

Three Essays on Understanding Consumer Engagement
with Brand Posts on Social Media

by

Qi Deng

A thesis submitted to the Faculty of Graduate and Postdoctoral
Affairs in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

in

Management

Carleton University
Ottawa, Ontario

© 2019

Qi Deng

Abstract

The rapid proliferation of social media over the last ten years has revolutionized the way that brands and consumers connect, communicate, and interact with each other. Nowadays, approaching creative brand posts in a way that maximizes consumer engagement has become a growing challenge to social media marketers. This thesis addresses this challenge and aims to understand how to enhance consumer engagement with brand posts on social media through the lens of linguistics. To achieve this goal, three independent but related papers were conducted to 1) investigate how the linguistic styles of brand social media posts influence consumer engagement; 2) examine the interactive impacts of consumer comment valence and brand response language style on consumers' evaluation of brand and their intention for future engagement with the brand; and 3) explore whether and how incorporating emojis in brand social media posts affects consumer engagement with the posts. The findings of this thesis reveal that, for brands, using proper language when communicating with consumers on social media can improve consumers' perceptions of brands and enhance their engagement with brands. The results of this thesis deepen our understanding of the role that brand language plays in influencing consumer engagement on social media as well as provide many practical guidelines for social media marketers regarding the language they use in communicating with consumers on social media.

Acknowledgements

I would like to express my sincere gratitude to my supervisor, Professor Shaobo Ji, for his continuous support of my Ph.D. study and for being such a great mentor and a friend. His guidance, trust, and encouragement helped me in all the time of becoming the researcher, and more importantly, the person who I am today.

I would like to thank the members of my thesis committee, Professor Michael Hine and Professor Michel Rod, for their advice, guidance, and insightful comments. Furthermore, I would like to thank the Sprott faculty members who have helped me throughout my doctoral program, especially Professor Lindsay McShane for her careful comments for this thesis, Professor Robin Ritchie for his help with data collection, and Professor Leighann Neilson for her guidance and care.

I would like to express my deepest gratitude to my parents, Shuhua Deng and Shuxia Li, for raising me with unconditional love and support in all my pursuits. Finally, my special thanks and love to my wife, Yun (Dora) Wang, who has always been supportive and understanding, a truly advocate in my life.

Qi Deng

Carleton University, Ottawa, Ontario, Canada

April 2019

Table of Contents

Abstract.....	i
Acknowledgements	ii
Table of Contents	iii
List of Tables	vii
List of Figures.....	viii
List of Appendices.....	ix
1 Introduction	1
2 Essay One: Investigating the Impacts of Brand Social Media Posts’ Linguistic Styles on Consumer Engagement	7
2.1 Introduction	7
2.2 Theoretical Foundation	9
2.2.1 Brand Language and Consumer Response	9
2.2.2 Communication Accommodation Theory.....	13
2.2.3 Linguistic Style and Social Media Language	18
2.3 Hypotheses Development.....	21
2.4 Methodology	27
2.4.1 Data Collection	27
2.4.2 Operationalization of Variables	30

2.4.3	Data Analysis	38
2.5	Discussion	46
2.5.1	Implications.....	48
2.5.2	Limitations and Future Research	50
3	Essay Two: Watch Your Tone: The Interactive Effects of Consumer Comment Valence and Brand Response Language Style on Consumer Engagement	52
3.1	Introduction	52
3.2	Theoretical Foundation	56
3.2.1	Language Expectancy Theory.....	56
3.2.2	Language Style on Social Media: Informal vs. Formal	59
3.2.3	The Expectation on Brand Language Style in Social Media	63
3.3	Hypotheses Development.....	67
3.4	Experiment 1: A Condition of Extreme Consumer Comment Valence	75
3.5	Experiment 2: A Condition of Less Extreme Consumer Comment Valence.....	86
3.6	Discussion	96
3.6.1	Implications.....	97
3.6.2	Limitations and Future Research	99
4	Essay Three: Emojifying the Brand Social Media Posts to Enhance Consumer Engagement	101
4.1	Introduction	101

4.2	Theoretical Foundation	104
4.2.1	The Communicative Role of Emojis.....	104
4.2.2	Consumer Engagement with Brand Posts on Social Media.....	107
4.3	Hypotheses Development.....	110
4.4	Study 1.....	116
4.4.1	Study Design.....	116
4.4.2	Data Collection	116
4.4.3	Data Analysis	117
4.4.4	Findings.....	117
4.4.5	Discussion.....	121
4.5	Study 2.....	121
4.5.1	Study Design.....	121
4.5.2	Experiment 1	121
4.5.3	Experiment 2.....	128
4.6	Discussion	131
4.6.1	Implications.....	131
4.6.2	Limitations and Future Research	134
5	Conclusion	135
5.1	Theoretical Implications.....	137

