén & Muthén, 2012).

4.1.6 Hypotheses Testing

The hypotheses discussed in Chapter 2 were tested through the structural model using IBM SPSS AMOS 25.

Direct Effects of UID and TID on Consumption Behavior. In the collegiate football context, college students' group identity with their university, UID, influenced their identity with the college football team, and this sequence had an impact on team apparel consumption behavior. Before investigating the role of in-group dynamics in sport fans' collegiate-licensed apparel consumption behavior, the impacts of team identification on the decision making associated with purchasing team merchandise were tested to confirm the empirical findings of a TID-consumption behavior association from the existing literature. In the college-sport context, whether affiliation with a university or college influenced fans' identification with the collegiate athletic team was confirmed. UID had a significant positive association with TID ($\beta=.66, p<.01$). Moreover, UID and TID positively influenced frequency of collegiate-licensed apparel consumption. However, there was no significant relationship between TID and unique product seeking.

Both TID and UID had significant associations with frequency of collegiate-licensed-apparel consumption ($\beta=.40, p<.01$), supporting *H1a*. In a similar vein to prior team merchandise research findings in sport management, the findings confirmed that individuals who highly identified with colleges and their athletic teams were more likely to purchase and wear collegiate-licensed apparel.

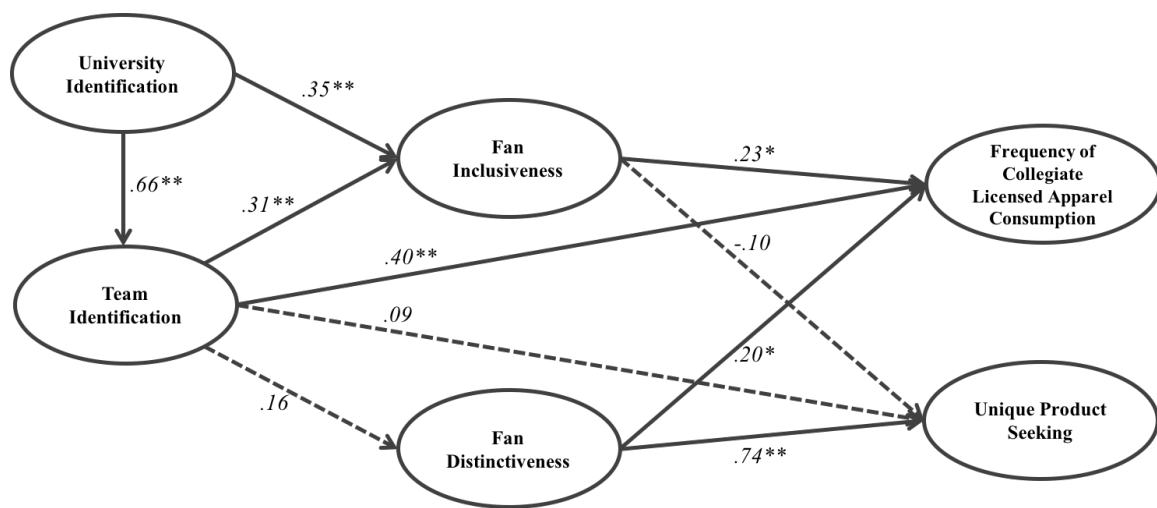


Figure 4.1. Path Coefficients of Proposed Model
Notes. Dashed lines represent nonsignificant effects; *: $p < 0.05$, **: $p < 0.01$.

Role of Group Dynamics in Consumption Behavior. To examine the psychological mechanism of how the concept of group dynamics plays a role in team apparel consumption within a group of fans, a structural model including FI and FD was tested. In the structure model shown in Figure 4.1, with a sequential association from UID to TID, the mechanism of group dynamics induced by the strength of either FI or FD influenced how frequently college sport fans buy/wear team apparel. The results of all possible team apparel consumption behavioral items in this model indicated an acceptable model fit overall ($\chi^2[df]=308.185[179]$, $\chi^2/df=1.72$, $p<.01$; RMSEA=.070;

SRMR=.088; CFI=.92, IFI=.92, TLI=.91). In Table 4.5, results showed that TID positively influenced FI ($\beta=.31, p<.01$, supporting *H2*), but not FD ($\beta=.16$, ns, rejecting *H3*). Next, FI had significant positive associations with frequency of purchase/wearing collegiate-licensed apparel ($\beta=.23, p<.05$), supporting *H4a*. However, FI had no significant associations with unique product seeking behavior, rejecting *H5a*. On the other hand, results showed that FD had significant positive associations with all of the outcomes: frequency of purchase/wearing collegiate-licensed apparel ($\beta=.20, p<.05$, supporting *H4b*) and unique-product seeking ($\beta=.74, p<.01$, supporting *H5b*). Previous team identification research in sport management has not shown the rationale behind why some sport consumers prefer to purchase unique team merchandise to be distinct from others. However, considering in-group dynamics, sport consumers prefer unique team apparel since they can reconcile both group inclusiveness and personal distinctiveness in the group. Thus, group dynamics influenced sport consumers' unique product seeking ($R^2=56\%$).

Table 4.5. *Path Coefficient and Significance for Study 1*

Path	β	<i>t</i> value	Hypothesis Testing		R^2
TID→FREQ	.40 **	3.96	<i>H1a</i>	Supported	
TID→UPS	.09 ns	0.93	<i>H1b</i>	Not supported	
TID→FI	.31 **	2.84	<i>H2</i>	Supported	36%
TID→FD	.16 ns	1.76	<i>H3</i>	Not Supported	3%
FI→ FREQ	.23 *	5.10	<i>H4a</i>	Supported	
FD→ FREQ	.20 *	3.46	<i>H4b</i>	Supported	39%
FI→UPS	-.10 ns	-1.21	<i>H5a</i>	Not supported	
FD→UPS	.74 **	7.77	<i>H5b</i>	Supported	56%

Notes. β =Standardized Path Coefficients; *: $p<0.05$, **: $p<0.01$.

In comparison to the direct relationships between TID and apparel consumption behavior, sport fans' group dynamics accounted for more variances in purchasing and wearing frequency ($\Delta R^2=7\%$). Through the mechanism of in-group dynamics, fan distinctiveness played a key role in predicting why fans consider purchasing unique team apparel—unique-product seeking ($\Delta R^2=54\%$).

Mediation Effect of Group Dynamics. To test the mediation effects of FI and FD on the relationship between TID and collegiate-licensed apparel consumption behavior, results should meet the following requirements: (1) variations in the predicting variable significantly explain variations in the mediator (i.e., path a); (2) variations in the mediator significantly explain variations in the outcome variable (i.e., path b); and (3) with the mediating effect, the previously significant relationship between the predictor and outcome variable (i.e., path c) is no longer significant (i.e., full mediation) or is less significant (i.e., partial mediation, Baron & Kenny, 1986; Frazier, Tix, & Barron, 2004). Based on the criteria, mediating effects of UID→TID→FI and TID→FI→FREQ were assessed as shown in Table 4.6.

When the direct path between FI and FREQ was controlled and set at zero, the estimated path from TID to FREQ was significant ($\beta=.41, t=6.17, p<.01$). When the direct effect of TID on FREQ was estimated along with FI, the direct path was still significant. Hence, FI functions as a partial mediator between TID and FREQ outcome. Similarly, when the direct path between TID and FI was controlled and set at zero, the estimated path from UID to FI was significant ($\beta=.49, t=5.85, p<.01$). When the direct effect of UID on FI was estimated along with TID, the direct path was still significant. Hence, TID functions as a partial mediator between UID and FI. In addition, chi-square

differences between the mediating models and the non-mediating models were significant (Satorra & Bentler, 2001).

Further, the statistical significance of the mediation effects with estimates of its standard error, Sobel's (1982) formula was utilized to test whether the indirect effect of the predictor variable on the outcome variable via the mediator is significantly different from zero and the calculated z-scores greater than 1.96 indicates significant differences. As shown in Table 4.6, the z-score of UID→TID→FI was 3.25 and the z-score of TID→FI→FREQ was 1.97. Another powerful method is to test how much mediation occurs using the proportion of total mediation, which is calculated by $[a*b/c = \text{unstandardized coefficient of path a} * \text{unstandardized coefficient of path b} \text{ divided by unstandardized coefficient of path c without the mediator}]$ (Shrout & Bolger, 2002). Approximately 35% of the total effect of UID on FI was mediated by TID, and 13% of the total effect of TID on FREQ was mediated by FI.

Table 4.6. Testing Mediation Effects (Study 1)

Mediating role of	Between	Statistics of P ^a →O ^b , when M ^c →O is set at 0.				Statistics of P→O, when M→O allowed.				$\Delta\chi^2$	Sobel test (z)	Amount of mediation
		B	SE B	β	t	B	SE B	β	t			
TID	UID & FI	0.49	0.08	0.58	5.85**	0.30	0.10	0.35	3.12**	7.93	3.25**	0.35
FI	TID & FREQ	0.41	0.07	0.54	6.17**	0.30	0.08	0.40	3.96**	5.17	1.97*	0.13

Notes. ^a Predictor variable; ^b Outcome variable; ^c Mediator; B=Unstandardized path coefficients; β =Standardized path coefficients; *: $p < 0.05$, **: $p < 0.01$.

