

IT'S NOT WHAT YOU TWEET BUT HOW YOU TWEET IT: AN EXPERIMENT  
OF ORIENTATION, INTERACTIVITY, AND VALENCE IN TWITTER

A Dissertation

by

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## ABSTRACT

This study examines the effects of message orientation, interactivity, and valence in Twitter on the attitudes and behaviors of sport consumers. Social media have become an integral component of strategic brand communication. Since sport properties have become increasingly interested in fostering customer engagement on social media, the purpose of this research is to examine the effects of message orientation, interactivity, and valence in Twitter on customer engagement, relationship quality, and purchase-related outcomes in the context of a live sports broadcast. Specifically, it is hypothesized that interactive messages with positive valence and socioemotional orientation would have a positive influence on sport consumers' engagement behaviors, perceptions of relationship quality, and purchase intentions.

A quantitative research design employing a quasi-experiment is utilized in this study. Study participants (N=255) are randomly assigned to different viewing scenarios in which tweets using eight different communication strategies are seen. The viewing scenarios employed in this research involve a simulated live sports broadcast where tweets from an official team account accompanied the broadcast. After completing the viewing task, participants are asked to complete a questionnaire via Qualtrics online survey software.

Univariate analysis of covariance is employed to investigate a series of testable hypotheses. Evaluation of the results reveal participants exposed to positive, highly interactive, and socioemotional communication in tweets are more willing to engage

with the brand on Twitter. Additionally, participants exposed to highly interactive messages expressed a significantly higher willingness to pay for officially licensed team merchandise. A detailed review of this study, as well as its limitations, implications, and future directions, are included.

## DEDICATION

For my parents, Jim and Carol Pederson

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## CHAPTER I

### INTRODUCTION

Sport organizations have long relied on traditional, one-way media channels (e.g. newspaper and television) as a means for communicating with consumers (Pedersen, Miloch, & Laucella, 2007; Shultz & Barnes, 1999). Beginning in the mid-1990's, the birth of the World Wide Web enhanced firms' ability to distribute content directly to consumers via websites (Boyle & Haynes, 2004). Over the past decade, the growth and evolution of internet technology have seen the World Wide Web transform from a one-way portal of information access, to a two-way communication platform offering increased bandwidth, data-storage capacity, and an increased number of tools used to create web content (Miller & Lamas, 2010). Broadly characterized as Web 2.0, this interactive, user-controlled Internet serves as the technological foundation for the plethora of social media platforms used by consumers today. In many ways, social media serve a similar role to traditional media, offering businesses yet another channel to communicate to their customers. However unlike traditional media, social media have given consumers a newfound ability to communicate back to a business, and with other consumers on a massive scale. (Mangold & Faulds, 2009). Web 2.0 has influenced the power structure in the marketplace, leading to a shift of power from producers toward consumers (Constantinides & Fountain, 2008). Brand managers have been forced to relinquish control of brand communication, as social media provide each and every consumer with a virtual megaphone to speak about a brand.

In 2014, 74% of all internet users reported using at least one social media platform (Pew Research Center, 2014). As that figure continues an upward trend, organizations across multiple industries have begun to recognize “embracing social media is no longer a strategic business option, but a necessity, and a huge opportunity” (Argenti, 2011 p. 61). While some scholars contend that the increasing complexity of the marketplace has made it harder to create a lasting connection with consumers (Collins, 2003), social media also provide newfound opportunities to engage with consumers. When used effectively, social media have shown to complement traditional marketing, providing reinforcement and credibility for brand communication (Bond et al., 2010). This complementary function can help transform a one-way promotional message into a dialogue, serving as a foundation for building relationships with consumers (Williams, & Chinn, 2010). Social media’s ability to facilitate interaction between brands and consumers has spurred increased interest and investment in customer engagement. The notion of customer engagement has begun to receive scholarly interest in the past decade and has pointed to its influence on brand image, satisfaction, and loyalty (Brodie et al., 2011, Sashi, 2012, Gummerus et al., 2012).

Today, social media use has become a ubiquitous activity that often compliments the consumption of other traditional forms of media, namely television. A 2014 study by the Consumer Electronics Association determined 80% of television viewing is complemented by a secondary device of some kind (Middleton, 2014). Furthermore, nearly 90% of millennials report regularly using a second screen while watching video (Morran, 2016). While some scholars argue social media are cannibalizing traditional

media such as television (e.g., Hull & Lewis, 2014), a growing body of academic literature indicates that social media serve a complementary role in traditional media consumption, thereby enhancing the viewing experience (Boehmer, 2015; Harrington, 2013; Harrington, Highfield, & Bruns, 2013). Some researchers have coined the term “social TV” to describe this second screen viewing phenomenon (Lim, Hwang, Kim, & Biocca, 2015; Proulx & Shepatin, 2012; Shin, 2013). Social TV, a revolutionary form of media consumption, is of paramount importance for both scholars and practitioners. It offers television audiences the opportunity to interact with others in real time through social media platforms during a live television broadcast (Lim et al., 2015). Industry professionals have recognized the importance of social TV, particularly during mega-sporting events such as the FIFA World Cup and Olympics, and have invested in technological systems that promote audience engagement during live programming (Bodhani, 2012). In addition to facilitating interaction between audience members, social TV provides a synchronous, complementary distribution channel for media partners to deliver planned communication to an audience. As a result, media properties and their partners are developing innovative strategies for communicating brand messages during live broadcasts (Lin & Pena, 2011). However, little is still known about the brand communication strategies that sport properties can employ to facilitate audience engagement during a live sport broadcast.

## **Statement of the Problem**

While the use of social media as a marketing tool has seen widespread adoption in the industry (Bond, Ferraro, Luxton, & Sands, 2010), there is a considerable gap in academic literature where customer engagement and social TV are concerned. However, the scholarly work that has been done on the topic (e.g., Lin & Pena, 2011) points to the potential for strategic communication during live television broadcasts to positively influence consumer behavior. The process of customer engagement via social TV entails a process by which brands and media properties distribute content on social media that compliments the live broadcast, while social cues embedded into a broadcast aim to encourage audience engagement on various online social platforms.

In recent years, television consumption has undergone drastic changes as time-shifted programming (i.e., DVR) and video streaming services (i.e., Netflix and Hulu) have left consumers in control of precisely when a show is watched. Despite these changes to the structure and delivery of television, live video programming remains the most popular viewing preference of consumers (Nielsen, 2015). In a global Nielsen survey, 65% of respondents said they preferred live television broadcasts, and 50% reported watching more live content when it has social media tie-ins (2015). While the convergence of live television and social media is not merely a sports phenomenon, one could argue sport does provide the most appropriate context to study social TV; sports represent one of the few forms of programming relatively immune to time-shifting and are ideally viewed as a live broadcast. In 2015, sports accounted for 93 of the top 100 live television programs globally (Nielsen, 2016). Furthermore, in 2015 live sport events

comprised only 1.4% of TV programming, yet nearly 50% of all TV-related tweets were about sports (Nielsen, 2016). When considered in tandem, these figures illuminate the necessity for research of sport consumer behavior and customer engagement in social TV.

The majority of studies on social TV have focused almost solely on consumers' uses and gratifications and the analysis the content posted and shared on social media live television programming (see Giglietto & Selva, 2014; Hwang & Lim, 2015; Lin & Pena, 2011). To date, however, research on the effects of strategic brand communication on customer engagement has failed to determine the impact of message characteristics on consumers' attitudes and behaviors. This gap in the literature is both theoretically and practically significant. Bowden (2009) contends that fostering customer engagement on social media can help to create meaningful and lasting relationships with consumers. As a result, brands have an opportunity to create "deep connections with customers that drive purchase decisions, interaction, and participation over time" (Forrester Consulting, 2008). Furthermore, Researchers have pointed to the potential for message characteristics (i.e., valence, style, and interactivity) to influence consumers' attitudes and behaviors (see Brunig, Dials, & Shirka, 2008; Hodge, Pederson, & Walker, 2015; Wu, 2013). As such, this study was undertaken to understand the effects of strategic sport brand communication on sport consumer behavior. Specifically, the primary purpose of this research is to examine how the orientation, interactivity, and valence of sport brand communication affects sport consumers' attitudinal and behavioral response in the context of live televised sport consumption.

To accomplish this plan, a web-based quasi-experiment was employed in which the message orientation (i.e., instrumental and socioemotional), level of interactivity, and valence were manipulated in a series of tweets during a simulated sport event broadcast. Prior researchers have used branded Twitter messages to examine the effects of brand communication on consumer attitudes (Li & Li, 2014). Furthermore, analysis of television networks Twitter messages during live broadcasts has indicated message orientation can impact the level of user interaction (Lin & Pena, 2011). While these studies represent a viable first step towards understanding customer engagement, further inquiry in sport using experimental research is warranted (Pedersen, 2014).

### **Theoretical Framework**

This research is guided by the theoretical perspectives of social information processing and social presence. The social information processing theory (SIPT) of computer-mediated communication explains how people create and foster relationships in an online environment (Walther, 1992). It was established on principles of social cognition and interpersonal relationship development, and points to the development of social relationships as a primary motive for online communicators (Walther, 1996). In the context of consumer engagement on social media, this theory is used to explain how consumers' interaction with brands, and other consumers, can foster the relational communication.

Computer-mediated communication (CMC) has been the focal point of research aimed at understanding how users process messages in an online setting (Naidu &



Jarvela, 2006; Rice & Love, 1987). Early research examining the differences between CMC and face-to-face communication sought to explore how CMC could enable group communication among geographically dispersed people (see Rapaport, 1991; Rheingold, 1993). Once it was established that CMC could facilitate group communication, research began examining the overall effectiveness of online interactions. People using e-mail and web-conferencing exhibited more task-oriented communication and demonstrated reduced interpersonal affect (see Garton & Wellman, 1995). Thus, early literature ascribed CMC as inherently impersonal, as it cut many social context cues (e.g., non-verbal communication) that relay emotional and personal information in face-to-face communication (Sproull & Kiesler, 1986).

A theoretical perspective that emerged to elucidate these findings was information richness theory (IRT; Daft & Lengel, 1984, 1986). IRT posits that the richness of a medium determined by the amount of cue systems they convey. Rich media are dubbed more appropriate for interpersonally demanding tasks, whereas lean media are more suitable and efficient for unequivocal tasks (Daft, Lengel, & Trevino, 1987). Given that CMC was assumed to constrain the number social cues, it was expected that communication would be less social or personal when it is computer mediated. The reduction or absence of social cues was considered a strength of CMC in organizational communication, where the filtering of affective aspects of communication made task orientation, process effectiveness and coordination more efficient (Kiesler, Siegel, & McGuire, 1984; Straus & McGrath, 1994).

These prevailing assumptions about the impersonal nature of CMC were dubbed the “cues-filtered-out” perspective (Culnan & Markus, 1987). However, as advancing technology stirred increased academic interest in CMC through the 1990’s, online communication grew increasingly complex, bearing a waning resemblance to the CMC represented in early experiments. Efforts to reinforce and advance the cues-filtered-out perspective returned nonsignificant and inconsistent results (e.g., Foulger, 1990; Kinney & Dennis, 1994; Weisband, 1994). Rice and Love (1987) explored a key intervening variable, time, which was thought to modify interpersonal effects of CMC, hypothesizing that people communicating online would adapt their communication to the medium as they became more familiar with it. By analyzing the content of online message board exchanges over several months, they found a greater amount of communication that was more interpersonal in nature.