5.2	Managerial Implications.....	141
5.3	Limitations and Future Research.....	143
	Reference	145
	Appendix 1. Dataset Description: Essay One.....	194
	Appendix 2a. Stimuli of Experiment 1 in Essay Two	199
	Appendix 2b. Stimuli of Experiment 2 in Essay Two.....	203
	Appendix 3a. Dataset Description: Essay Three.....	207
	Appendix 3b. Stimuli of Experiment 1 in Essay Three	211
	Appendix 3c. Stimuli of Experiment 2 in Essay Three.....	212

List of Tables

Table 2.1 Variable, Operationalization, and Data Source.....	34
Table 2.2 Descriptive Statistics.....	37
Table 2.3 Effects of Brand Post Linguistic Styles on Consumer Engagement.....	42
Table 2.4 Summary of Hypotheses Testing Results	47
Table 3.1 Features of Informal Language in Social Media.....	61
Table 4.1 Coding Framework for Content Analysis	117
Table 4.2 The Measurement of Variables	124

List of Figures

Figure 3.1 Two-way Interaction Effect on Brand Trust.....	81
Figure 3.2 Two-way Interaction Effect on Brand Satisfaction	82
Figure 3.3 Two-way Interaction Effect on Intention to Engage	83
Figure 3.4 The Results of Moderated Mediation Analyses	85
Figure 3.5 Two-way Interaction Effect on Brand Trust.....	91
Figure 3.6 Two-way Interaction Effect on Brand Satisfaction	92
Figure 3.7 Two-way Interaction Effect on Intention to Engage	93
Figure 3.8 The Results of Moderated Mediation Analyses	95
Figure 4.1 The Percent of Brands Using Emojis	118
Figure 4.2 The Percent of Posts with Emojis.....	119
Figure 4.3 Average Number of Emojis per Post.....	120
Figure 4.4 Type of Emojis	120
Figure 4.5 The Results of Mediation Analysis	127
Figure 5.1 Summary of Three Papers at the Conceptual Level	138

List of Appendices

Appendix 1. The Description of Dataset in Essay 1.....	194
Appendix 2a. Stimuli of Experiment 1 in Essay 2.....	199
Appendix 2b. Stimuli of Experiment 2 in Essay 2.....	203
Appendix 3a. The Description of Dataset in Essay 3.....	207
Appendix 3b. Stimuli of Experiment 1 in Essay 3.....	211
Appendix 3c. Stimuli of Experiment 2 in Essay 3.....	212

1 Introduction

Social media has rapidly proliferated over the last decade. According to Statista (2017 & 2018a), the number of monthly active users of Facebook, one of the most popular social networking sites, has soared from 100 million in 2008 to 2.32 billion in 2018 and the number of social media users worldwide is estimated to be around 3.02 billion by 2021. The dramatic proliferation of social media has been shaping the way consumers make purchase decisions (e.g., information searching and sharing, opinion forming, and purchase experience evaluation). As such, brands are actively embracing social media to better communicate and interact with their consumers and gradually shifting their marketing spending from traditional advertising media such as newspapers and TV to social media (de Vries et al., 2017; Hudson et al., 2016). For example, in the U.S. alone, the digital ad spending that companies make is estimated to increase from 83 billion (US\$) in 2017 to 129.23 billion (US\$) in 2021 (eMarketer, 2017). Moreover, mobile ad, with a 33.9% share of total US ad spend, is estimated to surpass TV ad in 2018 and become the leading advertising medium (eMarketer, 2017).

Nowadays, social media has become an integral part of the marketing communication mix and changed the way that brands and consumers engage with each other (Chu & Kim, 2011; Constantinides & Fountain, 2008; Dolan, Conduit, Fahy, & Goodman, 2016; Kozinets, Hemetsberger, & Schau, 2008; Merz, He, & Vargo, 2009). Unlike the traditional one-way communication (e.g., advertising on TV), social media provides a platform where brands and consumers can engage with each other in a bi-directional way (Berthon, Pitt, &