4.2 Study 2 Results

Study 2 was implemented to cross validate the findings derived from Study 1 and to compare the role of group dynamics on team apparel consumption behavior in both collegiate and professional sports contexts. Additionally, social visibility as a situational consumption cue was added to examine the moderating effect on the relationships among team identification, group dynamics, and apparel consumption behaviors. To examine the moderating effect of social visibility and the consequential effect of group dynamics from fans' inclusiveness need to their personal distinctiveness need, a path from FI to FD was added. This pendulum effect conceptually demonstrates whether fans' group inclusiveness is primary to their personal distinctiveness within the group in a given situation.

4.2.1 Participants

A total of 635 participants (59.4% male: $M_{age}=30.2$ years) were recruited from two different populations. One group of participants included 236 undergraduate students (72.9% men) ranging from freshmen to seniors enrolled in a variety of sport management and hospitality management courses, as well as in Sona Systems at the school of business. Respondents, through the Sona System, earned extra credits for their survey participation. In total, 416 undergraduate students from a large eastern university in the United States participated in the survey, but 180 were excluded by three filtering questions about prior team apparel purchase experience and actual game experience. As shown in Table 4.7, the age of participants ranged from 18 to 28 years ($M=19.67$, $SD=1.78$); and 41.5% were freshmen, 24.6% were sophomores, 21.2% were juniors, and 12.7% were seniors. The college students perceived the importance of feeling similar to

other fans of their favorite team ($M=4.23$, $SD=1.31$) and the importance of feeling distinctive from other fans of their favorite team ($M=3.92$, $SD=1.19$), anchored by $1=strongly\ agree$ and $7=strongly\ disagree$. On average, they spent \$131.21 on their collegiate-licensed apparel purchases in the last 12 months from the survey date.

The other group of participants ($N=399$) were recruited from the online survey panel service Amazon MTurk. To target relevant samples, specifically NFL fans, 454 were excluded by the same screening questions about prior team apparel purchase experience, actual game experience, and favorite NFL team. Participants from the online survey pool were almost evenly split between men and women (51.4% male). Ages ranged from 19 to 70 years ($M=36.5$, $SD=11.14$). Of the respondents, 92.5% had completed at least some college-level education, and 41.9% of annual household income was between \$40,000 and \$80,000. The NFL fans perceived the importance of feeling similar to other fans of their favorite team ($M=4.49$, $SD=1.44$) and the importance of feeling distinctive from other fans of their favorite team ($M=3.97$, $SD=1.44$). On average, they spent \$201.06 on overall team apparel purchases in the last 12 months and \$121.74 on their favorite NFL teams' apparel purchases in the same period.

Table 4.7. *Demographic Characteristics*

		Overall		College Students		NFL Fans	
		<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Age	Under 18	0	0	0	0	0	0
	18–24	264	41.6	229	97.0	35	8.8
	25–34	179	28.2	7	0.3	172	43.1
	35–44	110	17.3	0	0	110	27.6
	45 and over	82	12.9	0	0	82	20.6
Gender	Male	377	59.4	172	72.9	205	51.4
	Female	258	40.6	64	27.1	194	48.6
Income	Less than \$20,000	64	10.1	41	17.4	23	5.8
	\$20,001–\$40,000	95	15.0	14	5.9	81	20.3
	\$40,001–\$60,000	99	15.6	19	8.1	80	20.1
	\$60,001–\$80,000	106	16.7	19	8.1	87	21.8
	\$80,001–\$100,000	84	13.2	27	11.4	57	14.3
	Over \$100,000	184	29.0	114	48.3	70	17.6
Education	High School / GED	N/A	N/A	N/A	N/A	30	7.5
	Some College					84	21.1
	2-year College Degree					55	13.8
	4-year College Degree					150	37.6
	Master’s Degree					69	17.3
	Doctoral / Professional Degree					11	2.8
Total		635		236		399	

4.2.2 Measurement Invariance Test

To rule out the contextual elements and generalize the role of sport fans’ group dynamics in team apparel consumption behavior, Study 2 was conducted with the data from two different samples in the collegiate football context and NFL context. Before merging the data from the MTurk online panel into the NFL context and college students in the collegiate-football context, a measurement invariance test was performed to examine whether participants across groups responded equivalently to all measures (Hair et al., 2009). The baseline model without any invariance constraint showed an acceptable model fit of χ^2 [df]=566.88[166], χ^2 /df=3.42, $p<.01$; RMSEA=.062; CFI=.91; IFI=.91; and TLI=.89, establishing configural invariance (Jöreskog, 1993). A metric invariance was tested by releasing all invariance constraints and constraining only factor loadings to be

equal across groups. The metric invariance for factor loading equivalence was based on a chi-square difference across groups: $\Delta\chi^2=83.156$, $\Delta df=10$, $p<.01$. However, partial metric equivalence across the online panel and college students was sufficient as each latent factor included at least one invariant path (e.g., MacKensie, Podsakoff, & Podsakoff, 2011). Based on these results, data sets from two samples were merged into the proposed research model.

4.2.3 Confirmatory Factor Analysis Results

Before testing the structural model with merged datasets, CFA was conducted to evaluate whether all measures were consistent with the theoretical constructs. To assess convergent validity, a CFA was carried out on the measurement items of the same variables in Study 1. In Table 4.8, the structural regression weights between the items and latent variables, more precisely, constructs, are presented. The CFA model yielded the following fit of $\chi^2[df]=358.253[80]$, $\chi^2/df=4.48$, $p<.01$; RMSEA=.074; SRMR=.051; CFI=.93; IFI=.93; TLI=.91). These fit indicators were considered acceptable (Browne & Cudeck, 1992; Hu & Bentler, 1999).

Table 4.8. *Measures and Factor Loadings (λ) in Study 2*

Variables and Items	λ
<i>Team Identification (TID)</i>	
I consider myself to be a real fan of the [University or NFL] football team.	.83
Being a fan of the [University or NFL] football team is very important to me.	.91
I would experience a loss if I had to stop being a fan of the [University or NFL] football team.	.77
<i>Fan Inclusiveness (FI)</i>	
How included do you feel in this fan group?	.72
I feel well integrated into this fan group.	.71
I feel a sense of belonging with a group of [University or NFL] football fans.	.84
<i>Fan Distinctiveness (FD)</i>	
It is important for me to be different, unique, and unconventional.	.65
I think that I am different from the other fans of my team.	.80
I feel like I stand out from this fan group.	.85
I feel unique as I participate in this fan group.	.46
<i>Frequency of Collegiate-Licensed Apparel Consumption (FREQ)</i>	
Purchase frequency	.80
Spending frequency	.80
<i>Unique Product Seeking (UPS)</i>	
I actively seek to develop my personal uniqueness by buying special products or brands.	.74
I have often gone against the understood rules of my social group regarding when and how certain products are properly used.	.78
I often try to avoid products or brands bought by the general population.	.68

Notes. All factor loadings are significant ($p < .001$).

To check reliability and validity of the measurement model, Cronbach α scores, CR, AVE, and correlation between constructs were assessed using the same method in Study 1 (Bagozzi & Yi, 1988; Fornell & Larcker, 1981; Hair et al., 2011; Nunnally et al., 1994; Peterson & Kim, 2013). All items in the measurement model met acceptable thresholds of Cronbach's α , CR, and AVE. All constructs' square root of AVE estimates

were larger than the correlation of corresponding constructs, establishing discriminant validity. The CFA results presented in Table 4.9 show that the measurement model has sound psychometric properties.

Table 4.9. *Reliability and Validity for the Measurement Model*

Constructs	α	CR	AVE	Correlations of Constructs				
				TID	FI	FD	FREQ	UPS
TID	.867	.877	.705	.840				
FI	.794	.798	.570	.682	.755			
FD	.780	.818	.533	.092	-.043	.730		
FREQ	.781	.780	.640	.570	.464	.280	.800	
UPS	.776	.777	.538	.097	.088	.711	.288	.734

Notes. TID=Team Identification; FI=Fan Inclusiveness; FD=Fan Distinctiveness; FREQ=Frequency of Purchase/Wearing; UPS=Unique-Product Seeking; α =Cronbach's α ; CR=Composite Reliability; AVE=Average Variance Extracted; Diagonal elements in the correlation of constructs matrix are the square root of AVE.

4.2.4 Descriptive Analysis

With the assessment of factor loadings, cross-item correlation, reliability, and validity, the descriptive analysis for the tested constructs in the research model was performed. Table 4.10 summarizes the mean scores and standard deviation across the two contexts: fans of the college football team and NFL teams' fans.