In many instances, computer-mediated environments even provide a more desirable context for expressing affection and emotion compared to face-to-face interaction. This primarily occurs in online environments dedicated to social or “recreational” interaction (see Reid, 1991). This phenomenon was dubbed hyperpersonal communication by Walther (1996) to describe “CMC that is more socially desirable than we tend to experience in parallel face-to-face interaction” (p. 17). Through selective self-presentation, idealization, and reciprocation, senders express and transmit information more desirable for achieving a social goal, while recipients construct an idealized image of the sender that is then confirmed through reciprocation (Walther, 1996).

In the context of social TV, social presence theory (SPT) has been applied to better understand the antecedents and outcomes of audience engagement during live television events. Short, Williams, and Christie (1976) originally defined social presence as “the degree of salience of the other person in the interaction and the consequent salience of interpersonal relationships” (p. 65). Developed to help understand the effects of telecommunication, the conceptualization of social presence has seen continued evolution, mirrored by the increasing complexity of CMC. SPT was initially focused on the characteristics of a medium. By that conceptualization, and given that early CMC research was done in an organizational setting, SPT could be considered a competing theory of SIPT. However, as CMC has evolved into a social practice, SPT has been conceptualized to focus less on the medium and more on the people (Gunawardena, 1995). In the context of social TV, social presence describes the “communal experience of group viewing without being physically together (Wohn & Na, 2011, p. 2). One of the underlying dimensions of social presence is behavioral engagement, which involves reacting and responding to others online (Biocca, Harms, & Burgoon, 2003). Lim, Hwang, Kim, & Biocca (2015) found that sport fans engaging in social TV perceived greater social presence, which led to increased channel loyalty.

Based on SIPT, sport properties have the ability to foster engagement and relationships with fans in situations where CMC is more socially desirable than face-to-face (i.e., social TV). Consequently, fans that are more engaged during social TV will express greater loyalty. Therefore, it is important to further examine customer

engagement during social TV to understand how social presence may enhance consumer behavior.

### **Research Questions**

The research questions that inspire this study are as follows: What are the effects of message orientation on customer engagement behavior, perceived relationship quality, and purchase-related outcomes, such as purchase intentions and reservation price? Similarly, what are the effects of message interactivity on customer engagement, relationship quality, and purchase-related outcomes? Does message interactivity moderate the effects of message orientation on customer engagement behaviors? Lastly, what are the effects of message valence on customer engagement, relationship quality, and purchase-related outcomes?

### **Rationale for the Study**

We have extraordinary new capabilities available to us as marketers today. The web 2.0 explosion has unleashed a torrent of new technologies, products and vendors that can bring us closer to our customers, at a pace and scale never before imagined. Evaluating and implementing these new capabilities can be challenging. How do we place a value on user-generated content such as comments, forums, conversations, product reviews and content rating? Which of the new capabilities are most effective in furthering our customer relationships? How exactly do we measure effectiveness in this new world? New web marketing technologies provide opportunities that result in

personalization, conversation, and collaboration that can greatly accelerate the rate of “customer engagement.” This customer engagement may become the new measure of online marketing effectiveness.

- Michael Metz, *Cisco Systems, Inc.*

Bountiful opportunities for research on social TV and consumer engagement currently exist. Among these opportunities lies an imminent need for a deeper understanding of the specific characteristics of social media communication that influence consumer engagement during a live sports telecast. While prior research has investigated social TV in other contexts, the phenomenon of social TV and fan engagement has not received worthy consideration in sport contexts. Despite prevalent use of social media by sport properties and sport consumers alike, much of the research in this context has ignored the potential influence of message characteristics on fan engagement. Marketing scholars have identified the potential for customer engagement to positively influence consumer behavior (Bowden, 2009; Vivek, Beatty, & Morgan, 2012), which speaks to the paramount importance of identifying the factors of brand communication that influence customer engagement. Thus, there exists a gap in the sport marketing literature that must be addressed.

Within the past five years, sport properties have begun to integrate social media into live television broadcasts in unique and sophisticated ways, signaling the need for more empirical and theoretical evaluation of the efficacy of such strategies. This research centers primarily on issues related to the potential effects of social TV on sport consumers, as well as the necessity for research designs that examine the factors that

influence their viewing experience. Several studies of online brand communication have pointed to the effect of semantic and compositional factors, as well as various attributes of the sender, that influence consumer engagement (see Cha, Haddadi, Benevenuto, & Gummadi; 2010; Li & Li, 2014; Suh, Hong, Pirolli, & Chi, 2010)

In addition, numerous studies in communication research have indicated the potential for interactive communication platforms to influence consumers' affective, behavioral, and cognitive outcomes (e.g., Cho & Leckenby, 1999; Ha & James, 1998; Macias, 2003; Sukpanich & Chen, 2000; Sundar & Kim, 2004; Teo, Oh, Liu, & Wei, 2003). Specifically, this study focuses on the impact of Twitter messages on consumers' behaviors and perceptions during a televised sport broadcast. Recently, social media have attracted considerable attention from sport marketing scholars; although, there is a dearth of empirical research investigating the effects of certain message characteristics on consumers on Twitter (Filo, Lock, & Karg, 2015). Moreover, research examining sport consumer behavior in the context of social TV is practically non-existent. The current study aims to contribute to sport marketing and communication literature by providing a better understanding of how various characteristics of online communication during live events impact users' perceptions, attitudes, and behaviors.

Therefore, the purpose of the present study was to test the effects of message orientation, interactivity, and valence in tweets during a sports telecast on consumers' perceptions and behavioral intentions. In doing so, the theoretical perspectives of social presence and social information processing were explored to determine their relationship to social TV, consumer behavior, and fan engagement. Specifically, this study examines

how differences in message orientation, as well as the level of message interactivity and message valence, affect consumers' willingness to engage in four interactive behaviors on Twitter (i.e., retweet, favorite, reply, and follow). Also, this study explored the effect of message orientation, interactivity, and valence on consumers' perceived relationship quality, purchase intentions, and reservation price of officially licensed team merchandise.

### **Operational Definitions**

*Social TV*: Lim, Hwang, Kim and Biocca (2015) define social TV as “real-time backchannel communication on social networking sites during a live television broadcast” (p. 158).

*Customer engagement*: Vivek, Beatty, and Morgan (2012) define customer engagement as “the intensity of an individual’s participation and connection with the organization’s offerings and activities initiated by either the customer or the organization” (p. 133). Used interchangeably in this study with *consumer engagement* and *fan engagement*.

*Instrumental communication*: Instrumental, or task-oriented, communication describes messages oriented directly on providing or soliciting suggestions, opinions and information, (Bales, 1950).

*Socioemotional communication*: Socioemotional communication describes messages oriented towards more relational and emotional aspects of communication that release or build tension in a conversation (Bales, 1950).

*Interactivity*: Steuer (1992) defines interactivity as an attribute of technology within a certain medium, measured by “the extent to which users can participate in modifying the form and content of a mediated environment in real time” (p. 84).

*Relationship Quality*: Palmatier, Dant, Grewal, and Evans (2006) define relationship quality as the “overall assessment of the strength of a relationship, conceptualized as a composite or multidimensional construct capturing the different but related facets of a relationship (p. 138).

*Purchase Intentions* Purchase intentions have been defined as “an individual’s conscious plan to make an effort to purchase a brand” (Spears & Singh, 2004, p. 54).

*Reservation Price*: Reservation price is the maximum price a buyer is willing to pay in exchange for a good or service (Steedman, 1987).

*Sport Consumer Behavior*: Sport consumer behavior is expressed in consumers’ attitudes, purchase behaviors, preferences, decision-making, and information-processing relative to goods and services offered in the sport and leisure industry (Funk, Mahoney, & Havitz, 2003).

### **Overview of the Dissertation**

This dissertation is organized into five chapters. Chapter I introduces the topic of research, provides the theoretical lens guiding the research, and presents the rationale for the study. Chapter II offers a review of existing literature on customer engagement as it relates to the constructs involved in this research, accompanied by a series of testable hypotheses pertinent to this study. Chapter III presents the methodology, reviewing the



specifics of the experimental design utilized to investigate the research questions and test the hypotheses. Chapter IV presents the results of the analyses as well as an interpretation of the findings. Chapter V draws practical and theoretical implications from the research, addresses potential limitations of the study, and provides direction for future research in this area.

## CHAPTER II

### LITERATURE REVIEW

This chapter offers a concise review of present literature on the effects of message orientation, interactivity, and valence from a consumer behavior perspective. Embedded in the review are hypotheses developed with regard to the prominent constructs and concepts of this study. The first section introduces the concept of customer engagement, addressing the increased attention it has received from scholars and practitioners alike. The second section is concerned with message orientation, exploring the historical development of communication typologies in marketing and communication literature. The third section defines interactivity, and discusses key concepts related to the effects of interactivity on consumers' perceptions and behaviors. The fourth section examines the concept of message valence, outlining studies on the impact of message valence on consumers' disposition, particularly in an online setting. Lastly, a summary of the chapter is offered.

#### **Customer Engagement**

The continued evolution of the internet and increasingly interactive features of Web 2.0 have led to increased interest in customer engagement across various global industries (Sashi, 2012). Social media offer opportunities for fostering deeper relationships with customers (Ang, 2011; de Vries, Gensler, & Leeflang, 2012). This is particularly true in the sport industry, given sports fans' desire to foster long-lasting

relationships with a team (Bee & Kahle, 2006). Brand managers and consultants across multiple industries have devoted considerable time and effort to understanding and cultivating customer engagement (Forrester Consulting, 2008; Gallup Consulting, 2009). As a result, scholarly interest in the field of consumer behavior had devoted considerable effort towards the conceptualization, definition, and measurement of consumer engagement. While the terms ‘customer engagement’ and ‘consumer engagement’ only began appearing in marketing literature in the past decade, the term ‘engagement’ has appeared extensively in various fields, such as psychology (e.g., social engagement; Huo, Binning, and Molina, 2009), sociology (e.g., civic engagement; Jennings and Stoker, 2004), and organizational behavior (e.g., employee engagement; Crawford, Lepine, and Rich, 2010). As one would expect, the diversity of social science disciplines studying engagement has provided numerous definitions of the concept. The aforementioned disciplines all offer a multidimensional conceptualize of engagement, although the representation of given behavioral, emotional, and cognitive dimensions varies across contexts.

As marketing scholars have begun to explore consumer engagement, various definitions and conceptualizations have been presented. While the semantics of these definitions offer slight variations, they all point to consumer engagement as a brand-focused exchange between a company and consumer that extends beyond simple purchase transactions (Van Doorn et al., 2010; Hollebeek, 2011; Sashi, 2012). The present study’s operational definition comes from Vivek, Beatty, and Morgan (2012), defining customer engagement as “the intensity of an individual’s participation and

connection with the organization's offerings and activities initiated by either the customer or the organization" (p. 133).