Campbell, 2008; Gretry, Horváth, Belei, & van Riel, 2017; Hutter, Hautz, Dennhardt, & Füller, 2013). Specifically, brands may create fan pages (e.g., Facebook brand pages, etc.) and microblogging accounts (e.g., Twitter, Instagram, etc.) and interact with consumers through regularly updating attractive posts, and consumers could follow the pages or accounts in accordance with their interests and actively interact with brands through engaging with (i.e., liking, sharing, or commenting on) these posts. In this case, the brand post become a critical medium that connects brands and consumers. To marketers, consumer engagement with brand posts is crucial because it is essential for creating social contagion effects (Chung, Animesh, Han, & Pinsonneault, 2014). For example, within Facebook brand pages, when consumers ‘like’, ‘comment’ on, or ‘share’ brand posts, such actions would appear on their Facebook friends’ walls, thus, popularize the posts throughout their networks of friends and associates in a way that is similar to the word of mouth (i.e., WOM) communication (Babić Rosario, Sotgiu, De Valck, & Bijmolt, 2016; Cvijikj & Michahelles, 2013; de Vries, Gensler, & Leeflang, 2012; López, Sicilia, & Verlegh, 2017; Swani, Milne, & Brown, 2013; Swani & Milne, 2017; Yu, 2014). Research has shown that consumer engagement with brand posts is positively related with brand awareness, preference, and consideration (Coursaris, van Osch, & Balogh, 2016b; Cruz, Leonhardt, & Pezzuti, 2017; de Vries, Gensler, & Leeflang, 2017; Hutter et al., 2013), brand equity (Coursaris et al., 2016b; Wagner, Baccarella, & Voigt, 2017), brand loyalty (Jahn & Kunz, 2012), and brand performance (e.g., sales, new customer acquisition, brand value, etc.) (Chung et al., 2014; Colicev, O’Connor, & Vinzi, 2016; de Vries et al., 2017; Kumar, Bezawada, Rishika, Janakiraman, & Kannan, 2016).

Despite the importance of consumer engagement, research reported that only about 1% of the brands' followers on Facebook engage with the brands by 'like', 'comment' on, or 'share' their posts (Creamer, 2012; Lee, Hosanagar, & Nair, 2018). Even within the most popular Facebook brand pages, the fan engagement rate is only 4.3% (eMarketer, 2015). Social media marketers are struggling with approaching creative brand posts in a way that maximizes consumer engagement, and many social media efforts become the experimental trials and errors that rarely result in the desired outcome (Ashley & Tuten, 2015; Wilson, Guinan, Parise, & Weinberg, 2011; Martin & Todorov, 2010). Therefore, in the current practice of social media marketing, understanding how to design brand posts that induce active consumer engagement is an important priority (Evans, 2012; Kacholia, 2013; Kim, Spiller, & Hettche, 2015; Tuten & Solomon, 2013).

In academia, while some research suggests that marketers can strategically design brand posts that improve consumer engagement, it is still not clear what contents work better for which brand, and in what way (Lee et al., 2018; Lohtia, Donthu, & Hershberger, 2003; Swani, Brown, & Milne, 2014; Wallace, Buil, de Chernatony, & Hogan, 2014). Although it has been proposed that enhancing consumer engagement with brand posts on social media is challenging and hence worth exploring, compared to the abundant research on consumer interaction with traditional brand communication (e.g., advertising on TV, etc.) and user-generated contents (e.g., eWOM, etc.), consumer engagement with brand posts (i.e., the firm-generated contents) has been relatively understudied (Ibrahim, Wang, & Bourne, 2017; Kumar, 2015; Swani, Milne, Brown, Assaf, & Donthu, 2017). Therefore, more research on effective social media content strategies is needed to reveal how to

develop and implement brand social media posts that induce active consumer engagement (Kumar, 2015; López et al., 2017; Marketing Science Institute, 2018).

Unlike offline brand-consumer communications where messages can be conveyed through verbal (e.g., language), para-verbal (e.g. voice), and non-verbal (e.g. gesture) cues, brand-consumer communications on social media mostly happen through verbal cues (Jakic, Wagner, & Meyer, 2017; Kurtzberg, Naquin, & Belkin, 2009; Walther, 2012). Wherever brand-consumer communications occur within social media, language acts as the central medium; thus, the language style of a brand may affect consumers' perception, which, in turn, influences the consumers' intention to engage with the brand (Cruz et al., 2017). While previous research has investigated the consumer engagement behavior from many perspectives, little of them have examined the role of language in influencing consumer engagement. Therefore, this thesis aims to *understand how to enhance consumer engagement with brand posts on social media through the lens of linguistics*. To address this objective, three independent but related studies were conducted.

The first paper aims to *investigate and understand how linguistic styles of brand social media posts influence consumer engagement*. Drawing on the communication accommodation theory (CAT) (Giles, Taylor, & Bourhis, 1973) and literature on psycholinguistic and sociolinguistic research, we investigate the impacts of three brand post linguistic styles (i.e., emotionality, complexity, and informality) on consumer engagement. In this paper, field research was conducted in the context of Facebook brand pages. Based on the analysis of 15,496 brand posts collected from 120 Facebook pages for

a period of six months, we found that brand posts' linguistic styles significantly impact consumer engagement, but the effects vary regarding the three types of consumer engagement (i.e., like, share, comment). The findings of this paper improve our understanding of the role that brand language plays in enhancing consumer engagement.