Table 4.10. *Descriptive Statistics*

Constructs	College Students		NFL Fans	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
<i>University Identification (UID)</i>	5.05	1.14	n/a	n/a
<i>Team Identification (TID)</i>	4.26	1.43	5.33	1.22
<u>Group Dynamics</u>				
<i>Fan Inclusiveness (FI)</i>	4.73	.99	5.76	.96
<i>Fan Distinctiveness (FD)</i>	4.31	.90	3.97	1.25
<u>Outcomes</u>				
<i>FREQ</i>	4.10	.88	4.16	1.08
Purchase Frequency	3.80	1.07	4.02	1.14
Wearing Frequency	4.40	1.00	4.31	1.18
<i>UPS</i>	4.12	1.15	4.12	1.31

Notes. UID, TID, FI, FD, Frequency of Collegiate-Licensed-Apparel Consumption, (FREQ) and Unique Product Seeking (UPS): 7-point Likert Scales.

4.2.5 Hypotheses Testing

As confirmed in the acceptable model fit for the CFA, multi-group SEM analysis using IBM SPSS AMOS 25 was performed to test the moderating effect.

Moderation Analysis. Social visibility as a situational cue in Study 2 was added as a moderating variable in the research model. Social visibility was categorized into two groups: public consumption situation (e.g., at a stadium) and private consumption situation (e.g., home alone). An invariance test or a heterogeneity test was conducted to ensure that all measures in the structural model had the same meanings between a public consumption situation group and a private consumption situation group. Thus, a measurement weight model was built with equally constrained factor loadings across situations. As shown in Table 4.11, the difference in the chi-square statistic between the unconstrained original model and the measurement weight model was not significant ($\Delta\chi^2=7.723$, $\Delta df=10$ $p=.66$). These results indicate that measurement invariance across the two situational conditions was established. Furthermore, a structural invariance test

was conducted to examine whether causal paths in the structural model were different between the conditions. A structural weight model that constrained factor loadings and regression weights to be equal across the conditions showed a significant change in chi-square value between the unconstrained and structural weight models ($\Delta\chi^2=49.646$, $\Delta df=34$, $p=.04$). The structural variance signified that social visibility can be confirmed as a moderator with a differential effect on the tested paths (e.g., Dabholkar & Bagozzi, 2002). Consequently, there was a significant change between the models—the variable is moderating if the calculated change in χ^2 is greater than the χ^2 critical value. Thus, the two groups (public and private situations), by evaluating the change in χ^2 ($\Delta\chi^2$) relative to the change in degrees of freedom (Δdf), yielded a significant result.

Table 4.11. *Moderating Effect of Social Visibility*

Moderator	Model	χ^2	df	$\Delta\chi^2$	Δdf	Critical Value	Sig.
Social Visibility	Unconstrained	473.622	162				
	Measurement weight	481.345	172	7.723	10	18.307	$p=.66$
	Structural weight	523.268	196	49.646	34	48.602	$p<.05$

Moderating Effect of Social Visibility. Based on the moderation analysis, further testing on the moderated mediation structural model was conducted to understand how sport consumers fulfill the competing needs for fan inclusiveness and fan distinctiveness in public or private situations. Overall, the model fit indices of the structural model were assessed ($\chi^2/df=2.92$, $p<.01$; RMSEA=.055; SRMR=.065; CFI=.93; IFI=.93; TLI=.91). With randomized hypothetical scenarios, the moderated mediation analysis showed whether social visibility as a moderator overrides need for

fans' personal distinctiveness or group inclusiveness. The results showed social visibility, when being watched at the stadium in a public situation or alone at home in a private situation, had a moderating effect on the relationships between TID and team apparel consumption throughout group dynamics, FI and FD, supporting *H7*. However, each path estimates varied with the consumption situations. Table 4.12 shows the estimates for the public situation (i.e., stadium) and the private situation (i.e., home) with the z-test. The z-score values are presented to determine their significant moderating effect across situations. The calculated z-score values were obtained from the regression weights of both situations and the critical ratio of differences in AMOS. To analyze the multi-group moderating impact on each path in the structural model, any z-score values above 1.645 ($p < .10$) indicated the significant moderating impact. Social visibility as a situational cue in this study was a significant moderator to examine the impact of group dynamics in team apparel consumption across sport fans being watched in a public situation and those alone in a private situation. However, the significant moderating effect varied by each causal path across samples.

Table 4.12. *Group Comparisons of Path Significance for the Moderation*

Paths	Public Situation				Private Situation				z-test
	B	SE	β	t-value	B	SE	β	t-value	
TID → FREQ	0.39	0.068	0.50	5.72 **	0.25	0.081	0.30	3.03 **	1.34
TID → UPS	-0.17	0.078	-0.19	-2.20 *	0.01	0.095	0.01	0.14 ns	1.51
TID → FI	0.62	0.060	0.65	10.31 **	0.70	0.063	0.71	11.23 **	1.00
TID → FD	0.09	0.086	0.11	1.10 ns	0.32	0.087	0.39	3.66 **	1.84 †
FI → FD	-0.14	0.095	-0.14	-1.44 ns	-0.26	0.089	-0.32	-2.87 **	0.92
FI → FREQ	0.16	0.073	0.20	2.24 *	0.18	0.083	0.22	2.19 *	0.02
FD → FREQ	0.19	0.052	0.21	3.56 **	0.33	0.070	0.32	4.66 **	1.58
FI → UPS	0.22	0.088	0.23	2.53 *	0.13	0.097	0.13	1.37 ns	0.68
FD → UPS	0.68	0.082	0.67	8.26 **	0.90	0.112	0.72	8.03 **	1.61

Notes. TID=Team Identification; FI=Fan Inclusiveness; FD=Fan Distinctiveness; FREQ=Frequency of Purchase/Wearing; UPS=Unique-Product Seeking; B=Unstandardized Path Coefficients; SE=Standard Error; β =Standardized Path Coefficients; †: $p<.10$, *: $p<0.05$, **: $p<0.01$.

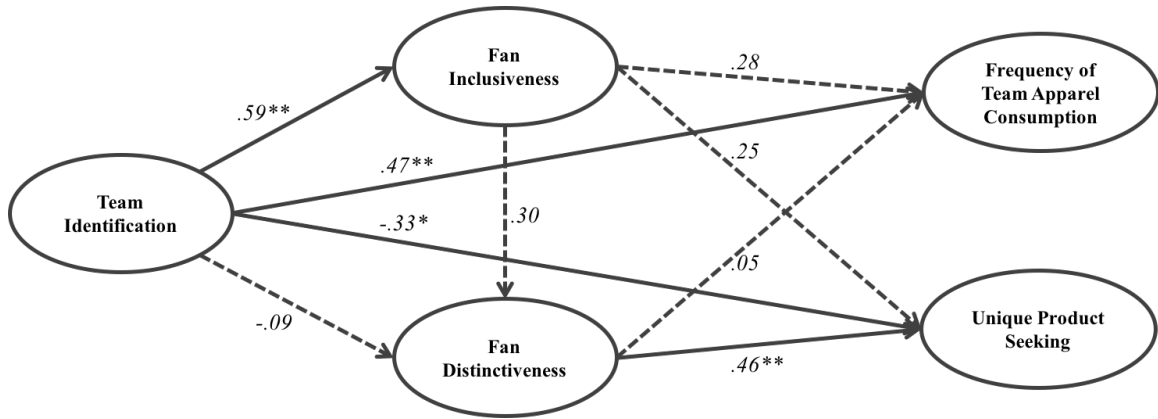


Figure 4.2. Path Significance for College Football in the Public Situation
 Notes. *: $p < 0.05$, **: $p < 0.01$; dashed lines represent nonsignificant effect.

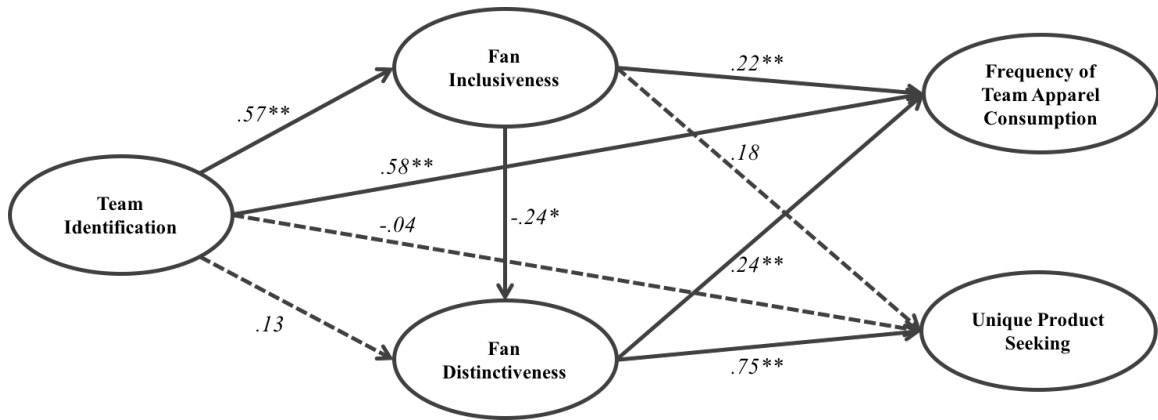


Figure 4.3. Path Significance for the NFL in the Public Situation
 Notes. *: $p < 0.05$, **: $p < 0.01$; dashed lines represent nonsignificant effect.