Customer engagement encapsulates the interactive experience a customer has with a brand and enhances brand equity (Brodie, Hollebeek, Juric, & Ilic, 2011). Anchored to relationship marketing, customer engagement is key in facilitating the formation and maintenance of trust and commitment (Sashi, 2012). Customer engagement can be influential in creating strong emotional bonds, contributing to even higher levels of trust and commitment developed through relational exchanges (Brodie et al., 2011; Sashi, 2012; van Doorn et al., 2010). It has also shown to lead to higher levels of relationship satisfaction (Gummerus, Liljander, Weman, & Pihlström, 2012). Thus, it is critical that organizations are aware of the factors that impact customer engagement in order to foster lasting quality relationships.

### **Message Orientation**

Interaction Process Analysis (IPA) offers a typology for examining communication style, which characterizes the orientation of a message as either instrumental or socioemotional communication (Bales, 1950). Established as a systematic method for studying interpersonal communication in small group settings, IPA was a pioneering coding system used to classify group behavior that was either task-oriented or relationship oriented. Instrumental, or task-oriented, communication focuses directly on providing or soliciting suggestions, opinions, and information, whereas socioemotional messages focus on more relational and emotional aspects of

communication that release or build tension in a conversation (Bales, 1950). IPA offers a 12-category observation system comprising six instrumental codes and six socioemotional codes (see Table A-1).

Although it was initially established as a framework for analyzing face-to-face small group interaction, IPA has been applied to the study of various computer-mediated environments. Peña and Hancock (2006) examined communication in a recreational computer-mediated environment, comparing the message orientation of text messages sent by participants in an online video game. Their findings revealed participants used socioemotional messages significantly more than instrumental messages.

Recently, the use of IPA has been applied to the study of online brand communication, specifically in the context of social media. IPA has historically been applied to interpersonal communication; however, IPA provides a useful lens to examine strategic communication in social media. Social media possess several characteristics of interpersonal communication such as two-way communication between users and instant synchronous feedback. IPA also provides a number of categories that expound upon the asking and answering questions of Kent and Taylor's (2002) dialogic loop principle. Most obviously, and perhaps most significantly, IPA draws the distinction between instrumental and socioemotional communication styles. Across industries, corporate communication strategies on social media will vary based on the expectations and needs of consumers (Kim, 2011; Kim & Rader, 2010). In a comparative study of global brands' communication styles, Zhang, Tao, and Kim (2014) analyzed microblog messages in the United States (Twitter) and China (Sina Weibo). Their results indicated

a cultural difference in the style of communication, as brands utilized more instrumental messages on Twitter but more socioemotional messages on Sina Weibo.

In the study of television network brands on Twitter, Lin & Pena (2011) determined communication style differs based on the genre of television programming. Compared to shows in the reality and comedy categories, the genre of drama composed more socioemotional tweets which tended to trigger more consumer responses. Across all genres, socioemotional tweets were retweeted more often than instrumental tweets, however, the distribution of retweets between communication styles varied significantly in each program genre. These findings support the notion that strategic use of Twitter is varied across brand types, and messages with socioemotional orientation generate more audience engagement.

Beyond the IPA typologies of communication orientation, Kent and Taylor's (1998) dialogic communication has been used to study brand communication on Twitter. Considered a "communicative orientation" (Kent & Taylor, 2002, p. 25), dialogic communication in tweets sent by Fortune 500 companies has shown to positively influence followers' engagement with interactive content (Rybalko and Seltzer, 2010).

The study of communication in the sport industry has been largely focused on determining antecedents of consumer behaviors (Dwyer, 2011; Kang, Lee, & Goo, 2012). However, limited empirical research has explored how linguistic characteristics of brand communication influence consumers. Hodge, Pederson, and Walker (2015) examined how fans respond to different marketing communication styles in Facebook event posts. Specifically, the study examined the relation between communication style

and a fan's willingness to engage in 4 interactive Facebook behaviors (i.e., like, comment, share, and RSVP). Their results revealed that a colorful communication style increased willingness to "like" and "RSVP" to Facebook events, and personal communication style enhanced willingness to "comment" on Facebook posts. Based on these findings, it would stand to reason that tweets with a socioemotional orientation would generate a greater behavioral response than tweets with an instrumental orientation.

For the purpose of relationship building, socioemotional communication may provide brands a more conversational, human tone (Kelleher & Miller, 2006). Kelleher (2009) found conversational voice and relational commitment in online communication contributed to relationship outcomes of trust, satisfaction, commitment, and control mutuality. Similarly, Park & Lee (2013) found human presence from organizations in social networking sites promotes favorable relationship outcomes, as well as positive word of mouth communication. In the context of Twitter, Li and Li (2014) examined the effects of message orientation and determined tweets with a more communal-relationship orientation generated more favorable outcomes for trust and control mutuality.

The factors that influence consumers' purchase behaviors in an online setting have received considerable attention in recent years (see Ballouli 2011, Hausman & Siekpe, 2009). However, the effects of communication style on consumers' purchase intentions and behaviors has received limited attention in an online context. Keeling, McGoldrick, and Beatty (2010) explored avatars as salespeople in an online store to

effect of communication style. Their findings revealed avatars with social-oriented communication styles contributed to user trust and patronage intentions. Beyond the context of online shopping, the effects of communication style have been explored in the context of face-to-face personal selling. In a study of the salesperson-customer relationship, Williams and Spiro (1985) were able to discern that a more personal and social orientation in salespersons' communication associated positively with sales. Similar studies in personal sales echo the positive effects socioemotional orientation in enhancing persuasion and patronage intentions (Darian, Wiman, & Tucci, 2005; Dion & Notarantonio, 1992; Sharma & Patterson, 1999). Taken all together, one would surmise that tweets with socioemotional messages would generate greater customer engagement, relationship outcomes, and purchase intentions. Consequently, this study proposes the following hypotheses:

Hypothesis 1: Fans exposed to socioemotional tweets will express a greater willingness to (a) retweet, (b) favorite, (c) reply, and (4) follow the team's Twitter account than fans exposed to instrumental tweets. (H1)

Hypothesis 2: Fans exposed to socioemotional messages will express higher perceived relationship quality with the team than fans exposed to instrumental messages. (H2)

Hypothesis 3: Fans exposed to socioemotional messages will express greater (a) purchase intentions and (b) willingness to pay than fans exposed to instrumental messages. (H3)



## **Interactivity**

At the core of customer engagement is interactivity, a concept that has been a focal point of face-to-face communication and CMC research. However despite significant academic inquiry, scholars have struggled to reach consensus on the definition of interactivity, conceptualizing it as a process, a function, or a perception (McMillan & Hwang, 2002). The lack of agreement is due, in large part, to the ongoing transformation of communication technology. Interactivity involves human interaction, as well as human-to-computer interaction via communication software and hardware (Stromer-Galley, 2004). Fundamentally, interaction occurs in any communicative activity between two or more parties (Karimova, 2010).

The two most dominant perspectives of interactivity are based on either a contingency approach or a functional approach (Sundar, Kalyanaraman, & Brown, 2003). The contingency perspective assumes a message-based conceptualization of interactivity, defining it as “an expression of the extent that in a given series of communication exchanges, any third (or later) transmission (or message) is related to the degree to which previous exchanges referred to even earlier transmissions” (Rafaeli, 1988, p. 111). Conversely, the functional perspective sees interactivity as an attribute of technology situated within a particular medium, defining it as “the extent to which users can participate in modifying the form and content of a mediated environment in real time” (Steuer, 1992, p. 84).

Though both conceptualizations of interactivity have been adopted in previous CMC research, the functional approach is most applicable to the current study. Based on

the functional perspective, “traditional” forms of mass communication (e.g., magazines, radio, and television) are much less interactive than “new” forms of Internet-enabled CMC. However, while CMC is considered by and large an interactive medium, interactivity in CMC can be characterized by the various features that enable users to modify and control the form and flow of content. Early research from this perspective operationalized interactivity as the number of website features (e.g., hyperlinks, comment box, onsite poll) which enable users to modify and control their online experience (Coyle & Thorson, 2001; Teo, Oh, Liu, & Wei, 2003; Warnick, Xenos, Endres, & Gastil, 2005). The technological and structural characteristics of Twitter provide several interactive conventions that allow users to modify and control their experience with the medium. These conventions include hashtags, mentions, hyperlinks, and various forms of embedded visual media (i.e. images, videos, GIFs). Thus, message interactivity is operationalized in this study as the number of attributes in a tweet that would allow users to “participate in modifying the form and content” (Steuer, 1992, p. 84). Specifically, a tweet containing two or more interactive elements is regarded as a highly interactive tweet. Conversely, a tweet containing fewer than two interactive elements is considered a lowly interactive tweet.

Research examining message interactivity in online environments has been predominantly occupied with users’ attitudes, perceptions, and information-processing (Bucy, 2004; Hackman & Walker, 1990; Jones, Blake, Davies, & Scanlon, 2004). The obvious behavioral consequence of interactivity is interaction, or engagement. Therefore, Sundar (2004) contends that theorizing interactivity effects should “proceed

along the lines of determining the mechanism by which interactivity causes interaction, in terms of both nature and volume” (p. 386). Given that highly interactive messages contain more elements with which users can modify their experience, one would assume that highly interactive tweets would generate greater customer engagement than lowly interactive tweets.

Although the relationship between interactivity and attitudes has been closely examined in prior research, the impact of interactivity on relationship outcomes has yet to receive such attention. Ha and James (1998) were early proponents of interactivity as a means to develop and strengthen relationships. Higher degrees of interactivity in websites have shown to positively impact consumers’ level of trust, which residually influences purchase intentions (Sukpanich & Chen, 2000). In an examination of the positive association between interactivity and purchase intentions, Sukpanich (2004) found interactivity had a strong influence on behavioral control and trust, which are key components of brand-consumer relationships. Therefore, one would expect messages with higher levels of interactivity to result in more favorable relationship outcomes, as well as purchase intentions. Prior research has suggested a relationship between higher levels of interactivity and persuasion (Macias, 2003; Sundar & Kim, 2005; Teo et al., 2003). In a study by Cho & Leckenby (1999), interactivity was found to positively influence consumers’ attitudes toward advertising, attitudes toward the brand, and purchase intentions. Similarly, Ko, Cho, and Roberts (2005) found interactivity was positively related to consumer attitudes and purchase intentions. Considering this, as well as the aforementioned effects of interactivity, this study assumes that highly

interactive tweets will for generate higher levels of customer engagement, relationship outcomes, and purchase intentions. Therefore, this study puts forth the following hypotheses:

Hypothesis 4: Fans exposed to highly interactive messages will express a greater willingness to (a) retweet, (b) favorite, (c) reply, and (4) follow the team's Twitter account than fans exposed to lowly interactive messages. (H4)

Hypothesis 5: Fans exposed to highly interactive messages will express higher perceived relationship quality with the team than fans exposed to lowly interactive messages. (H5)

Hypothesis 6: Fans exposed to highly interactive messages will exhibit greater (a) purchase intentions and (b) willingness to pay than fans exposed to lowly interactive messages. (H6)

Furthermore, sport communication research on the uses and gratifications of social media by sports fans has indicated both information and interactivity as primary drivers (Blaszka, Burch, Frederick, Clavio, & Walsh, 2012; Frederick, Lim, Clavio, & Walsh, 2012). Given the prediction that greater presence of interactive elements (i.e., hashtags, @mentions, and hyperlinks) will elicit a more favorable engagement responses, one would presume that effect is further enhanced in tweets of socioemotional orientation. Therefore, this study presents its 7th hypothesis:

Hypothesis 7: Level of interactivity in tweets will moderate the effect of message orientation on fans' willingness to (a) retweet, (b) favorite, (c) reply, and (4) follow the team's Twitter account. (H7)

## **Valence**

In a study of message effects on Twitter, it is paramount to examine message content on the spectrum of positive and negative valence. Message valence in CMC has received a bounty of academic interest in recent years, assessing its impact in both business-to-consumer (B2C) and consumer-to-consumer (C2C) communication. In B2C communication, brands must strategically plan the valence of advertising with consumers. Smart and successful brands do not ignore negative aspects of their goods or services, but instead, earn the trust and respect of consumers by promoting the positives while still acknowledging that negatives exist. This two-sided message approach involves strategically sharing both positive and negative information, as addressing “drawbacks in a two-sided message can increase persuasion” (Eisend, 2013, p. 566). In essence, the sharing of negative information establishes credibility, a strategy particularly effective with highly involved and intelligent customers (2013).