The second paper aims to *examine the interactive effects of consumer comment valence and brand response language style on consumers' trust and satisfaction toward the brand and their intention to engage with the brand in the future*. Drawing on the language expectancy theory (LET) (Burgoon, 1993; Burgoon & Miller, 1985), this paper examines which language style (i.e., formal vs. informal) brands should adopt in responding to consumer comments with different valences (i.e., positive vs. negative) to improve consumers' trust and satisfaction toward the brands and, in turn, enhance their intention to engage with the brands in future. In this paper, we propose that brands should treat positive and negative consumer comments as two different scenarios and use different language styles in responding to them. Two scenario-based experiments were conducted to test our hypotheses in scenarios of extreme and less extreme consumer comment valence, respectively. The results reveal that consumer comment valence and brand response informality interactively impact consumers' evaluation of the brand, which, in turn, influence their intention to engage with the brand in the future. The findings of this paper help us understand how consumers' evaluation of brands and intention to engage with brands can be impacted by the way brands communicating with consumers.

The third paper aims to *explore whether and how incorporating emojis in brand social media posts affects consumer engagement with the posts*. Given the infancy of this research stream, this paper presents an exploratory study on the effects of emojis on consumer engagement. Specifically, drawing on the media richness theory (MRT) (Daft & Lengel, 1984 & 1986) and computer-mediated communication (CMC) literature (Crystal, 2006; Huang, Yen, & Zhang, 2008; Luor, Wu, Lu, & Tao, 2010), this paper addresses two research questions: 1) how are emojis used in brand social media posts currently; 2) can (how) emojis in brand social media posts influence consumers' perceptions which, in turn, enhance their engagement intention. Applying a mixed-method research design, we conducted two studies in this paper. First, a field study was conducted. In this study, we portrayed the current state of emoji use in brand social media posts based on the analysis of 4,549 brand posts collected from 90 Facebook pages for a period of two months. Second, two online experiments were conducted to investigate the impacts of emojis in brand social media posts on consumers' perceptions of brand posts and engagement intention. The results reveal that incorporating emojis in B2C brand posts can positively impact consumers' perceptions of the brand, which, in turn, improve their engagement intention; however, the results do not show such relationship in case of B2B brand posts. The findings of this paper improve our understanding of the role that emojis play in brand-consumer interaction and enhancing consumer engagement with brand posts on social media.

The rest of this thesis is organized as follows. Chapter 2, 3, and 4 present three independent but related papers and chapter 5 provides an integrative view of the three papers and conclusion.

2 Essay One: Investigating the Impacts of Brand Social Media Posts'

Linguistic Styles on Consumer Engagement

2.1 Introduction

Enhancing consumer engagement on social media through well-designed brand posts is vital, but also challenging, to current digital marketing (Chung et al., 2014; Kumar, 2015; Marketing Science Institute, 2018; Swani et al., 2017). While previous research that investigates the antecedents of consumer engagement has mainly focused on specific brand post characteristics, such as content type, media type, and post timing, very few of them has examined the language used by brand (Cruz et al., 2017; Jakic et al., 2017; Lee et al., 2018). However, such overlook does not weaken the importance of language. Whenever interacting with a brand, consumers encounter with the brand language, e.g., the choice of words, sentence structure and sentence tone in advertising, the language used by salesperson and service encounters, the language in brand posts, and even the brand name itself. Serving as the medium that communicates brand meanings, language plays a significant role in the underlying processes of consumers identifying, experiencing, integrating, signifying, and connecting with brands and affects consumers' responses to brands in terms of perception, memory, attitude, as well as behavior (Carnevale, Luna, & Lerman, 2017; Schmitt, 2012; Luna, Carnevale, & Lerman, 2013). Branding relies heavily on language, and it is notably more evident in the social media world (Carnevale et al., 2017). Unlike the offline world where messages can be conveyed using verbal (e.g., language), para-verbal (e.g. voice), and non-verbal (e.g. gesture) cues, brand-consumer

interactions in the social media world mostly happen through verbal cues (Jakic et al., 2017; Kurtzberg et al., 2009; Walther, 2012). Wherever (e.g., blogging, Twitter, Facebook, etc.) brand posting occurs, language remains crucial for effectively enhancing consumer engagement (Cruz et al., 2017). Consider the following two Facebook brand posts:

#1 [*Post by Starbucks on November 13, 2017, at 10:00 am*]

Thanksgiving, all bundled up. Turkey Stuffing Panini is back! 🍞

#2 [*Post by Microsoft on November 27, 2017, at 12:00 pm*]

The new Surface Book 2 delivers up to 17 hours of battery life and is 2 times more powerful than before. Pre-order the most powerful Surface yet: <http://msft.social/7KHKei>

While both of the posts have a topic of introducing new products, the former one is more speech-like and the latter more writing-like. Specifically, the former post is shorter, more informal, more emotional, and requires less cognitive resources to understand than the latter one, and unsurprisingly, it induced much more consumer engagement than the latter one (i.e., 16,000 “likes” and 955 “shares” vs. 9 “likes” and 0 “shares”). Thus, in designing brand posts for consumer engagement on social media, language matters.