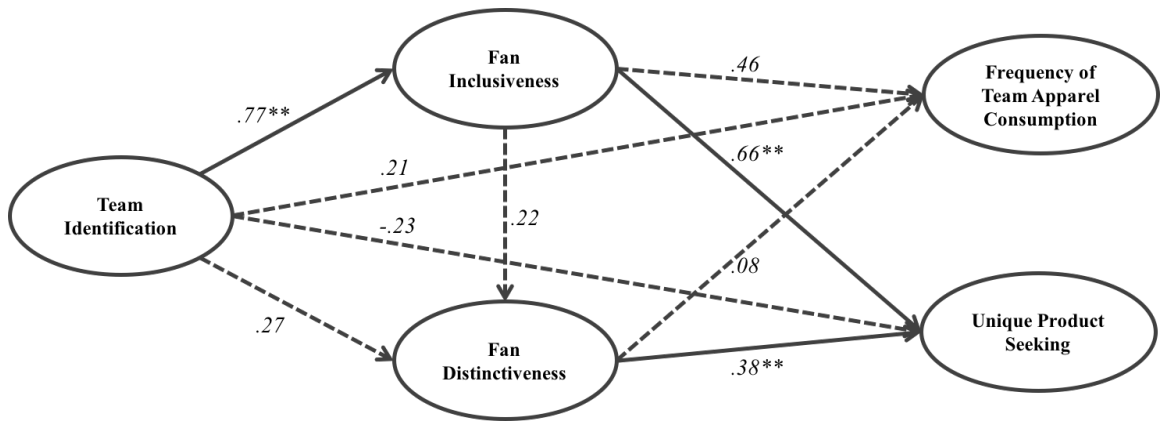


Figure 4.4. Path Significance for College Football in the Private Situation
 Notes. *: $p < 0.05$, **: $p < 0.01$; dashed lines represent nonsignificant effect.

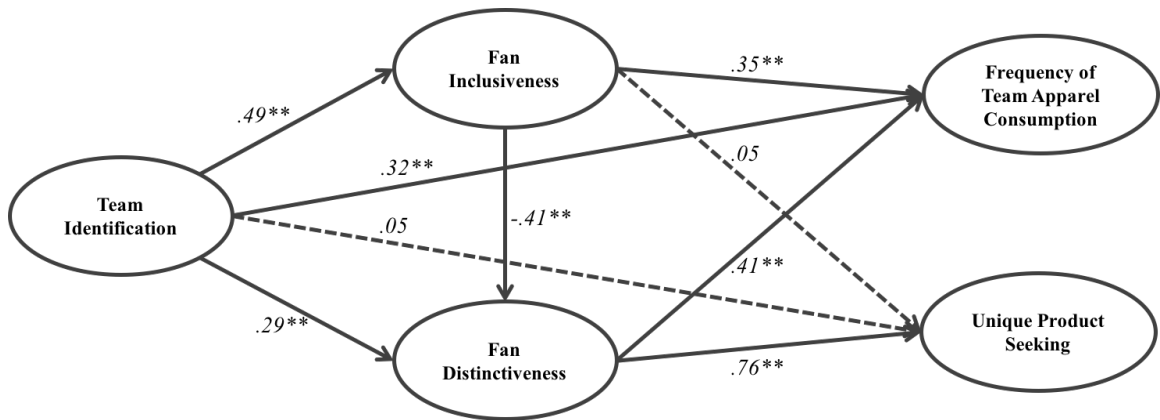


Figure 4.5. Path Significance for the NFL in the Private Situation
 Notes. *: $p < 0.05$, **: $p < 0.01$; dashed lines represent nonsignificant effect.

Direct Effects of TID on Consumption Behavior. As in Study 1, before examining the role of group dynamics on the outcomes of apparel consumption behavior, direct effects between TID and team apparel behavior were assessed in the multi-group moderated mediation model. Across the public versus private situations and the collegiate-football versus professional NFL contexts, TID was significantly associated with FREQ in the NFL context in both public and private situations, and TID was significantly associated with FREQ in the college sport context in only the public situation (see Table 4.13). These results partially confirmed *H1a*.

The Role of Group Dynamics in Team Apparel Consumption. As shown in Figure 4.2 through Figure 4.5, the mechanism of group dynamics throughout fan inclusiveness and fan distinctiveness predicted a unique portion of variances in team apparel consumption outcomes when comparing fans who watched their teams' games publicly at a stadium and those alone at home in a private situation. Moreover, group differences from the collegiate football and NFL contexts were revealed. The structural model yielded an acceptable fit of $\chi^2[df]=731.742[324]$, $\chi^2/df=2.26$, $p<.01$; RMSEA=.045; SRMR=.044; CFI=.91; IFI=.91; TLI=.89.

As presented in Table 4.13, *Hypothesis 2*, which predicted the direct path of TID on FI, was accepted in both public and private situations. It was found that college students' TID had an association with FI in the public situation ($\beta_{TID_FI}=.59^{**}$) as well as in the private situation ($\beta_{TID_FI}=.77^{**}$). Furthermore, NFL fans' TID had a significant association with FI in the public situation as well as in the private situation ($\beta_{TID_FI}=.57^{**}$, $.49^{**}$ respectively).

With the moderating effect of social visibility, the consequential effect from FI to FD was tested in Study 2. The negative sign estimates between FI and FD in the NFL context meant that fans' group inclusiveness and fans' personal distinctiveness are competing needs (public: $\beta_{FI_FD} = -.24^*$, private: $\beta_{FI_FD} = -.41^{**}$), supporting *H6*. College football fans' inclusiveness was not associated with their personal distinctiveness.

With regard to *H4a*, the relationship between FI and FREQ was accepted across both situations in the NFL context (see Table 4.13). The relationship was stronger in the private situation than in the public situation (public: $\beta_{FI_FREQ} = .22^{**}$, private: $\beta_{FI_FREQ} = .35^{**}$). With regard to *H4b*, the relationship between FD and FREQ was only accepted in the NFL context (public: $\beta_{FD_FREQ} = .24^{**}$, private: $\beta_{FD_FREQ} = .41^{**}$). Moreover, the estimate was stronger in the private situation than in the public situation. It can be interpreted that individual distinctiveness need in a private consumption situation had a significant effect on team apparel consumption behavior. For the relationship between FI and unique product seeking, *hypothesis 5a* was rejected across both situations. However, *hypothesis 5b*, which predicted the relationship between FD and unique-product seeking, was accepted in both situations and groups. College students' FD had an association with unique product seeking in the public situation ($\beta_{FD_UPS} = .46^{**}$) as well as in the private situation ($\beta_{FD_UPS} = .38^{**}$). Also, NFL fans' FD had a significant association with unique product seeking in the public situation as well as in the private situation (public: $\beta_{FD_UPS} = .75^{**}$, private: $\beta_{FD_UPS} = .76^{**}$). As a result, the tested paths in the multi-group moderated mediation analysis were not significant in the same manner according to the situations and the contexts. However, the results implied

that FD and FI in terms of group dynamics significantly influenced the team apparel consumption behavior in both situations.

Considering the effects of in-group dynamics on team apparel consumption behaviors in the multi-group moderation analysis, the results indicated that the NFL fans' needs for FI and FD accounted for how sport consumers purchase/wear team apparel more frequently (public: $R^2=58\%$, private: $R^2=45\%$) and how they sought unique apparel (public: $R^2=54\%$, private: $R^2=57\%$). Similarly, college sport fans' needs for FI and FD explained the variances in how they sought unique apparel (refer to Table 4.13). In sum, these findings demonstrated that intragroup dynamics, fan inclusiveness and fan distinctiveness, account for greater variance in predicting team apparel consumption behaviors.

Table 4.13. Results of the Multi-Group Analysis

HOs	Paths	Public Situation						Private Situation						
		Collegiate			NFL			Collegiate			NFL			
		β	t	R^2	β	t	R^2	β	t	R^2	β	t	R^2	
<i>H1a</i>	TID →	FREQ	0.47 **	3.05		0.58 **	6.25		0.21 ns	1.00		0.32 **	3.70	
<i>H1b</i>	TID →	UPS	-0.33 *	-2.24		-0.04 ns	-0.45		-0.23 ns	-1.15		0.05 ns	0.61	
<i>H2</i>	TID →	FI	0.59 **	5.95	35%	0.57 **	7.10	33%	0.77 **	7.75	59%	0.49 **	5.54	24%
<i>H3</i>	TID →	FD	-0.09 ns	-0.56	7%	0.13 ns	1.24	4%	0.27 ns	1.39	21%	0.29 **	2.94	14%
<i>H6</i>	FI →	FD	0.30 ns	1.62		-0.24 *	-2.24		0.22 ns	1.06		-0.41 **	-3.94	
<i>H4a</i>	FI →	FREQ	0.28 ns	1.57	47%	0.22 **	2.66	58%	0.46 ns	1.89	46%	0.35 **	3.81	45%
<i>H4b</i>	FD →		0.05 ns	0.39		0.24 **	3.67		0.08 ns	0.62		0.41 **	4.97	
<i>H5a</i>	FI →	UPS	0.25 ns	1.50	32%	0.18 ns	1.95	54%	0.66 **	2.89	53%	0.05 ns	0.54	57%
<i>H5b</i>	FD →		0.46 **	3.30		0.75 **	8.04		0.38 **	2.63		0.76 **	7.17	

Notes. β =Standardized Path Coefficients; t =Critical Ratio; *: $p < 0.05$, **: $p < 0.01$.