In addition to communication from brands, social media give each consumer a platform to voice comments and opinions, and the valence of those messages has also shown to influence consumers’ perceptions and engagement behaviors. Consumers tend to hold a negativity bias and place greater emphasis on negative comments (Chen & Lurie, 2013). Wu (2013) examined consumers’ perception of online reviews and found that prospective customers value negative reviews, and perceive reviewers who leave negative ratings as more intelligent than positive reviewers. Conversely, a study of video PSAs revealed that positive comments provided more support to the PSA message than negative comments about the videos’ content (Shi, Messaris, & Cappella, 2014). The

inconsistency in the aforementioned results supports research on negativity bias and two-sided messages. Negative messages have been shown to capture consumers' attention and affect behavior. In a study of voting behavior during a political campaign, Martin (2008) determined that an emphasis on negative issues led to higher voter turnout. To test these findings in CMC, North (2015) analyzed tweets from Fortune 500 companies to determine if negative messages generated greater consumer engagement in the form of replies, retweets, and favorites. However, the results indicated that the level of consumer engagement was not affected by the message valence.

Meanwhile, other research on message valence in CMC has attributed positive messages as a driver of consumer engagement. Berger and Milkman (2012) examined how content's valence affects social sharing. This was important research because while increased attention has been placed on word of mouth and viral marketing, less attention has been given to its causes, or what causes one to share content with others, or what type of content is shared most often. They found that positive content is more likely to be shared and become viral. They also found that positive content generates more arousal and interest in the consumer (2012). In a study of word of mouth (WOM) conversations, Baker, Donthu, and Kumar (2016) found that the valence of WOM conversations had a significant relationship with purchase intentions and retransmission intentions. In a study of restaurant Facebook fan pages, Kang, Tang, & Fiore (2014) found hedonic benefits (i.e., pleasure, fun, and entertainment) enhanced consumer-brand relationships and positively affected customer engagement and participation with a brand's Facebook page. In the context of Twitter, positive messages have been shown to

affect consumers' product involvement and purchase intentions (Jin & Phua, 2014). However, negative messages on Twitter generate stronger intentions to spread electronic word of mouth (eWOM), but only when the source of the message has a low number of followers.

In one of the first and only studies to examine message valence in sport communication, Kwak, Kim, and Zimmerman (2010) conducted an experiment of message valence in user-generated and mainstream media. Results of their study revealed that positive messages generated more favorable source evaluations, and had a significant effect on perceived source trustworthiness and attitude toward the source. Furthermore, the effects of message valence were not moderated by team identification.

While the aforementioned literature on message valence does offer unanimous support for the effect of positive messages consumer behavior, majority attribute to positive messages with fostering greater affective and behavioral outcomes. By these previous findings, this study posits that messages with positive valence would elicit more favorable behavioral response, perceptions of relationship quality, and purchase intentions. Thus, this study puts forth its final series of hypotheses:

Hypothesis 8: Fans exposed to positive tweets will express a greater willingness to (a) retweet, (b) favorite, (c) reply, and (4) follow the team's Twitter account than fans exposed to negative tweets. (H8)

Hypothesis 9: Fans exposed to positive tweets will express higher perceived relationship quality with the team than fans exposed to negative tweets. (H9)

Hypothesis 10: Fans exposed to positive tweets will express greater (a) purchase intentions and (b) willingness to pay than fans exposed to negative tweets. (H10)

### **Summary**

This chapter has presented a review of existing customer engagement and consumer behavior studies on message characteristics in the marketing literature. Also provided are were the imperative concepts put forth in the first chapter. In doing so, I expanded on the concept of customer engagement, and provided examples of its *presence* in the sport industry. Additionally, I reviewed the literature regarding message orientation, interactivity and valence in regards to customer engagement.

This chapter also contained a series of testable hypotheses, summarized as follows: fans exposed to socioemotional tweets will express a greater willingness to (a) retweet, (b) favorite, (c) reply, and (4) follow the team's Twitter account than fans exposed to instrumental tweets (H1); fans exposed to socioemotional messages will express higher perceived relationship quality with the team than fans exposed to instrumental messages (H2); fans exposed to socioemotional messages will express greater (a) purchase intentions and (b) willingness to pay than fans exposed to instrumental messages (H3); fans exposed to highly interactive messages will express a greater willingness to (a) retweet, (b) favorite, (c) reply, and (4) follow the team's Twitter account than fans exposed to lowly interactive messages (H6); fans exposed to highly interactive messages will express higher perceived relationship quality with the team than fans exposed to lowly interactive messages (H5); fans exposed to highly



interactive messages will exhibit greater (a) purchase intentions and (b) willingness to pay than fans exposed to lowly interactive messages (H6); level of interactivity in tweets will moderate the effect of message orientation on fans' willingness to (a) retweet, (b) favorite, (c) reply, and (4) follow the teams Twitter account (H7); fans exposed to positive tweets will express a greater willingness to (a) retweet, (b) favorite, (c) reply, and (4) follow the team's Twitter account than fans exposed to negative tweets (H7); fans exposed to positive tweets will express higher perceived relationship quality with the team than fans exposed to negative tweets (H8); fans exposed to positive tweets will express greater (a) purchase intentions and (b) willingness to pay than fans exposed to negative tweets (H9).

## CHAPTER III

### METHODOLOGY

In the previous chapter, I presented a series of testable hypothesis. In this chapter, I describe the methodological issues relevant to the research design protocol used to test the hypotheses. First, I discuss the details of the research design and describe the stimuli utilized in the study. Second, I explain the dependent variables and their measures. Finally, I conclude by offering an overview of the sampling and experimental procedure.

#### **Research Design**

This study was designed as a 2 (message orientation: instrumental vs socioemotional) x 2 (message interactivity: high vs low) x 2 (valence: positive vs negative) full factorial between-subjects quasi-experiment. Participants were randomly assigned to one of eight cells and exposed to a series of NCAA Division I basketball highlights, each accompanied by a hypothetical tweet produced by the home team's Twitter account. The objective of the study was to determine if different message orientation, different degrees of message interactivity, and different levels of message valence have an impact on consumers' affective and behavioral responses. Hypotheses testing was conducted using analysis of covariance (ANCOVA). It was anticipated that in the message orientation condition, participants would have a stronger attitudinal and behavioral response to the sender of the tweet. Similarly, high message interactivity is

expected to elicit similarly favorable responses in comparison to low message interactivity. Further, positive messages are expected to elicit more favorable responses in comparison to negative messages.

### **Study Stimuli**

To examine sport team Twitter communication with fans, the official Twitter account for the university's men's basketball was selected as the focal point of the stimuli. The basketball team was selected based on the timing of the study, as data collection took place during the basketball off-season. The purpose of collecting data out of season was done to reduce response bias based on current team performance (Paulhus, 1991). Two short TV clips from a men's basketball game were used in all eight conditions. The Twitter account @AggieMensHoops, the official Twitter account for the university's men's basketball team, would be the source of the tweets in each of the conditions. Eight separate pairs of tweets were created for the eight experimental conditions, with the context of each tweet relating to a respective video clip. While the contextual focus of the tweets was kept consistent across all eight conditions, the tweets were modified to reflect the manipulation of message orientation, interactivity, and valence. Specifically, instrumental tweets were focused on sharing or soliciting suggestions, opinions, or information. Conversely, the socioemotional tweets were primarily focused on communicating emotion and building or releasing tension. Based on the functional perspective of interactivity, interactivity was operationalized as any feature of the message that enables active participation or engagement from the reader.

Therefore, a hashtag, mention, and hyperlink were used as interactive elements. To reflect the different levels of message interactivity, the number of interactive features in each experimental condition was manipulated. In the high interactivity condition, each tweet contained at least two interactive elements, whereas, in the low interactivity conditions, each tweet contained no more than one interactive element. Valence was manipulated by presenting video clips that depict either positive or negative game events. In each of the valence conditions, the context of the tweet was manipulated to reflect the valence of the corresponding video clip. Table A-2 provides a detailed summary of tweets used in each experimental condition.

Twitter name and @handle and avatar were kept consistent across all eight conditions. The length of each tweet was kept similar across all conditions to avoid potential effect of information length. The tweets used in each experimental condition were inspired from a collection of real tweets sent by sport media organizations during college basketball games. An expert panel of researchers familiarize with the project were consulted to determine the message of each tweet was appropriate for each experimental condition. After agreement had been reached regarding the stimulus, a pretest was conducted to test the manipulation of each variable. A sample of  $n = 20$  participants was given a set of tweets containing a treatment from each experimental condition and asked to respond to a set of manipulation check measures (see below). Participants then underwent a short debriefing with the lead researcher to confirm the quality and authenticity of the tweets.

## **Participants**

Participants were composed of undergraduate students from an online course at a large university in the southwestern United States. Students were informed that their participation was entirely voluntary, and they could withdraw from the study at any time.

While the use of college students as participants has long been debated (see Lynch, 1999), numerous experimental studies in the field of consumer research have utilized college students (Enis, Cox, & Stafford, 1972). College students have shown to express attitudes and behaviors comparable to non-students, proving to be valuable subjects of consumer research (Calder, Phillips, & Tybout, 1981). Moreover, this demographic is of particular interest to sport marketers because it represents a substantial segment of sport consumers (Mason, 1999). College students do not wholly represent the demographic of any sports league; however, they do represent a substantial segment of social media users (Lenhart, 2015). Furthermore, given that the context of this experiment focused on the university's men's basketball team and its respective Twitter profile, students at the university represented a key demographic for the university's athletic department.

## **Measures**

The variables examined in this study include the following: behavioral intentions, relationship quality, purchase intentions, and reservation price. These measures were determined using measures previously developed by scholars in the field

of consumer research. Scores for each measure were calculated based on the mean of the items. Additionally, reliability estimates (Cronbach's alpha) were examined for each scale of items and are provided below. Table A-3 provides a full overview of all measures and the individual scale items used for each measure.