This paper aims to examine the language used in brand posts and its impact on consumer engagement. Specifically, drawing on the communication accommodation theory (CAT) and literature on psycholinguistic and sociolinguistic research, this paper investigates the impacts of three brand post linguistic styles (i.e., emotionality, complexity, and informality)

on consumer engagement in the social media context. This paper has many theoretical implications. First, although previous research has studied consumer engagement with brand posts on social media from many perspectives, to date, little is known about how consumer engagement could be enhanced through employing the proper linguistic style in brand posts. The results of this paper will fill this gap. Second, this paper extends the CAT by demonstrating that accommodating one's language to the context where communication occurs has similar effects as accommodating one's language to the interlocutor. Besides, while previous research using CAT is mainly conducted in the offline interpersonal communication context, this paper extends the theoretical generalizability of CAT by applying it to a research context of brand-to-consumer communications occurring on social media. This paper also has many managerial implications. Through investigating the role that language styles play in affecting consumer engagement, this paper reveals that social media marketers should carefully design the linguistic styles of brand posts and provides many guidelines for social media marketing practitioners.

2.2 Theoretical Foundation

2.2.1 Brand Language and Consumer Response

Branding and language have been studied together for a long time in a relatively fragmented way (Carnevale et al., 2017). Generally, based on the characteristics of settings where the language occurs, this research area has shown two major streams that respectively focus on language in advertising and language used by salespersons and service encounters. While the language in advertising mainly occurs in a one-way and indirect F2C communicational channel, language used by salespersons and service

encounters usually occurs in a two-way and direct interpersonal communicational channel (Holmqvist & Grönroos, 2012). Each research stream has produced many exciting insights for brand-related issues.

Among research on language in advertising, a widely researched topic is the effects of language on bilingual consumers' responses to the advertising and the mentioned brand. Following this stream, researchers have found that the proper use of native language and code-switching (i.e., mixed languages within a sentence) can positively affect bilingual consumers' responses to advertising. For example, Puntoni, De Langhe, & Van Osselaer (2008) found that marketing slogans expressed in consumers' native language tend to be perceived as more emotional than those expressed in their second language are. Noriega & Blair (2008) found that, while advertising to bilinguals, native language advertisement is more likely to elicit self-referent thoughts about family, friends, home, or homeland, which in turn can lead to more positive attitudes and behavioral intentions. Koslow, Shamdasani, & Touchstone (1994) found that Spanish-language advertising can enhance Hispanic consumers' affect toward the advertisement, but advertising exclusively in Spanish can decrease the affect toward the advertisement. With a focus on code-switching, Luna & Peracchio (2005) found that minority-language slogans switching to the majority language result in greater persuasion than majority-language slogans switching to the minority language, which is further confirmed by Ahn, La Ferle, & Lee (2017) in their study of the code-switching in the Korean marketplace. According to Ahn et al. (2017), Korean-English and transliterated Korean-English code-switching were significantly higher in attitude toward the slogan and product evaluation than English-Korean code-switching. Despite the

native language and code-switching, the linguistic style of advertising has been examined as well. For example, research has suggested that script complexity, which is usually measured based on readability, negatively affects the advertising recall and recognition for consumers who were less involved with the product category (Lowrey, 2006; Metoyer-Duran, 1993). Djafarova (2008) found that using puns in advertising could create a humorous effect and double meanings and satisfy the audience's need to enjoy their language, which, in turn, can attract attention.

Similar to research on language in advertising, research on language used by salespersons and service encounters examined the impacts of language on consumers' perceptions of and responses to the services before, during, and after the services' happening (Holmqvist & Van Vaerenbergh, 2012). Following this stream, researchers have found that language has a significant impact on consumer responses, which, in turn, can affect the sales/service performance (Pace, 1962). For example, Peterson, Cannito, and Brown (1995) found that salespeople's voice characteristics (e.g., the rate of speaking, average pause duration, and fundamental frequency contour) have significant impacts on sales performance. Fernandez et al. (2004) found that the language used by physicians has an impact on patients' perception of health care service. Specifically, Spanish-speaking patients are more likely to report better interpersonal processes of care when their physicians have high Spanish ability. Downing (2011) found that using short, affirmative words and language that consumers could easily understand can enhance the call center agents' sales effectiveness. With a focus on code-switching, Schau, Dellande, & Gilly (2007) examined the impacts of three types of code-switching (i.e., language, dialect, and brand code-switching) on service