Mediation: Indirect Effects of Group Dynamics. As in Study 1, mediating effects of group dynamics were assessed. Based on the same criteria in Study 1, mediating effects of FI and FD on the team apparel consumption behaviors were found in the NFL context only as presented in Table 4.14. There was no mediation effect in the college sport context.

First, in the public situation (i.e., stadium), when the direct path between FI and FREQ was controlled, the path from TID to FREQ was significant ($\beta=.73, t=8.57, p<.01$). When the direct effect of TID on FREQ was estimated along with FI, the direct path was still significant. Hence, FI functions as a partial mediator between TID and FREQ outcome. In a mediating role of FD between FI and FREQ, the direct path from FI to FREQ was significant ($\beta=.17, t=1.98, p<.05$) when the path between FD and FREQ was controlled. Therefore, FD partially mediated the relationship between FI and FREQ.

In the private situation (i.e., home), the path from TID to FREQ was significant when the direct paths between FI and FREQ as well as between FD and FREQ were controlled ($\beta=.53, t=6.56, p<.01$; $\beta=.39, t=4.17, p<.01$, respectively). As the direct path was still significant with the mediating role of FI and FD, the needs for FI and FD function as partial mediators between TID and FREQ. Similarly, FD partially mediated the relationship between FI and FREQ as the direct path from FI to FREQ was significant ($\beta=.22, t=2.57, p<.05$) when the path between FD and FREQ was controlled. However, when the direct effect of TID and UPS was estimated along with FD, the path from TID to UPS became non-significant. Hence, FD functions as a full mediator between TID and UPS. Chi-square differences between the mediating models and the non-mediating models were all significant.

Sobel's z-scores indicated that all of the indirect effects were significantly different as shown in Table 4.14. Lastly, to check whether the mediation effects were large enough, the amount of mediation was calculated. 18% of the total effect of TID on FREQ was mediated by FI in the public situation and 31% in the private situation. Approximately 37% of the total effect of FI on FREQ was mediated by FD in the public situation and 83% in the private situation. The results showed that the mediating role of group dynamics (i.e., via FI and FD) allowed for a high degree of explanation for team apparel consumption behavior, which is the behavioral outcomes in sport marketing.

Table 4.14. *Testing Mediation Effects (Study 2)*

Mediating role of	Between	Statistics of P ^a →O ^b , when M ^c →O is set at 0.				Statistics of P→O, when M→O allowed.				Δχ ²	Sobel test (z)	Amount of mediation
		B	SE B	β	t	B	SE B	β	t			
<i>Public Situation in the NFL context</i>												
FI	TID & FREQ	0.73	0.09	0.73	8.57**	0.59	0.10	0.58	6.25**	6.83	2.49*	18%
FD	FI & FREQ	0.15	0.07	0.17	1.98*	0.20	0.08	0.22	2.66**	13.77	-2.04*	37%
<i>Private Situation in the NFL context</i>												
FI	TID & FREQ	0.71	0.11	0.53	6.56**	0.41	0.11	0.32	3.70**	13.59	3.13**	31%
FD	TID & FREQ	0.47	0.11	0.39	4.17**	0.41	0.11	0.32	3.70**	30.71	2.44*	32%
FD	TID & UPS	0.56	0.16	0.38	3.58**	0.08	0.13	0.05	0.54ns	85.81	2.61**	58%
FD	FI & FREQ	0.26	0.10	0.22	2.57*	0.46	0.12	0.35	3.81**	30.71	-2.91**	83%

Notes. ^a Predictor variable; ^b Outcome variable; ^c Mediator; B=Unstandardized path coefficients; β=Standardized path coefficients; *: p < 0.05, **: p < 0.01.

CHAPTER 5: DISCUSSION

The purpose of this research is to explore the psychological mechanism through which sport fans in a fan group use two conflicting needs of group dynamics to make a decision on team apparel consumption. This is accomplished through two studies. Study 1 used a survey design to uncover the role of group dynamics in sport fans' team apparel consumption behavior. Study 2 replicated the findings in Study 1 and further demonstrated that group dynamics influencing team apparel consumption are moderated by social visibility as a situational cue with two samplings of university sport fans and general NFL spectators. This chapter presents a discussion of these two studies' findings based on the literature review and the tested hypotheses. This chapter begins with discussions on Study 1 and Study 2 to reflect on the research model built in the previous chapter, followed by a general discussion in which the overall takeaways are addressed. Then, theoretical contributions and practical implications of this research are described. The chapter finishes with limitations and future directions.

5.1 Study 1 Discussion

Study 1 provides initial insight into understanding the role of college sport fans' group inclusiveness and their personal distinctiveness needs on college-licensed apparel consumption behavior. The mechanism of group dynamics was induced by a level of fan inclusiveness (FI), fan distinctiveness (FD), or both. Above all, whether sense of affiliation with the university and the collegiate football team directly influences college-licensed apparel consumption was tested to reaffirm past sport management literature. With a sequential association from university identification (UID) to team identification (TID), these group affiliations were shown to significantly influence how frequently

college sport fans buy/wear team apparel, supporting direct effects between TID and team apparel consumption behavior, supporting *H1a*.

TID had significant positive impacts on college sport fans' inclusiveness within a group. Brewer's (1991) optimal distinctiveness theory (ODT) assumes that individuals reconcile the two competing needs of FI and FD simultaneously. However, the empirical findings in Study 1 show that college sport fans who highly identify themselves with the college football team experience FI, confirming *H2*. This finding refutes the basic concept of ODT that optimal distinctiveness is a compromise between inclusion of the self into social collectives and differentiation of the self from others (Brewer, 1991; 2003). However, the findings from Study 1 indicate that fans activated their need for FI through UID and TID when considering team apparel consumption. Although there was no link from TID and FD, personal distinctiveness significantly influences purchasing and wearing team apparel as well as unique product seeking behavior. In Study 1, all participants were set to watch their favorite team's games at their home stadiums. Therefore, they maintained the desire for group inclusiveness in that situation and activated the desire for group inclusiveness in team apparel-purchase/wearing decision making. However, regardless of the level of group affiliation, FD of group dynamics played a significant role in predicting team apparel consumption behaviors.

In addition, in college sport spectatorship, UID strongly associated with collegiate sport fans' group inclusiveness through identification with their college athletic team. With respect to the role of group dynamics in college-licensed-apparel consumption, both needs of FI and FD influenced the frequency of purchasing and wearing of college team apparel, supporting *H4a* and *H4b*. More importantly, mediation analysis showed that FI

played 13% of the mediating role in the total effect between TID and FREQ. Empirical findings demonstrated that personal distinctiveness needs determine fans' needs for unique product seeking, supporting *H5b*. The findings indicated that group dynamics as a function of relative strengths of the competing drives for group inclusiveness and personal distinctiveness influence college sport fans' apparel consumption behavior. However, as individuals showed high inclusiveness when they remained with their fan group, the need for personal distinctiveness must be fulfilled in the group regardless of the degree of TID or UID. Need for FD led to purchasing and wearing of collegiate-licensed apparel and unique product seeking behavior (e.g., Brewer, 1991; Brewer, 1993). In particular, prior theoretical frameworks derived from SIT or TID have not demonstrated why some sport fans seek unique team products, as those theoretical frameworks emphasize group perception and the collective self in intergroup relations as well as self-concept by group memberships (Tajfel & Turner, 1979). However, as the need for FD is concerned with personal identity that differentiates the self from others in a social context, these findings provide the evidence to determine the underlying mechanism of sport fans' uniqueness seeking for team apparel consumption.

5.2 Study 2 Discussion

Study 2 provides additional evidence of the mechanism underlying the impact of group dynamics on team apparel consumption across two different research contexts. More importantly, Study 2 confirms opposing forces of two needs in terms of group dynamics according to the contextual characteristic of sport fans and the moderating effect of social visibility as a situational cue as well as a boundary condition influencing team apparel consumption. Using the same measurement model from Study 1, the

mechanism of group dynamics throughout FI and FD predicted a unique portion of variances in team apparel consumption outcomes when comparing public versus private consumption.

The empirical findings demonstrate that social visibility overall has a moderating effect on group dynamics and the consequential team apparel consumption behavior across two different settings—public and private situations—supporting *H7*. More specifically, from group comparison for the moderation, need for FD was strongly activated to team apparel consumption behavior and unique product seeking behavior in a private situation, rather than in a public situation. In the moderation analysis, further investigation on the role of group dynamics was conducted to examine path significance comparisons between the collegiate football and NFL contexts.