### *Behavioral Intentions*

To measure participants behavioral intentions, a series of behavioral response items were adapted from Hodge, Pederson, and Walker (2015) to measure participant's willingness to engage in each of the four behavioral intentions associated with Twitter (i.e., willingness to retweet, favorite, reply, and follow). Items were measured on a 7-point Likert-type scale ranging from 1 (very unlikely) to 7 (very likely).

### *Relationship Quality*

Three subscales used to measure relationship quality were adapted from prior research (Kim, Trail, Woo, & Zhang, 2011). Trust was measured with three statements (e.g., "I trust the Aggie men's basketball team"); self-connection was measured with three statements (e.g., "The Aggie men's basketball team reminds me of who I am"); and relationship satisfaction was measured with three statements (e.g., "My relationship with the Aggie men's basketball team is favorable"). All above statements were measured on a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The reliability estimate for the measure was high ( $\alpha = .91$ ).

### *Purchase Intentions*

Purchase intentions were measured using two statements adapted from Yoo & Donthu (2001). Participants responded to the following phrases: "I would like to buy

officially licensed Texas A&M Men's Basketball merchandise," and "I intend to buy officially licensed Texas A&M Men's Basketball merchandise." Items were measured on a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). The reliability estimate for the measure was high ( $\alpha = .91$ ).

#### *Reservation Price*

To measure reservation price, participants were shown an image of an officially licensed Texas A&M cooler and asked to respond to the following open-ended question: "What is the maximum price (\$USD) you would be willing to pay for an officially licensed Texas A&M 24-can cooler (pictured above)."

#### *Control Measures*

Previous research posits that involvement with an organization may affect one's motivation to process organization related information (Zaichkowsky, 1985). Because the stimulus was a Texas A&M men's basketball game, participants' interest and attitude toward Texas A&M men's basketball were measured as control variables in the study. Interest was measured using the following statement: "Generally, how interested are you in Texas A&M men's basketball?" Responses were measured using a 7-point Likert-type scale ranging from 1 (not at all interested) to 7 (very interested). Attitude toward the team was adapted from prior research (Ki & Hon, 2007), and was measured with a 2-item 7-point semantic differential scale including "negative/positive" and "dislike/like". The reliability estimate for the measure was high ( $\alpha = .91$ ).

### *Manipulation Check*

To test the manipulation of message orientation, the following item was developed: “The tweets sent by @AggieMensHoops were primarily emotional and dramatized.” The manipulation of message interactivity was checked with the following statement: “The tweets sent by @AggieMensHoops contained a high number of interactive elements (i.e. hashtags, mentions, links, and visual media).” Lastly, the valence of the tweets was measured with the following statement: “The tweets sent by @AggieMensHoops were mostly positive.” All items were measured on a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree).

### **Study Procedure**

Students enrolled in the online class were informed of the study via email and were provided an information sheet outlining the purpose and procedures of the study. The following day, the students were emailed a link to the web-based questionnaire created using Qualtrics online survey software. Once students accessed the Qualtrics web page, the first section of the instrument consisted of the consent form and other information related to the study (see Appendix C). Students who agreed to participate in the study were instructed to advance to the next section to answer questions regarding their general use of Twitter. Participants were then asked to respond to questions related to their attitude and involvement with the men’s basketball team.

After responding to the first series of questions, participants were randomly assigned to one of eight experimental conditions. In each condition, participants were



provided with two short video clips, each accompanied by a series of questions aimed to assess engagement behaviors. For each video clip, participants were asked to watch the video and then respond to the questions that followed.

Participants were then informed to respond to a final series of questions that assessed the aforementioned variables related to this research, and concluded their participation by responding to series of manipulation check measures. Once these procedures were completed, participants were thanked for their involvement in the study.

## CHAPTER IV

### RESULTS

#### **General Twitter Usage**

The participants in this study were undergraduate students ( $N = 255$ ) enrolled in an online sports business class at a large southwestern university. The online class fulfilled a general education requirement for the university, and thus was composed of students from various majors across the university. A full summary of the participants' Twitter use is provided in Table A-4. The majority of participants were Twitter users (72.6%), and reported spending an average of 34.57 minutes on Twitter daily.

#### **Manipulation Check**

To test the manipulation of message orientation in this experiment, an independent sample t-test was conducted with message orientation (instrumental vs socioemotional) as the grouping variable, and perceived message orientation towards instrumental messages and socioemotional messages as the dependent variable. It was found that people in the socioemotional message condition found the messages to be more dramatized and emotional ( $M = 3.89$ ,  $SD = 1.55$ ) than participants in the instrumental message condition ( $M = 3.12$ ,  $SD = 1.49$ ),  $t(253) = 4.00$ ,  $SE = 0.19$ ,  $p < .001$ . To test the manipulation of message interactivity, an independent sample t-test was conducted with message interactivity (high vs low) as the grouping variable and perceived level of interactivity as the dependent variable. Participants in the high

interactivity condition rated the tweets as more interactive ( $M = 4.52$ ,  $SD = 1.44$ ) than those in the low interactivity condition ( $M = 3.50$ ,  $SD = 1.51$ ),  $t(253) = 5.49$ ,  $SE = 0.18$ ,  $p < .001$ . To test the manipulation of message valence, an independent sample t-test was conducted with message valence (positive vs negative) as the grouping variable and perceived message valence as the dependent variable. It was found that people in the positive message valence condition ( $M = 5.50$ ,  $SD = 1.44$ ) found the messages to be more positive than participants in the negative message valence condition ( $M = 3.33$ ,  $SD = 1.47$ ),  $t(253) = 11.87$ ,  $SE = 0.18$ ,  $p < .001$ . Based on the results of these analyses, it was determined that the manipulation of stimulus tweets in this study was successful.

### **Hypothesis Testing**

Hypotheses 1-3 tested the effect of message orientation on fans interactive behaviors, perceived relationship quality, and purchase intentions. Specifically, Hypothesis 1 predicted fans exposed to socioemotional messages in tweets would express a greater willingness to (a) retweet, (b) favorite, (3) reply, and (4) follow the team's Twitter account than fans exposed to instrumental messages in tweets. Hypothesis 1b and 1d were not supported, revealing no significant difference between communication orientations for willingness to favorite or follow. Hypothesis 1a was supported, as willingness to retweet socioemotional messages ( $M = 3.24$ ) was significantly higher than instrumental messages ( $M = 2.817$ ),  $F(1,244) = 5.441$ ,  $p < .05$ ,  $= .022$ . Similarly, hypothesis 1c was supported, as willingness to reply to socioemotional messages ( $M = 2.538$ ) was significantly higher than instrumental messages ( $M = 2.189$ ),

$F(1,244) = 4.539, p < .05, \eta^2 = .018$ . Hypothesis 2 predicted fans exposed to socioemotional messages in tweets would express higher perceived relationship quality with the team than fans exposed to instrumental messages. No significant difference was found, therefore hypothesis 2 was not supported.

Hypothesis 3 predicted fans exposed to socioemotional messages would express greater (a) purchase intentions and (b) willingness to pay than fans exposed to instrumental tweets. No significant difference was found for purchase intentions or willingness to pay, thus hypothesis 3a and 3b were not supported. The full ANCOVA results for message orientation can be seen in Table A-5.

Hypotheses 4-6 tested the effect of message interactivity on fans interactive behaviors, perceived relationship quality, and purchase intentions. Specifically, Hypothesis 4 predicted fans exposed to highly interactive tweets would express a greater willingness to (a) retweet, (b) favorite, (3) reply, and (4) follow the team's Twitter account than fans exposed to lowly interactive tweets. Hypothesis 4b and 4d were not supported, as no significant difference was found between levels of interactivity for willingness to favorite or follow. Hypothesis 4a was supported, as willingness to retweet highly interactive tweets ( $M = 3.325$ ) was significantly higher than lowly interactive tweets ( $M = 2.740$ ),  $F(1,244) = 9.880, p < .01, \eta^2 = .039$ . Similarly, Hypothesis 4c was supported, as willingness to reply to highly interactive tweets ( $M = 2.817$ ) was significantly higher than lowly interactive tweets ( $M = 1.910$ ),  $F(1,244) = 30.345, p < .001, \eta^2 = .111$ . Hypothesis 5 predicted fans exposed to highly interactive messages would express higher perceived relationship quality with the team than fans exposed to lowly

interactive messages. No significant difference was found, therefore hypothesis 5 was not supported. Hypothesis 6 predicted fans exposed to highly interactive messages would exhibit greater (a) purchase intentions and (b) willingness to pay than fans exposed to lowly interactive messages. Hypothesis 6a was not supported, as no significant difference was found between high and low interactivity. However, Hypothesis 6b was significant, as fans' willingness to pay when exposed to highly interactive tweets ( $M = 14.94$ ), was significantly higher than when exposed to lowly interactive tweets ( $M = 13.231$ ),  $F(1,244) = 4.575$ ,  $p < .05$ ,  $\eta^2 = .018$ . Thus, hypothesis 6b was supported. The full ANCOVA results for message interactivity can be seen in Table A-6.

Hypothesis 7 tested the interaction effect of message interactivity and orientation. Specifically, hypothesis 7 predicted message interactivity would moderate the effect of message orientation on fans' willingness to (a) retweet, (b) favorite, (c) reply, and (d) follow the team's Twitter account. Hypothesis 7d was not supported, as no significant interaction was found for fans' willingness to follow the team's Twitter account. H7a was supported, as highly interactive messages increased fans' willingness to retweet socioemotional messages ( $M = 3.77$ ) versus instrumental messages ( $M = 2.72$ ),  $F(1,244) = 7.20$ ,  $p < .01$ ,  $\eta^2 = .029$  (see Figure A-1). H7b was supported, as highly interactive messages increased fans' willingness to favorite socioemotional messages ( $M = 4.12$ ) versus instrumental messages ( $M = 3.19$ ),  $F(1,244) = 8.05$ ,  $p < .01$ ,  $\eta^2 = .032$  (see Figure A-2). H7c was also supported, as highly interactive messages increased fans' willingness to reply to socioemotional messages ( $M = 3.23$ ) versus instrumental

messages ( $M = 2.41$ ),  $F(1,244) = 8.65$ ,  $p < .01$ ,  $\eta^2 = .034$  (see Figure A-3). Full results for the interaction effects can be seen in Table B-7.