outcomes in terms of encounter duration, the incidence of positive and negative comments, and post-fulfillments (i.e., inquiries and returns). They found that, compared to dialect and brand code-switching, language code-switching results in more positive comments. Holmqvist & Van Vaerenbergh (2013) found that, for high-involvement services (e.g., financial and medical services), bilingual consumers (both male and female, elderly and young) prefer native language more than the second language. They further examined the impacts of the second language and found that the use of the second language during service negatively affects consumers' post-service behaviors. Specifically, consumers receiving service in their second language are less likely to tip the waiter in a restaurant and are less likely to recommend the service provider to others (Van Vaerenbergh & Holmqvist, 2013 & 2014). Azab & Clark (2017) found that, in a search recovery context, service providers can improve rapport with majority consumers using a language convergence strategy, and the rapport will, in turn, result in positive word-of-mouth and re-patronage intentions.

In spite of the different settings, research on advertising language and language used by salespersons and service encounters has suggested that language plays a significant role in brand-consumer interactions and brands can positively affect consumers' perception, responses, and interactions through properly selecting or framing the language they use (Williams & Spiro, 1985). Given that the brand-consumer interaction on social media has the characteristics of both advertising (i.e., F2C) and the interaction between salespersons and service encounters and consumers (i.e., bidirectional), it is reasonable to expect that

the language used by brand posts can affect consumer engagement behavior on social media.

2.2.2 Communication Accommodation Theory

Proposed in the early 1970s by Howard Giles and his colleagues (Giles et al., 1973), the CAT (previously known as Accommodation Theory or Speech Accommodation Theory) is a theory that explores how people adjust their behaviors during communicative interactions, why they do so, and the social consequences arising from doing so (Giles, Coupland, & Coupland, 1991; Muir, Joinson, Cotterill, & Dewdney, 2017). At the heart of CAT is the concept of accommodation (Gasiorek, 2015; Giles et al., 1991). Previous research has investigated accommodation from many perspectives and shown that accommodation could occur in terms of verbal (e.g., language, information density), paraverbal (e.g., utterance length, speech rate, accent, vocal intensity, pausing frequencies and lengths), and non-verbal (e.g., gesture, head nodding and facial affect, posture, smiling, and gaze) communicative features, as well as discursive social interaction dimensions (e.g., socioeconomic status and education) (Giles et al., 1991). According to CAT, there are two general accommodation strategies, namely, convergence and divergence (Giles et al., 1991; Muir et al., 2016). Convergence (later refers as accommodation) is a strategy whereby people adjust their communication behaviors to become more similar to their interlocutors, typically adopted to seek social approval, affiliation, and interpersonal similarity as well as reduce social distance (Giles et al., 1991; Giles, 2008). Conversely, divergence (later refers as nonaccommodation) is a strategy in which people accentuate differences between themselves and their interlocutors in communication behaviors, and often motivated by the

desire to emphasize the distinctiveness from one's interlocutor, highlight contrasting identities, and increase social distance (Giles et al., 1991; Giles & Gasiorek, 2014). One core concept of the CAT is that the perception of convergence (or accommodation) could induce positive evaluations of the communication (e.g., message agreement, persuasiveness, and communication satisfaction), the interlocutor (e.g., credibility, trust, sociability, and attractiveness), and the relationship (e.g., relational satisfaction, closeness, common identity, and intimacy) (Giles et al., 1991; Atamturk, Atamturk, & Dimililer, 2017). This concept was confirmed by a recent meta-analysis of 149 empirical research on CAT that was published between 1970 and 2010 (Muir et al., 2017; Soliz & Giles, 2014).

Since its infancy, the CAT has attracted much attention from researchers and, thus, been extended and elaborated for a number of times, and applied to many research areas (e.g., education, culture, media, legal, and business) and contexts (e.g., interpersonal, intergroup, and inter/intra-generation). Although its early focus was mainly on traditional face-to-face communications, the CAT has been employed by research on computer-mediated-communication (CMC) as a solid theoretical foundation as well (Muir et al., 2017). Unlike traditional face-to-face communications, where message could be transmitted through verbal, para-verbal and non-verbal cues, CMC (e.g., email, instant messaging, SMS, etc.) is mainly dependent on the verbal cues (Muir et al., 2017; Kurtzberg et al., 2009; Walther, 2012), and due to which, the CMC research that employs CAT has mainly focused on the accommodation of language and addressed two broad topics, that is, the occurrence of language accommodation in CMC and its corresponding consequences. Research on the former has identified that language accommodation exists in various CMC contexts, such