First of all, TID directly influenced team apparel consumption behavior, supporting *H1a* in the NFL context. Nonsignificant relationships between TID and team apparel consumption in the private situation and in the college football context may be explained by students' strong UID toward their consumption behavior in the public situation. College football fans recruited in Study 2 were all current undergraduate students. They had a relatively higher level of university identification than their college football team identification (i.e., $M_{UID}=5.05$, $SD_{UID}=1.14$, $M_{TID}=4.26$, $SD_{TID}=1.43$). Current college students' TID in Study 2 was much lower than college football fans' TID, which included both current students and alumni in Study 1 (i.e., $M_{TID}=5.07$, $SD_{TID}=1.20$). Across both contexts and both situations, TID–FI relationships were significant, supporting *H2*. The relationship in the public situation was significantly stronger than in the private situation. The sequential effect from FI to FD with respect to

group dynamics in this study demonstrates how negative associations in the NFL context indicated that FI and FD are competing needs, thus confirming *H6*.

In predicting the role of group dynamics throughout FI and FD in team apparel consumption behavior, context-specific differences exist. College football fans showed that their need of FD significantly influenced unique product seeking behavior in both public and private situations. Thus, *H5b* was confirmed. College fans' group dynamics had no mediating effect on team apparel consumption behaviors. The rationale behind this may be that college students have strong UID compared with their TID levels and that the college students' purchasing power for team shirts is much lower than NFL fans' purchase power (i.e., willingness-to-pay_{College} = \$34.07 versus willingness-to-pay_{NFL} = \$49.77). NFL fans demonstrated that both FI and FD influenced purchase/wearing frequency of team apparel, supporting *H4a* and *H4b*. In particular, the results of mediation effects of FD across both consumption situations showed that 83% of the total effect of FI on FREQ was mediated by FD in the private setting and 37% in the public setting (Table 4.14). NFL fans' FD needs played an important role in unique product seeking, which confirms *H5b*. These confirmed hypotheses revealed that the FD–UPS relationships were stronger in both situations across the two different contexts. Overall, FD conceptualized group dynamics in a group of fans explains why sport fans seek unique team products across collegiate and professional football contexts as well as across the two social visibility conditions. Both needs for FI and FD in group dynamics mediated the impacts of TID on team apparel consumption behavior with a significant mediation amount.

5.3 General Discussion

This research provides a theoretical foundation for sport fan group dynamics by exploring the notion of group inclusiveness and personal distinctiveness and how individual membership in a group of fans drives team apparel consumption behavior. The competing needs explain the psychological mechanism that determines how needs for FI and FD become activated and continue to interact. Across two studies, this research demonstrates that sport consumption behavior is not solely followed by TID. Both fan inclusiveness and fan distinctiveness in terms of group dynamics play a role in sport consumers' team apparel consumption behavior because of individual perception within the team-associated community and group conformity with other people within the group. Depending on the context of group dynamics, this research illustrates why the need for FI becomes activated first and continually moves to the need for FD and the mechanism of how moving forces from FI to FD last.

Considering FI and FD in understanding team apparel consumption, this research provides the insight that sport fan behavior introduces a compelling reason for why the need for FI is initially activated. These group dynamics operate in non-sport contexts, but the unique characteristics of sport, passion created by sport fans and TID as strong attachment with a sport team, make the role of group dynamics powerful and unique in a fan-group context. A fan automatically classifies him/herself into the group to which he/she belongs; people affiliate with groups. Similar to a religious group, a group of fans who support their favorite team have a strong desire for group inclusiveness. Most prior studies in sport consumption behavior have emphasized that the sense of belonging into a sport team significantly influences a sport fan's attitude toward the team and consequent

sport consumption behaviors. However, as a unique characteristic of spectating sport contexts, fans not only attach to their favorite sport teams, but they also belong to a fan community which supports the team.

Under the optimal distinctiveness framework, group dynamics are conceptualized as perceived interchangeability of group inclusion to the same group and interindividual differences (Simon & Kampmeier, 2001). This notion highlights the opposing forces or needs between individual motive, to be distinct from other group members, and collective motive, to be similar to the group, as mutual determinants of the interpersonal self. The empirical findings suggest that these competing identification motives promote or diminish group cohesion and individuality. This research provides insight into understanding the role of group dynamics within spectating contexts. The evidence supporting the psychological mechanism showed a strong connection between TID and FI as well as the consequential impact from FI to FD. In particular, FD and FI played a key role in predicting why fans consider purchasing unique team apparel as the continuous swing between FI and FD occurs in response to extremes. Interestingly, the concept of group dynamics explains why sport fans seek unique team products, but pays limited attention to traditional perspectives of TID to consumption behavior models. Therefore, the current findings further our understanding of why and how individuals within a group of fans consume team products based on unique balances between group inclusiveness and personal distinctiveness. This psychological reaction compels sport fans to seek personal distinctiveness while decreasing needs for FI. Furthermore, not only by variations of group dynamics, apparel consumption behaviors are affected by a situational cue, social visibility.

Sport fan behaviors are influenced by the presence of a group of other fans. An individual's needs in terms of group dynamics are activated differently according to the unique situation, such as when a large number of other fans support the team and watch a game together at the stadium or when a fan watches alone at home. Groups also influence individual's decision-making processes. The decision making can be changed by distinctiveness need or impaired by need for group uniformity (Baumeister, Ainsworth, & Vohs, 2016).

Group dynamics can accommodate situational differences in the relative activation of inclusion and differentiation of needs. The effect of conformity and distinctiveness seeking will occur in a specific context, or when an individual's choice is visible to other group members (Papyrina, 2012). Prior social identity research has shown that individuals are more likely to establish a common identity with a group as a means of satisfying a need for inclusion in social relationships (e.g., Turner, 1991). Similarly, if in-group members in a public setting signal a high degree of individuality, they temporarily reinforce their group membership (Brewer & Roccas, 2001). When a consumption choice is framed in a public situation, sport consumers appear to be more sensitive to diffusion effects, as social visibility has a positive effect of group inclusiveness. Alternatively, when a consumption choice is framed in a private situation, the need for personal distinctiveness can be accentuated more than the pre-existing need for group inclusiveness. Individuals protect a unique personal identification while reducing discomfort of being distinct from other group members in public. As per Study 2, group dynamics by social visibility influence individuals' team apparel consumption decision.

Sport fans initially activated FI within the group and sequentially activated FD along with FI according to situational or temporal cues. Once group members have advanced beyond the first phase of collective self as the need for group inclusiveness, they become differentiated through processes of individuality (Haslam & Ellemers, 2016). The group situation determines how much force is applied to move toward FD. The sequential effect from FI to FD by group influence is strongly activated in the private situation. The specific needs of FI or FD indicate the direction and strength of reducing tension that leads to individual want and goal-directed behavior. The dual needs for FI and FD creates tension, and the opposing forces from individuals' initial need to proximal need, as within-person fluctuation and immediate determinants of attitude, direct the strength of the group dynamics (e.g., Kanfer & Ackerman, 1989; Kanfer & Ackerman, 1996). The role of group dynamics by the presence of other group members occurs when personal distinctiveness is seen to encourage greater accountability. Four decades of SIT research since Tajfel and Turner's work (1979) have overlooked that social identification and personal differentiation are not mutually exclusive. Baumeister and Leary (1995) argue that individuals need only a certain amount of social inclusion, and once this need is satiated, the need to seek further belongingness diminishes. This means that "submerging the self within a group of people does not necessarily preclude differentiation" (Haslam & Ellemers, 2016). Together with Studies 1 and 2, this research extends existing sport management literature by providing a deeper understanding on interpersonal relations in a group of fans and examining the role of group dynamics in team apparel consumption in sport spectating contexts.

5.3.1 Theoretical Implications

This research provides a theoretical foundation for sport fan group dynamics and contributes to sport marketing research on sport fan groups. Traditionally, it has been believed that group membership triggers a loss of individuality and that the individual self is immersed in the group to which he/she belongs (Forsyth, 2016). With the limited aspects from sport team merchandise literature, sport marketing studies have isolated the needs associated with team merchandise consumption in terms of intragroup relations and highlighted a fan–team relationship in purchasing team merchandise. However, the current studies extend this line of research by identifying a process of group dynamics.

In that sport fans' group dynamics focus on the symbolic capital accruing to the group members as the result of signaling by members as well as the benefits to each individual in the group, signaling theory is closely linked with group dynamics. Within a group, individuals may signal competitively to gain social benefits for themselves, while conveying information for group-level communication. In other words, the two levels of signaling are intertwined as needs for FI and FD are reconciled under the notion of group dynamics (Bleige Bird, & Smith, 2005). Signals convey information about perceived identity in two-way communication and in the levels of individual and group. Group-level signaling, such as wearing or purchasing team apparel, consists of signaling identity cues. Individual-level signaling is personal distinctiveness or heterogeneity among the group members in the benefits or costs of signals. The intensity of signaling also drives daily-based choices, such as choosing the clothing. Therefore, behaviors make signaling relevant to specific situations or contexts (Bleige Bird & Smith, 2005). Team apparel consumption behaviors through the psychological mechanism of group dynamics (i.e., FI

& FD) contribute to group members' (i.e., sport fans) collective cohesion, as well as infer individuality by signaling their own hidden information to other group members.