Hypothesis 8-10 tested the effect of message valence on fans interactive behaviors, perceived relationship quality, and purchase intentions. Specifically, Hypothesis 8 predicted fans exposed to positive tweets would express a greater willingness to (a) retweet, (b) favorite, (c) reply, and (4) follow than fans exposed to negative tweets. Hypothesis 8a was supported, as fans willingness to retweet positive messages ( $M = 3.721$ ) was significantly higher than negative messages ( $M = 2.344$ ),  $F(1,244) = 54.775$ ,  $p < .001$ ,  $\eta^2 = .183$ . Hypothesis 8b was supported, as fans willingness to favorite positive messages ( $M = 4.486$ ) was significantly higher than negative messages ( $M = 2.607$ ),  $F(1,244) = 87.095$ ,  $p < .001$ ,  $\eta^2 = .263$ . Hypothesis 8c was supported, as fans willingness to reply to positive messages ( $M = 2.526$ ) was significantly higher than negative messages ( $M = 2.201$ ),  $F(1,244) = 6.895$ ,  $p = .05$ ,  $\eta^2 = .016$ . Hypothesis 8d was supported, as fans willingness to follow after being exposed to positive messages ( $M = 4.076$ ) was significantly higher than negative messages ( $M = 3.327$ ),  $F(1,244) = 13.561$ ,  $p < .001$ ,  $\eta^2 = .053$ . Hypothesis 9 predicted fans exposed to positive tweets would express higher perceived relationship quality with the team than fans exposed to negative tweets. No significant difference was revealed between positive and negative messages, therefore hypothesis 9 was not supported. Hypothesis 10 predicted fans exposed to positive tweets would express greater (a) purchase intentions and (b) willingness to pay than fans exposed to negative tweets. No significant difference was found between positive and negative messages for purchase intentions or

willingness to pay, therefore hypothesis 9 was not supported. The full ANCOVA results for message valence can be seen in Table A-8.

## CHAPTER V

### DISCUSSION

The primary objective of this project was to examine the effects of message characteristics in tweets on fans' attitudes, behaviors, and purchase intentions. More specifically, this study tested how message orientation, interactivity, and valence impacted fans' willingness to engage on Twitter. Moreover, the effects of message orientation, interactivity, and valence on perceived relationship quality and purchase intention were ascertained. This chapter considers how these findings apply to the sport industry. In the process, a summary of the study's results is provided, along with a review of the research questions and the results of hypothesis testing executed to answer each of them. Furthermore, limitations to this research are addressed, as well as possible directions for future research.

#### **Summary of Results**

The research questions that guided this study are as follows: What are the effects of message orientation on customer engagement behavior, perceived relationship quality, and purchase-related outcomes, such as purchase intentions and reservation price? Similarly, what are the effects of message interactivity on customer engagement, relationship quality, and purchase-related outcomes? Does message interactivity moderate the effects of message orientation on customer engagement behaviors? Lastly, what are the effects of message valence on customer engagement, relationship quality,



and purchase-related outcomes? These questions were explored via testable hypotheses presented in Chapter II.

Hypothesis 1 predicted fans exposed to socioemotional messages in tweets would express greater engagement behaviors than fans exposed to instrumental tweets. This hypothesis was partially supported, as socioemotional messages did elicit a greater willingness to retweet and reply compared to instrumental messages. However, message orientation was found to have no effect on willingness to favorite or follow the team's Twitter account.

Hypothesis 2 predicted fans exposed to socioemotional messages in tweets would express higher perceived relationship quality than fans exposed to instrumental tweets, however no significant difference between message orientations was found. Hypothesis 3 predicted fans exposed to socioemotional messages in tweets would express greater purchase-oriented behaviors, but no message orientation did now reveal any significant effect on purchase intentions or reservation price.

Hypothesis 4 predicted fans exposed to highly interactive messages in tweets would express greater engagement behaviors than fans exposed to instrumental tweets. Similar to hypothesis 1, this hypothesis was partially supported, as highly interactive messages did elicit a greater willingness to retweet and reply compared to lowly interactive messages. However, message interactivity revealed no effect on willingness to favorite or follow the team's Twitter account.

Hypothesis 5 predicted fans exposed to highly interactive messages in tweets would express higher perceived relationship quality than fans exposed to lowly

interactive messages, however message interactivity was shown to have no effect on relationship quality. Hypothesis 6 predicted fans exposed to highly interactive messages in tweets would express greater purchase-oriented behavior than fans exposed to lowly interactive messages. Interactivity was shown to have no significant effect on purchase intentions, however a significant effect was revealed for reservation price. Fans exposed to highly interactive messages expressed a significantly higher reservation price than fans exposed to lowly interactive messages.

Hypothesis 7 predicted message interactivity would moderate the effect of message orientation on fans' engagement behaviors. This hypothesis was partially supported, as interactivity moderated the effect of orientation on fans' willingness to retweet, favorite, and reply to the tweet. However, no significant interaction between interactivity and orientation was found for fans' willingness to follow the team's Twitter account.

Hypothesis 8 predicted fans exposed to positive tweets would express greater engagement behaviors than fans exposed to negative tweets. This hypothesis was fully supported, as positive messages generated significantly higher willingness to retweet, favorite, reply, and follow the team's Twitter account.

Hypothesis 9 predicted fans exposed to positive tweets would express greater perceived relationship quality than fans exposed to negative tweets, however message valence was shown to have no significant effect on relationship quality. Hypothesis 10 predicted fans exposed to positive tweets would express greater purchase-oriented

behaviors, however no significant effect was found for purchase intentions or reservation price. A full summary of hypothesis testing can be seen in Table A-9.

### **Implications**

Despite increased interest in customer engagement in recent years, a gap remains in the literature where sport and social TV are concerned. Very few studies in the field of consumer research have examined social TV with sport as the central focus (Hwang & Lim, 2015; Lim, Hwang, Kim & Biocca, 2015). Furthermore, little research in sport marketing has addressed the impact of various message characteristics on consumer behavior. This void in the literature is intriguing, given the scholarly work that has examined the use of social media in sport marketing (Kim, Sung, & Kang, 2014; Pronchinske, Groza, & Walker, 2012). Also, research in sport marketing has gone without a research effort where customer engagement and social TV are concerned. Industry research has indicated that sport fans represent one of the most engaged groups during live sport events (Nielsen, 2015; 2016). Therefore, research intending to explore this area of sport consumer behavior is necessary.

As stated earlier, sport and media properties have begun to invest in technological platforms and develop strategic brand communication to cultivate customer engagement during televised events. The results of this research provide evidence that certain communication strategies can influence customer engagement. Rather than using Twitter merely as a tool to provide real-time information about an event, sport properties should emphasize more relational and emotional aspects of the

event, as this type of communication was shown to increase fans' willingness to share and reply to tweets. The effect of socioemotional communication was also moderated by the tweet's level of interactivity. Sport properties should take advantage of the interactive conventions built into Twitter (i.e., hashtags, @mentions, and hyperlinks) and create messages that include various interactive elements, as they too were shown to significantly increase fans' willingness to share and reply to tweets. As one may assume, sport properties should remain cognizant of the tone of their tweets, as all forms of fan engagement were higher when viewing positive messages. Overall, the major implication of this research concerns customer engagement, as highly interactive, socioemotional communication on Twitter has the potential to generate the most fan engagement.

### **Limitations**

In every study, certain conditions and restraints mark delimitation brought forth by the researcher (Charles, 1995). Thus, there exists some delimitation in the present study worth noting. First, the selection of the Texas A&M men's basketball team was made primarily out of convenience, given that access to game footage, as well as a sample population with relative interest in the team, was integral to the study. Given this research only examined one group of fans and one team, the findings of this study may be limited with respect to other teams.

McGrath et al., (1982) notes that no research design can equally maximize precision, generalizability, and realism. Thus, some limitations beyond the researcher's

control imposed constraints study. The first of those limitations was the quasi-experimental design, which some scholars say offers less external validity than field experiments (Kerlinger & Lee, 2000). However, quasi-experimental design offered advantages to the researcher in this study as it allowed for the control of background variables that may otherwise be difficult to detect.

Another limitation of this study pertains to the collection of data via self-administered questionnaire. Crowne & Marlowe (1964) argue that response bias can occur because participants often provided responses that are socially desirable, but not necessarily representative of true feelings and beliefs. However, given the private and voluntary nature of this study, participants were assumed to have responded honestly to the questionnaire items.

A final limitation of this study was the simulation of a second-screen viewing experience. For one, participants were only exposed to short clips of a sport broadcast and not a game broadcast in its entirety. Also, tweets that accompanied each clip were not viewed on a second screen, but rather on the same platform immediately after the clip was shown. However, the sequential exposure to the game event and proceeding tweet did simulate exposure to the content normally delivered on two platforms, and thus was deemed an appropriate method for testing the effects of independent variables.

### **Future Directions**

Ultimately, this research serves as a foundation to support a new stream of academic literature aimed at understanding the growing social TV phenomenon. That

said, the findings of this study point to several fruitful areas for future research. The most notable direction of this research points towards a real-time social TV environment. While the research in this study revealed significant effects related to fan engagement, follow-up field studies are needed to test these effects of message characteristics in Tweets during the real broadcast of a live sport event.

In addition, future researchers should conduct research that examines the effect of message orientation over the course of an entire game or season. While previous research had indicated that communication characterized as more relational and emotional would elicit more favorable relationship outcomes, those results did not come to fruition in the present study. This may be due to the limited time and exposure that each participant had to the brand. Thus, future research should examine the longitudinal effect of message orientation on consumer-brand relationship.

Similarly, it would be worthwhile for future research to examine the effects of message interactivity longitudinally. Although highly interactive messages were shown to foster more behavioral responses in this study, that effect may be dampened over time due to what scholars have called the “interactivity paradox” (Bucy 2004). The interactivity paradox posits that the interactivity in online environments takes a cognitive toll on users. At a certain point, overly interactive online environments can have detrimental effects on users’ cognition and attitudinal response (2004). This could also apply to behavioral response in the context of Twitter, and is worthy of consideration in future studies.

Future research should also continue to focus on stylistic elements of online communication and their effects on consumer behavior. In particular, it would be prudent to consider merging perspectives of style and orientation to get a better understanding of their effects. For example, Hodge, Pederson, and Walker (2015) characterized different communication styles (i.e., forceful, passive, personal, impersonal, colorful, and less colorful). Those various styles could exist in various types of socioemotional or instrumental messages. Thus, conducting research aimed at merging those concepts could elucidate a clearer picture of the effects of communication style.

Finally, the scope of this research aimed solely at sport brand communication that accompanies a live sports broadcast. For sport properties, social TV represents a key opportunity to engage with consumers. However, consumer engagement efforts extend beyond social TV. Future research should examine how strategic communication in social TV environments may differ based on the media content, as well as demographic and psychographic profile of various audiences.

## CHAPTER VI

### CONCLUSION

The results of this study offer important insights into the effects of message characteristics on sport consumer behavior. More broadly, the outcomes address the increased emphasis and investment in social media use by sport properties. Additionally, the findings presented offer some new perspective on how the theoretical perspective of social information processing might relate to the effects of certain message characteristics on fan engagement on social media. Furthermore, given the dearth of research on consumer engagement and social TV in sport marketing and management literature, I have successfully introduced a new avenue of scholarly opportunity with the completion of this study.