as email (Bunz & Campbell, 2004; Crook & Booth, 1997), instant messaging (Riordan, Markman, & Stewart, 2013; Scissors, Gill, & Gergle, 2008; Scissors, Gill, Geraghty, & Gergle, 2009), online forum (Danescu-Niculescu-Mizil, West, Jurafsky, Leskovec, & Potts, 2013; Wang, Reitter, & Yen, 2014; Welbers & de Nooy, 2014), Twitter (Danescu-Niculescu-Mizil, Gamon, & Dumais, 2011), online review sites (Michael & Otterbacher, 2014), and virtual teams (Wang & Fussell, 2010; Yilmaz, 2016). For example, Riordan et al. (2013) found that communication convergence in instant messaging conversations occurs both lexically and structurally (i.e., in terms of message length and response times), and such convergence is influenced by interpersonal characteristics (i.e., level of disagreement, experience with IM, length of relationship) and conversation types (task-oriented vs. social). Welbers & de Nooy (2014) found that online forum posters adjust their linguistic style (regarding the use of emoticons and Arabic words) in accordance with both previous posters within the same thread and previous posts in other threads within the same topic. By analyzing the reviews of tourist attractions at TripAdvisor, Michael & Otterbacher (2014) found that reviewers' linguistic style (i.e., pronoun use, informal language, markers of dialect, and review length) is affected by that of preceding reviews. By analyzing 215,000 conversations between the 2,200 pairs of Twitter users, Danescu-Niculescu-Mizil et al. (2011) found that linguist style accommodation also happens in Twitter conversation. Bunz & Campbell (2004) found that language accommodation (regarding politeness) occurs in e-mail communications. Wang, Reitter, & Yen (2014) found that language alignment occurs in the online community. Wang & Fussell (2010) found that language accommodation occurs in online multicultural multiparty brainstorming. Despite the existence of language accommodation in CMC, research also

identified that users' language accommodation in online communities is not an everlasting behavior; rather, it has a lifecycle. For example, Danescu-Niculescu-Mizil et al. (2013) found that users' language accommodation is related to their engagement behavior in online communities. According to them, users' engagement in online community follows a determined lifecycle, which is reflected concerning their linguistic accommodation behavior. Users first actively accommodate their language in accordance with the language of the online community; then, after maximum synchrony reaches, the language divergence between the user and community forms and increases until the user abandons the site. Similar language accommodation decay was also found by Wang, Reitter, & Yen (2014).

Similar to the CAT research on traditional face-to-face communications, CMC research has identified that language accommodation in CMC often resulted in positive perceptions of the interlocutor as well as the relationship. Crook & Booth (1997) found that language accommodation (i.e., use of the verb, adjective, and adverbial words) in e-mail can enhance the rapport between communicators. Scissors et al. (2008) and Scissors et al. (2009) found that linguistic similarity (regarding the use of positive emotion words, task-related words, verb tense, phrasal entrainment, and emoticons) can enhance trust between interlocutors in IM communication. Huffaker, Swaab, & Diermeier (2011) and Swaab, Maddux, & Sinaceur (2011) found that linguistic and assent convergence can increase agreements between potential coalition partners in online multiparty negotiations. Ludwig et al. (2013) found that linguistic style matching between an online product review and the interest group is positively related to conversion rates. Steinmann, Mau, & Schramm-Klein (2015) found that personalized communication style used by the brand to interact with online

consumption community members can enhance the members' evaluation of brand and community as well as increase their purchase intention. Yilmaz (2016) found that linguistic style matching among members can increase the virtual teams' group performance. Muir et al. (2017) found that linguistic style accommodation over CMC shapes recipient's impression (i.e., attractiveness and rapport) of the speaker, but the effects depend on the conversational norms of social context. Otterbacher, Ang, Litvak, & Atkins (2017) found that linguistic mimicry is effective for fostering empathy between interlocutors on Facebook. Specifically, using a casual and personal tone, through including "I", present-tense verbs, and markers of chat or Internet slang, in one's Facebook posts can lead to the "empathy symbiosis" with one's interlocutors, since it encourages mutual mimicry.

Combining the findings from previous research on brand language use and language accommodation in CMC, it is clear that 1) language plays a significant role in brand-to-consumer communication in a way that it can affect consumers' perception of, response to, and interaction with brands; and 2) language accommodation 'functions' (i.e., positively affect the evaluation of communication, interlocutor, and relationship) not only in traditional face-to-face communication but also in the context of the CMC. Brand posting is a form of brand-to-consumer communication that occurs in a CMC context, i.e., social media. While social media marketers are struggling with how to design brand posts to attract consumer engagement in social media, our review indicates that language matters. However, surprisingly, very little research has examined the impacts of the language used in brand posts on consumer engagement in the social media context (Gretry et al., 2017; Jakic et al., 2017; Ludwig et al., 2013; Swani et al., 2017). Recent research shows that

language indeed affects the result of brand-consumer communication in social media. For example, it has been found that language used by brands in their communication with consumers on social media impacts consumers' trust of the brand (Jakic et al., 2017; Gretry et al., 2017), and the psycholinguistic style of social media posts can be used as a useful learning feature to predict engagement with the posts (Hwong, Oliver, Van Kranendonk, Sammut, & Seroussi, 2017; Lee et al., 2018).