As a critique of intergroup relations research, specifically social identity research, this research investigates an integrated and sequential identity expression within an in-group. Excessive similarity among in-group members would lead to a feeling of lack of distinction within the group. Based on Brewer's ODT considering multi-components of the self, such as individual self, relational self, and collective self during an ongoing group membership process, this research suggests that situational or temporal factors influence spreading and activating multi-components of the self. The findings confirm that collective and personal identities coexist, but the activation of one subset occasionally suppresses other components of identity (Forsyth, 2016).

The fan group context in terms of group dynamics is similar to the pendulum movement. The notion of swinging back and forth like a pendulum accounts for individual needs for group dynamics in that individuals stop activating or move backward to previous needs in response to dynamic social influences (Hsieh & Wu, 2011). The notion of group dynamics serves as psychological accounts of team apparel consumption. Sport consumers do not only affiliate with groups (i.e., fan community in the sport spectating context). They also move toward the other psychological account, need for personal distinctiveness. Thus, the existence and prevalence of the fan community in consumption behavior marks a swing of the pendulum in the group context.

In general, the pendulum effect refers to the movement in one direction that causes an equal movement in another direction. As a natural law discovered by Galileo Galilei, this concept can be applied to various streams, such as sociology, psychology, politics, and

economics. Dual polarity creates more distance between the two sides (Wallach, Kogan, & Bem, 1962). This pendulum analogy illustrates how either FI or FD in-group dynamics are activated and moves in a certain direction. This process describes opposing forces that create a continuous group dynamic. Individual behavior repeats and moves in a similar motion to the swinging pendulum on a grandfather clock. Given the direction of the pendulum, its location can be determined, and it will appear at different times based on temporal and situational cues (Friedenberg, 2010).

With the psychological mechanism, both needs in the pendulum pathway emphasize the interactive impact of social visibility on team apparel consumption behavior. Group affiliation, TID or UID, is the first direction as antecedents of group dynamics. FI and FD represent opposing forces on a pendulum swing from one side (FI) to the other (FD). This identity–pendulum effect refers to conflicting positions in identity formation through an oscillating pendulum. The opposing force effect, using the metaphor of swings of a pendulum, illustrates the importance of context in sport team apparel consumption and emphasizes underlying structures that may differently impact group dynamics in the field of sport fan behavior. Two elements of the pendulum effect, the moving direction and the length of pendulum, help to understand the psychological mechanism of swinging from FI need to FD need in team apparel consumption according to the situational cue and how long fans maintain FI in a group without activating the opposing force (i.e., FD).

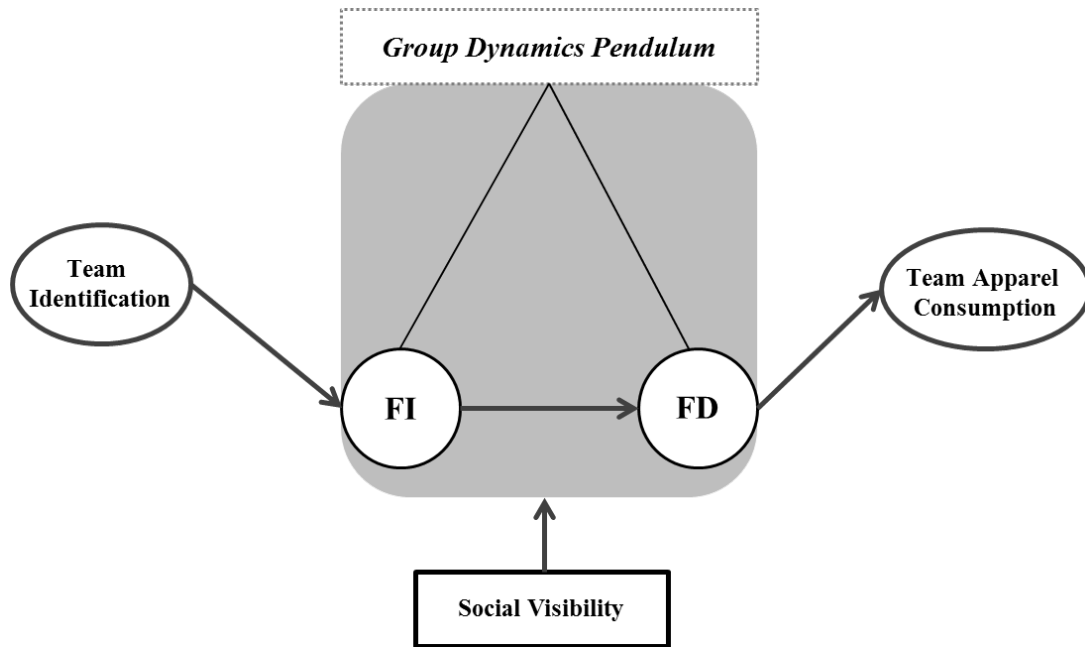


Figure 5.1. Identity Pendulum Effect

Most notably, the duality of needs for group-level and individual-level identities in terms of the pendulum effect contributes to the literature on team identification and team merchandise. The overarching theoretical implication is that group dynamics influence the pendulum and extends the existing conceptualization of optimal distinctiveness. Throughout the ODT framework, Brewer (1991) proposes an optimal balance between the opposing needs for assimilation and differentiation. However, the identity–pendulum effect between FI and FD illustrates that there may be no fixed optimal equilibrium point because individual needs must continually move back and forth. FI activates a psychological reaction and begins to swing toward the other side (FD). In particular, the level of TID determines which direction the pendulum moves first after being rewound and the following reaction, which is FD, to swing back.

In addition, the opposing force effect between FI and FD illustrates the continuous replaceability of one need with another in terms of group dynamics. Findings of this research suggest that the ODT framework is correct, but an optimal point is only temporary. Hence, optimal distinctiveness is not static, but constantly swings from one end to the other. In other words, when it goes too far to one side, it recalibrates.

The mechanisms and interworking that make it swing are the mediators (group dynamics) and moderators (social visibility and context). The opposing forces in a pendulum in terms of group dynamics provide an insightful idea to extend ODT framework and advance the theory. Thus, this research supports that individuals need a certain amount of social relatedness in a group. In terms of satiation and substitution motivation (Baumeister & Leary, 1995), sport fans are driven to form group inclusiveness initially, after which the attachments would presumably subside. This should be directed at supporting ODT as well as contributing to Goldman and the colleagues' ODT research (2016) with regard to an opposing-force effect between assimilation and differentiation, but refuting ODT framework with regard to continuous moves instead of an optimal balance. It assumes that the theoretical framework of group dynamics in sport fan behavior research contributes to a better understanding of the psychological mechanisms underlying group influence to drive sport consumers' behaviors directly or sequentially.

Group dynamics in line with the ODT have been conceptualized with how much a fan feels inclusive to a group as well as how much a fan feels distinct from a group. This research across two studies examines the mechanism underlying group dynamics on team apparel consumption and the important boundary condition, social visibility, influencing the consumption. It seems plausible that sport team-related apparel consumption is

affected by the concept of group dynamics throughout sport fans' group inclusiveness need and personal distinctiveness need. Patterns of team apparel consumption behavior can be understood as accentuating the need for group dynamics with an intragroup relationship within a group of fans. The group dynamics is all seen in the context of maintaining individuals' changes of group inclusion and sequentially connected to their needs of personal distinctiveness in-group (e.g., Baumeister & Leary, 1995). The proposed research lays a foundation for a stream of future research in understanding how sport consumers blend in or stand out from groups, and why and how sport fans consume team products in a different manner.

5.3.2 Managerial Implications

This research provides a managerial insight by highlighting the role of group dynamics. Group dynamics have implications that go beyond psychological mechanism in team apparel consumption decision. The concept of group dynamics in this research proves to be an explanatory construct for sport context-specific consumption behavior studies. As directly or sequentially connected to enabling sport consumers to activate the psychological need for group inclusiveness and personal distinctiveness, the consequential consumption behavior should be linked to a pattern of changes in the bases for sense of belonging toward a sport team. The findings will provide practical guidelines for both teams and sports brand marketers to understand the desire of sophisticated consumers to signal their individuality and what products and services should be offered according to the context-specific needs. For instance, sport team managers may want to consider ways to evoke the opposing forces of group dynamics to manage different tactics of team apparel sales. In understanding the role of group dynamics by

consumption situations, this research may aid apparel manufacturing and retail store managers to focus on unique apparel design/style and point of purchase display in the retail store at stadiums, as well as rolling out different apparel items (from best-selling to limited edition and from mass produced items to customized items) on the online website and athletic departments website. These empirical findings contribute to understanding team apparel demands in the sports apparel industry as examining the role of FD as the mechanism to restore sport fans' derived distinctiveness.