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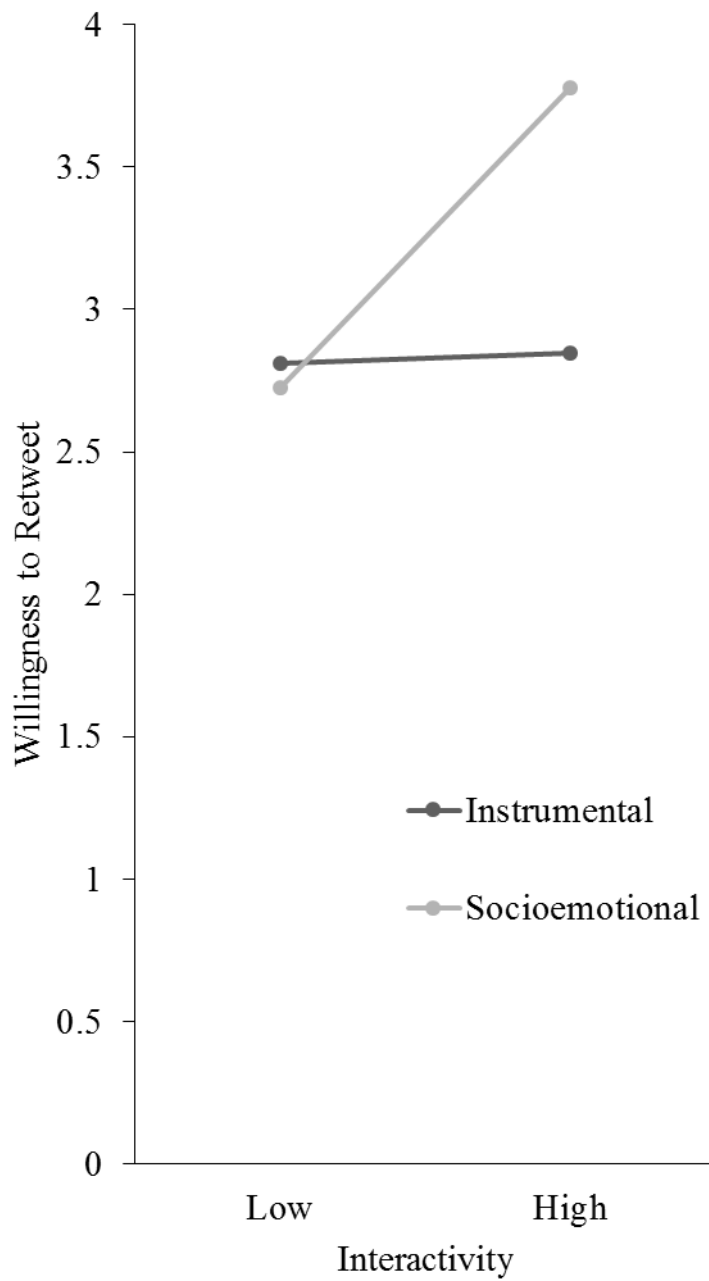
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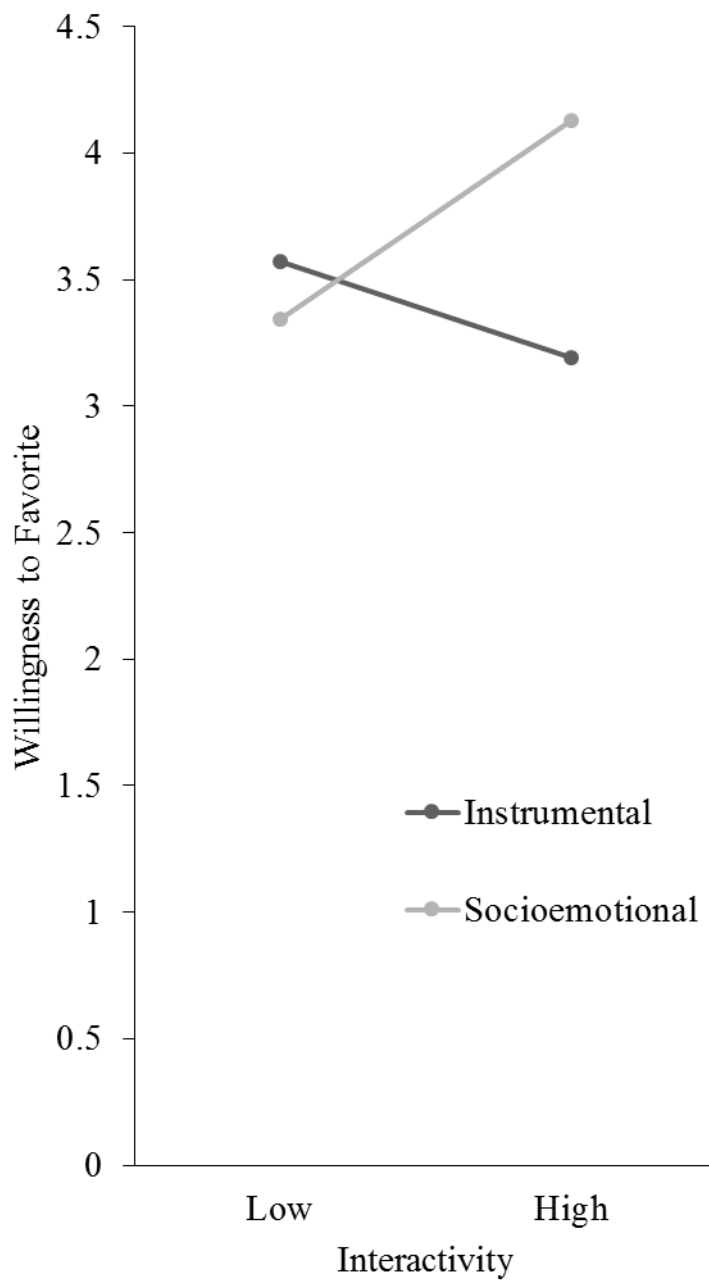
## APPENDIX A

### FIGURES



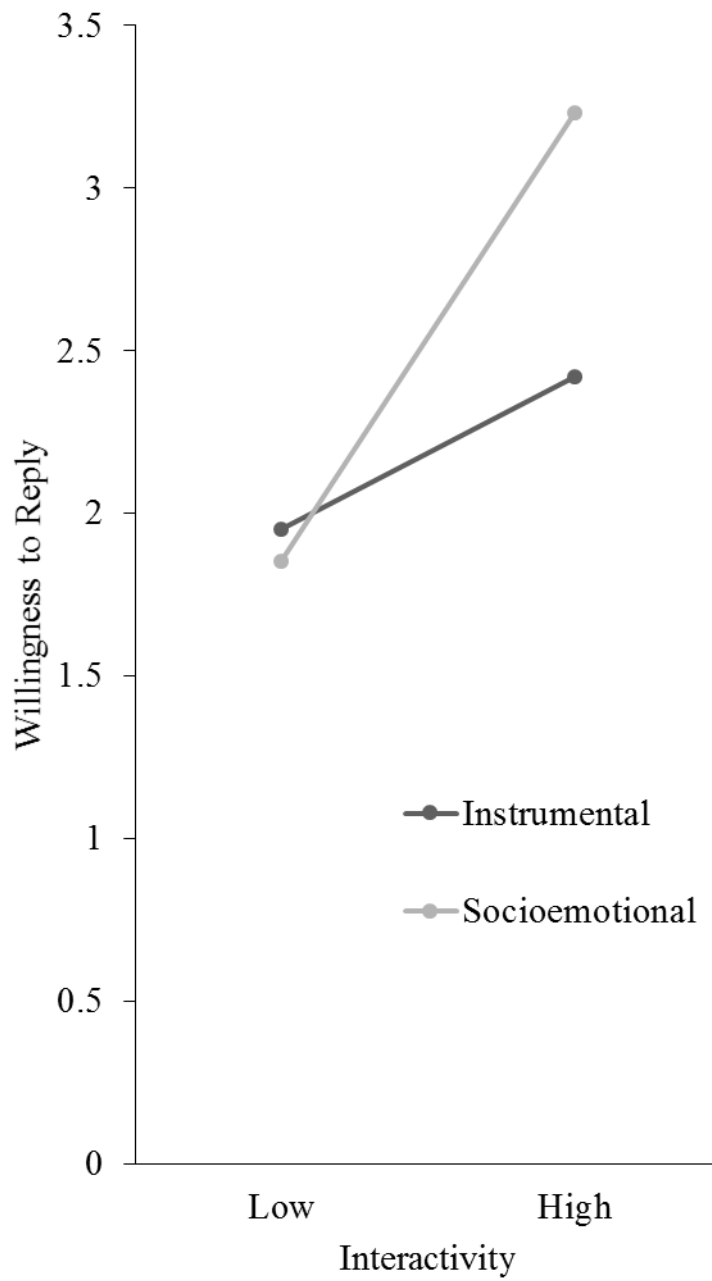
**Figure A-1**

*Results of moderation analysis testing the effects of message orientation and interactivity on willingness to retweet*



**Figure A-2**

*Results of moderation analysis testing the effects of message orientation and interactivity on willingness to favorite*



**Figure A-3**

*Results of moderation analysis testing the effects of message orientation and interactivity on willingness to reply*



APPENDIX B

TABLES

**Table B-1***Categories of Bales's IPA observation system*

Message Orientations		Examples
Task/Instrumental		
- Ask for opinion	Evaluation, analysis, expression of feeling	What do you think about the game?
- Ask for suggestion	Direction, possible way of action	What should the team do?
- Ask for information	Information, repetition, confirmation	Will the team win tomorrow?
- Gives opinion	Evaluation, analysis, expresses feeling	The game was amazing tonight.
- Gives suggestion	Direction, implying autonomy for other	Watch the game tonight.
- Gives information	Information, repeats, clarifies, confirms	Postgame recap is now available online.
Positive		
Socioemotional		
- Shows solidarity	Raises other's status, gives help, reward	Thanks so much for supporting the team.
- Shows tension release	Jokes, laughs, shows satisfaction	Wow, that was an amazing play.
- Agree	Shows passive acceptance, understands, concurs, complies	Yes, I agree with you.
Negative		
Socioemotional		
- Shows antagonism	Deflates other's status, asserts self	You don't know what you're talking about
- Shows tension	Asks for help, withdraws out of field	I am not happy about the game.
- Disagree	Shows passive rejection, formality, withholds help	I told you that is not allowed in here.

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Sources: Bales (1970); Lin and Pena (2011); Pena and Hancock (2006)

**Table B-2***List of experimental conditions and tweets*

Experimental Condition <sup>a</sup>	Tweets
Condition I: Positive – Instrumental – High	<ol style="list-style-type: none"> <li>1. Aggies get a steal and a transition layup for @JDotGreenX116. #Aggies start the half on a 10-2 run and now trail 43-48</li> <li>2. 18-foot jumper by @Danuel23House is good, giving the #Aggies a 65-64 with :22 remaining. Timeout Tigers #WHOOOP</li> </ol>
Condition II: Positive – Instrumental – Low	<ol style="list-style-type: none"> <li>1. Aggies get a steal and a transition layup for Jordan Green. Aggies start the half on a 10-2 run and now trail 43-48</li> <li>2. 18-foot jumper by Danuel House is good, giving the #Aggies a 65-64 with 22 seconds remaining. Timeout Tigers</li> </ol>
Condition III: Positive – Socioemotional – High	<ol style="list-style-type: none"> <li>1. Steal and a fast break bucket by @JDotGreenX116! #Aggies are RED HOT to start the half</li> <li>2. Step-back J by @Danuel23House is GOOD! #Aggies have battled back and retaken the lead! #WHOOOP</li> </ol>
Condition IV: Positive – Socioemotional – Low	<ol style="list-style-type: none"> <li>1. Steal and a fast break bucket by Jordan Green! Aggies are RED HOT to start the half</li> <li>2. Step-back J by Danuel House is GOOD! #Aggies have battled back and retaken the lead!</li> </ol>
Condition V: Negative – Instrumental – High	<ol style="list-style-type: none"> <li>1. Turnover by the #Aggies results in another LSU 3-pointer. @LSUBasketball leads by 9 with 10 minutes remaining in the half</li> <li>2. Hornsby makes a 3-pointer as time expires. @LSUBasketball lead the Ags by 8...40-32 at the half #12thman</li> </ol>
Condition VI: Negative – Instrumental – Low	<ol style="list-style-type: none"> <li>1. Turnover by the Aggies results in another LSU 3-pointer. Tigers lead the Aggies by 9 with 10 minutes remaining in the half</li> <li>2. Hornsby makes a 3-pointer as time expires. Tigers lead the Aggies by 8 points...40-32 at the half</li> </ol>
Condition VII: Negative – Socioemotional – High	<ol style="list-style-type: none"> <li>1. #Aggies mishandled entry pass turns into an LSU 3-pointer. A&amp;M turnovers have @LSUBasketball in total control</li> <li>2. Hornsby with a dagger at the horn! #Aggies face an uphill battle in 2nd half #12thman</li> </ol>
Condition VIII: Negative – Socioemotional – Low	<ol style="list-style-type: none"> <li>1. Aggies mishandled entry pass turns into an LSU 3-pointer. A&amp;M turnovers have the Tigers in total control</li> <li>2. Hornsby with a dagger at the horn! Aggies face an uphill battle in 2nd half</li> </ol>

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<sup>a</sup>Displayed as Valence – Orientation – Interactivity

**Table B-3***List of measures and scale items*

Scale	Items
Behavior Intentions <sup>a</sup>	a. How likely would you be to retweet this tweet? b. How likely would you be to favorite this tweet? c. How likely would you be to reply to this tweet? d. How likely would you be to follow this Twitter account? (Based on Hodge, Pederson, and Walker, 2015)
Relationship Quality <sup>b</sup>	a. I trust the Aggie Men's Basketball team. b. The Aggie Men's Basketball team is reliable. c. I can count on the Aggie Men's Basketball team. d. The Aggie Men's Basketball team reminds me of who I am. e. The Aggie Men's Basketball team's image and my self-image are similar in a lot of ways. f. The Aggie Men's Basketball team and I have a lot in common. g. I am pleased with the relationship I have with the Aggie Men's Basketball team. h. My relationship with the Aggie Men's Basketball team is favorable. i. I am satisfied with my relationship with the Aggie Men's Basketball team. (Based on Kim, Trail, Woo, and Zhang, 2011)
Purchase Intentions <sup>c</sup>	a. I would like to buy officially licensed Aggie Men's Basketball merchandise. b. I intend to buy officially licensed Aggie Men's Basketball merchandise. (Based on Yoo and Donthu, 2001)
Reservation Price	a. What is the maximum price (\$USD) you would be willing to pay for an officially licensed Texas A&M 24-can cooler (pictured above).
Attitude toward the Team <sup>d</sup>	a. Please rate your attitude regarding Texas A&M Men's Basketball
Interest in the Team <sup>e</sup>	a. Generally, how interested are you in the Texas A&M Men's Basketball team?
Manipulation Check <sup>b</sup>	a. The tweets sent by @AggieMensHoops were primarily emotional and dramatized. b. The tweets sent by @AggieMensHoops contained a high number of interactive elements (i.e., #hashtags, @mentions, and links). c. The tweets sent by @AggieMensHoops were mostly positive.

<sup>a</sup> Items were measured using a 7-point Likert type scale (1 = very unlikely, 7 = very likely)

<sup>b</sup> Items were measured using a 7-point Likert-type scale (1 = strongly disagree, 7 = strongly agree)

<sup>c</sup> Items were measured using a 5-point Likert-type scale (1 = strongly disagree, 7 = strongly agree)

<sup>d</sup> Item was measured using 2 7-point semantic differential scales

<sup>e</sup> Item was measured using a 7-point Likert-type scale (1 = not interested at all, 7 = very interested)

**Table B-4***Twitter usage of participants*

Twitter Usage	Percentage	Min.	Max.	<i>M</i>	<i>SD</i>
Do you currently have a Twitter account?	72.6% yes				
Approximately how many Twitter accounts are you following?		1	1000	285.37	213.17
Approximately how many followers do you have on Twitter?		0	1362	330.79	257.93
How much time (in minutes) do you spend on Twitter on an average day?		0	300	34.57	1887.93
Have you ever visited or followed any sport organization's Twitter account?	63.5% yes				
Approximately how many sport organizations do you follow on Twitter?		0	700	18.11	59.429

**Table B-5***Main effects of message orientation*

Dependent Variable	Socioemotional Orientation	Instrumental Orientation	Mean difference	df	<i>F</i>	<i>p</i>	$\eta_p^2$
Retweet	3.248	2.817	.432	(1,244)	5.44	.020*	.022
Favorite	3.731	3.362	.370	(1,244)	3.40	.066	.014
Reply	2.538	2.189	.349	(1,244)	4.53	.034*	.018
Follow	3.760	3.643	.118	(1,244)	.338	.561	.001
Relationship Quality	4.014	3.937	.077	(1,244)	.383	.537	.002
Purchase Intentions	2.922	2.941	.019	(1,244)	.021	.885	<.001
WTP	14.507	13.663	.843	(1,244)	1.12	.290	.005

\**p* < .05

**Table B-6***Main effects of message interactivity*

Dependent Variable	High interactivity	Low interactivity	Mean difference	df	F	p	$\eta_p^2$
Retweet	3.325	2.740	.584	(1,244)	9.88	.002**	.039
Favorite	3.671	3.422	.248	(1,244)	1.52	.218	.006
Reply	2.817	1.910	.907	(1,244)	30.34	<.001**	.111
Follow	3.720	3.683	.037	(1,244)	.034	.854	<.001
Relationship Quality	4.023	3.928	.095	(1,244)	.579	.448	.002
Purchase Intentions	2.992	2.871	.121	(1,244)	.834	.362	.003
WTP	14.940	13.231	1.709	(1,244)	4.57	.033*	.018

\*p &lt; .05; \*\*p &lt; .01

**Table B-7***F values for the orientation x interactivity interaction effects*

Effect	Retweet	Favorite	Reply	Follow
Orientation	5.44*	3.40	4.53*	.338
Interactivity	9.88**	1.52	30.34**	.034
Orientation x Interactivity	7.20**	8.05**	8.65**	3.83

\*p &lt; .05; \*\*p &lt; .01

**Table B-8***Main effects of message valence*

Dependent Variable	Positive Valence	Negative Valence	Mean difference	Df	F	p	$\eta_p^2$
Retweet	3.721	2.344	1.377	(1,244)	54.775	<.001**	.183
Favorite	4.486	2.607	1.878	(1,244)	87.095	<.001**	.263
Reply	2.526	2.201	.325	(1,244)	6.895	.05*	.016
Follow	4.076	3.327	.750	(1,244)	13.561	<.001**	.053
Relationship Quality	4.082	3.870	.212	(1,244)	2.896	.090	.012
Purchase Intentions	2.832	3.031	.200	(1,244)	2.275	.133	.009
WTP	14.307	13.863	.443	(1,244)	.307	.580	.001

\*p &lt; .05; \*\*p &lt; .01

**Table B-9***Summary of hypothesis testing results*

Hypotheses	Predictions	Results
H1a	Retweet: socioemotional > instrumental	Supported
H1b	Favorite: socioemotional > instrumental	No
H1c	Reply: socioemotional > instrumental	Supported
H1d	Follow: socioemotional > instrumental	No
H2	Relationship Quality: socioemotional > instrumental	No
H3a	Purchase Intentions: socioemotional > instrumental	No
H3b	Willingness to Pay: socioemotional > instrumental	Supported
H4a	Retweet: high interactivity > low interactivity	No
H4b	Favorite: high interactivity > low interactivity	Supported
H4c	Reply: high interactivity > low interactivity	No
H4d	Follow: high interactivity > low interactivity	No
H5	Relationship Quality: high interactivity > low interactivity	No
H6a	Purchase Intentions: high interactivity > low interactivity	No
H6b	Willingness to Pay: high interactivity > low interactivity	Supported
H7a	Retweet: orientation x interactivity interaction	Supported
H7b	Favorite: orientation x interactivity interaction	Supported
H7c	Reply: orientation x interactivity interaction	Supported
H7d	Follow: orientation x interactivity interaction	No
H8a	Retweet: positive valence > negative valence	Supported
H8b	Favorite: positive valence > negative valence	Supported
H8c	Reply: positive valence > negative valence	Supported
H8d	Follow: positive valence > negative valence	Supported
H9	Relationship Quality: positive valence > negative valence	No
H10a	Purchase Intentions: positive valence > negative valence	No
H10b	Willingness to Pay: positive valence > negative valence	No

APPENDIX C

INFORMED CONSENT FORM



## **It's not what you tweet but how you tweet it: An experiment of interactivity and communication style in Twitter**

You are invited to participate in a research study which examines the use of Twitter while viewing a sport event. We ask that you read this form and ask any questions you may have before agreeing to be in the study.

The study is being conducted by Dr. Gregg Bennett and Joseph Pederson of the Department of Health and Kinesiology at Texas A&M University.

### **STUDY PURPOSE**

The purpose of this study is to examine the impact of Twitter communication on users' attitudes and behaviors.

### **PROCEDURE FOR THE STUDY**

If you agree to participate in the study, you will take part in a 10-15 minute experimental survey which will ask to respond to a series of sport video clips and tweets. Your survey results will be kept confidential, and no personally identifying will be recorded.

### **CONFIDENTIALITY**

You will not be asked to disclose your name, or any other personally identifying information. Efforts will be made to keep your personal information confidential. We cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law.

Organizations that may inspect or copy your research records for quality assurance and data analysis include groups such as the primary investigator and his or her research associates, the Texas A&M University Institutional Review Board or its designees, and (as permitted by law) state or federal agencies, specifically the Office for Human Research Protections (OHRP) who may need to access your research records.

### **PAYMENT**

You will not receive payment for taking part in this study.

### **CONTACT FOR QUESTIONS OR PROBLEMS**

For questions about the study, contact the researcher, Joseph Pederson at [jpederson\\_33@hlkn.tamu.edu](mailto:jpederson_33@hlkn.tamu.edu) or 970-324-1810.

For questions about your rights as a research participant, to provide input regarding research, or if you have questions, complaints, or concerns about the research, you may call the Texas A&M University Human Subjects Protection Program office by phone at 1-979-458-4067, toll free at 1-855-795-8636, or by email at [irb@tamu.edu](mailto:irb@tamu.edu).

### **VOLUNTARY NATURE OF STUDY**

Taking part in this study is voluntary. You may choose not to take part or may leave the study at any time. Leaving the study will not result in any penalty. Your decision whether or not to participate in this study will not affect your current or future relations with Texas A&M University.