Next, since group dynamics can influence collective team apparel purchase behaviors and personal self-identity appraisals during decision making, creating a variety of team merchandise options generates better fit with sport consumers' purchase behavior and allows them to distinguish themselves from others (Chan et al., 2012; Lancaster, 1990). In practice, sports apparel manufacturers should consider that unique team apparel design should be highlighted to meet more individualized needs as mass market alternatives. Observing different team apparel consumption behavioral patterns throughout the identity–pendulum effect, this research serves as a strategic indicator of sport fans' FD needs and empirical evidence of what products they prefer when individual-level self-expression needs are dominant. Understanding group dynamics in team apparel consumption may be an effective strategy for sports enterprises to adopt. From a sport organizational perspective, the sales of team merchandise have become a synergistic business for generating profits, and licensing team products has been a salient revenue source. Thus, this study contributes to the literature on identity signaling through individual-level distinctiveness needs, as it has been shown that people have identity expression needs when consuming a team product. In the field of sport fan behavior, it

can help marketers pursuing a niche marketing strategy and managers to meet customized and individualized needs in team merchandising as a new driver of demand.

The current research extends understanding of purchase and wearing behavior, spending behavior on team apparel, and uniqueness seeking through group dynamics. The extent to which sport fans purchase and wear team apparel and the extent to which sport fans pursue unique products is influenced by situational cues or environmental contexts (Maimaran & Wheeler, 2008; Xu, Shen, & Wyer, 2012), as well as by reconciling their personal self and their collective self. The role of group dynamics can vary depending on situational factors or context-specific factors. Thus, the current findings help manufacturers of sport team apparel and retailers understand what types of team apparel are more marketable according to situational and contextual cues.

5.3.3 Limitations and Future Research

Despite the contributions of this research, there are limitations that must be addressed. The first concern is the nature of the primary survey design. With the sample from Amazon MTurk, coverage and sampling error may be addressed because there are group differences in demographics between the sample and potential sport consumer population (Dillman et al., 2014). The errors can be reduced by drawing a large sample size while also ensuring the minimum number of demographic differences. To rule out this concern, further investigation of group dynamics in team apparel consumption in Study 2 was conducted with current college students. To examine group differences and ensure generalization of the empirical findings, it was replicated with the sample of the NFL fans in another spectating context. Cross-sectional data in a limited research context may lead to the limited ability to generalize across other levels of sports spectators.

Therefore, another intriguing avenue for future research directly relates to exploring the role of group dynamics across a wide range of sports events or leagues.

Next, methodological issues may limit the current findings. During the modification of the ODT scale so that it fits in the sport context, measures under two components of group dynamics, FI and FD were ensured. However, even though a separate set of data across different research contexts was collected in Study 2, the stability of modified measures can affect the construct validity (Cooper & Pervin, 1998).

This research utilizes social visibility as a situational cue to examine a pattern change of team apparel consumption behavior through a group dynamics mechanism. Beyond the situational cue, further investigation is required to find other situational or contextual cues to be able to strengthen or attenuate the relationships. In particular, consumption behaviors in a public condition can vary on the size of groups to which people belong or social threat in groups. Future research is required to test whether FI by the size of groups overrides FD and find possible situational cues that may prioritize FD over FI.

Furthermore, the level of group inclusiveness necessary to perceive group affiliation as a basis of group membership leads to more questions for future research. Future research should be conducted to find how diverse levels of group inclusiveness influence sport fans in different ways and how they manage the pendulum effect between the need for FI and FD that makes them feel comfortable both personally and socially (Brewer, 1996). This further investigation could determine why sport consumers behave differently in fan groups and how often they make unique product purchases or choices.

5.4 Conclusion

This research provides initial answers to two important questions regarding the mechanism underlying group dynamics. The first research question considers why sport fans' team apparel consumption behavior is not solely influenced by how much they identify themselves with sport teams, but rather it relies on fans' group inclusiveness and personal distinctiveness needs. Group dynamics is not organized only in terms of inclusiveness and connectedness, but also in terms of intragroup differentiation in the fan-group context. Therefore, the empirical findings support Brewer's ODT with regard to the competing needs for inclusiveness and distinctiveness but refute the ODT framework of an optimal, static balance between the two needs. Instead, this research extends understanding of FI and FD's continuous moves in team apparel consumption. The results indicate that sport fans' group dynamics based on a strong connection between TID and FI and the consequential pendulum effect from FI to FD influence sport fans' team apparel consumption choices. An important conceptual distinction is that TID does not merely account for sport fan behavior and sport fans' team apparel consumption is affected by group dynamics with respect to two opposing forces of a collective self and a personal self for group membership. The need for group dynamics will be an integrative construct available to understanding sport fans' intragroup membership and the consequential behaviors in the spectating context. The other research question is why people sometimes make differentiated, but unique product choices according to the identity-pendulum effect or context-specific situational cues. The psychological mechanism that makes the needs swing is derived from the role of group dynamics and interworking with social visibility. The results indicate that a public context, over a

private one, moderates the effect of group dynamics. It is worth noting that group dynamics in the boundary condition by social visibility account for psychological reaction, influencing their team apparel consumption.

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APPENDICES

APPENDIX A

IRB APPROVAL



Research Integrity & Compliance
Student Faculty Center
3340 N. Broad Street, Suite 304
Philadelphia PA 19140

Institutional Review Board
Phone: (215) 707-3390
Fax: (215) 707-9100
e-mail: irb@temple.edu

Certification of Approval for a Project Involving Human Subjects

Date: 21-Aug-2017

Protocol Number: 24636
PI: FUNK, DANIEL C
Review Type: EXEMPT
Approved On: 21-Aug-2017
Approved From:
Approved To:
Committee: A1
School/College: TOURISM AND HOSPITALITY (2100)
Department: TOURISM:SPORTS MANAGEMENT & LEISURE (21020)
Sponsor: NO EXTERNAL SPONSOR
Project Title: The Role of Optimal Fan Distinctiveness on Fan Behavior

The IRB approved the protocol 24636.

If the study was approved under expedited or full board review, the approval period can be found above. Otherwise, the study was deemed exempt and does not have an IRB approval period.

If applicable to your study, you can access your IRB-approved, stamped consent document or consent script through ERA. **Open the Attachments tab and open the stamped documents by clicking the Latest link next to each document.** The stamped documents are labeled as such. Copies of the IRB approved stamped consent document or consent script must be used in obtaining consent.

Before an approval period ends, you must submit the Continuing Review form via the ERA module. Please note that though an item is submitted in ERA, it is not received in the IRB office until the principal investigator approves it. Consequently, please submit the Continuing Review form via the ERA module at least 60 days, and preferably 90 days, before the study's expiration date.

Note that all applicable Institutional approvals must also be secured before study implementation. These approvals include, but are not limited to, Medical Radiation Committee ("MRC"); Radiation Safety Committee ("RSC"); Institutional Biosafety Committee ("IBC"); and Temple University Survey Coordinating Committee ("TUSCC"). Please visit these Committees' websites for further information.

Finally, in conducting this research, you are obligated to submit the following:

- **Amendment requests - all changes to the study must be approved by the IRB prior to the implementation of the changes unless necessary to eliminate apparent immediate hazards to subjects**
- **Reportable new information - using the Reportable New Information form, report new information items such**

as those described in the Investigator Guidance: Prompt Reporting Requirements HRP-801 to the IRB **within 5 days**

- **Closure report** - using a closure form, submit when the study is permanently closed to enrollment; all subjects have completed all protocol related interventions and interactions; collection of private identifiable information is complete; and Analysis of private identifiable information is complete.

For the complete list of investigator responsibilities, please see the Policies and Procedures, the Investigator Manual, and other requirements found on the Temple University IRB website: [: http://research.temple.edu/irb-forms-standard-operating-procedures#POLICY](http://research.temple.edu/irb-forms-standard-operating-procedures#POLICY)

Please contact the IRB at (215) 707-3390 if you have any questions

APPENDIX B
CONSENT FORMS

Study 1 Consent Form

Dear Amazon Mechanical Turk workers,

You are now invited to complete an online questionnaire concerning sport team apparel and your daily behavior.

The estimated duration of your study participation is about 10 minutes. Please read each question carefully before answering. The reasonably foreseeable risks or discomforts are not expected beyond those associated with typical day-to-day activities. The benefit you will obtain from the research is knowing that you have contributed to the understanding of this topic. The alternative to participating is not to participate. Participation is voluntary, and responses will remain confidential.

If you have questions, concerns, or complaints, or think the research has hurt you, contact miae.lee@temple.edu.

To begin the questionnaire, please click below if you are willing to take part in this research:

I read the consent form above, and agree to take part in this research study.

Study 2 Consent Form

Dear Participant, [Dear Amazon Mechanical Turk workers,]

We invite you to take part in this research study because you are a student at [University Name]. You will complete an online questionnaire concerning sport team apparel and your daily behavior.

[or You are now invited to complete an online questionnaire concerning sport team apparel and your daily behavior.]

The estimated duration of your study participation is about 10 minutes. Please read each question carefully before answering. The reasonably foreseeable risks or discomforts are not expected beyond those associated with typical day-to-day activities. The benefit you will obtain from the research is knowing that you have contributed to the understanding of this topic. The alternative to participating is not to participate. Participation is voluntary, and responses will remain confidential.

If you have questions, concerns, or complaints, or think the research has hurt you, contact miae.lee@temple.edu.

To begin the questionnaire, please click below if you are willing to take part in this research:

I read the consent form above, and agree to take part in this research study.