Therefore, in this paper, we investigate the impacts of linguistic styles of brand posts on consumer engagement in the social media context. Given the explosive proliferation of social media, the audience of one brand is often at the million-level, across various languages and cultures, and all over the world. It is challenging (if not impossible) and cost-intensified for brands to adjust their language to the consumer segments with regards to each of their linguistic styles. Drawing on the CAT, we propose that adapting to a general social media linguistic style in brand posts could be an efficient and practical approach to enhance consumer engagement in social media.

2.2.3 Linguistic Style and Social Media Language

What is the style of social media language? Although at first glance, the question is too broad to answer, it was once explored by early online language researchers at an even broader context (i.e., Internet language or CMC language) and under a reframed question, whether Internet language is closer to speech or writing (Thelwall, 2009). The difference between speech and writing has been investigated by linguists since the infancy of the linguistics. After decades of exploration, many main differences have been identified.

Specifically, regarding linguistic style, speech is social-oriented, less formal, less complex, less structured, and more spontaneous, while writing is information-oriented, more formal, more complex, more structured, and more planning (Baron, 2003, Crystal, 2011). Through comparison with speech and writing, the research found that different Internet languages (e.g., web, email, blogging, social networking sites, and microblogging) vary concerning their similarities with speech and writing (Barton & Lee, 2013; Crystal, 2006). Specifically, at one extreme, the web is more similar to writing, while, at the other extreme, microblogging and social networking sites are more similar to speech (Barton & Lee, 2013).

Recently, with the development of computational linguistics, researchers started to examine social media linguistic style at more detailed levels. Generally speaking, the linguistic style can be measured at two levels. At a word level, linguistic style can be determined by examining the use of style words (Ireland et al., 2011; Ludwig et al., 2013; Niederhoffer & Pennebaker, 2002). According to Tausczik & Pennebaker (2010), there are two broad categories of words, namely, content words and style words. Content words are generally nouns, regular verbs, and many adjectives and adverbs and are used to convey the content of a communication, while style words include pronouns, prepositions, articles, conjunctions, auxiliary verbs, and a few other esoteric categories and reflect one's communication style (Tausczik & Pennebaker, 2010). At a feature level, linguistic style can be described regarding the intuitive message characteristics, such as informality, emotionality, and complexity (Hu, Talamadupula, & Kambhampati, 2013; Lee & Kahle, 2016; Paris, Thomas, & Wan, 2012). Usually, these characteristics are evaluated either by examining more basic message characteristics (e.g., use of abbreviations and emoticons,

word length, the existence of wrong-typed words, etc.) or, sometimes, through human interpretations (e.g., human coders coding regarding the extent of the message characteristics). These research indicated that social media language is both heterogeneous and homogeneous. On the one hand, social media language varies with medium and situational factors, such as gender (Bamman, Eisenstein, & Schnoebelen, 2014; Schwartz et al., 2013), age (Nguyen, Gravel, Trieschnigg, & Meder, 2013; Subramaniam & Razak, 2014), geolocation (Huang et al., 2016), and social media platforms (Hu et al., 2013; Kadir, Idris, & Husain, 2012; Paris et al., 2012). On the other hand, some structural language features (e.g., informal, less complex, emotional, spontaneous) are broadly observed across social media regardless of the medium and situational factors, showing that social media language is, in general, casual and conversation-like (Baron, 2003; Herring, 2007; Walther, 2012; Muresan, Gonzalez-Ibanez, Ghosh, & Wacholder, 2016; Paris et al., 2012; Thelwall, 2009).

Previous research on brand-consumer relationships has shown that brand anthropomorphism often underlies consumers' responses to brand communication; that is, consumers tend to interact with brands in the similar ways as with their interpersonal relationships and use norms of social relationships to guide their interactions with brands (Aggarwal, 2004; Aggarwal & McGill, 2007; Aggarwal & McGill, 2012; Fournier, 1998; Sela, Wheeler, & Sarial-Abi, 2012). Although most of these research was conducted in an offline communication context (e.g., advertising), in social media, due to the naturally interactive context where brand-consumer interaction largely resembles interpersonal interactions, brand anthropomorphism is even more likely to occur naturally and brand

communications are more likely to be treated as interpersonal communications (Gretry et al., 2017). Consequently, in brand-consumer communications on social media, consumers will expect brands to respect the social norms and ‘talk’ as if their other interpersonal relationships do (Kwok & Yu, 2013). Therefore, it is reasonable to assume that adopting a casual communication style in brand posting could obey consumers’ perception of social media norms, fulfill the consumers’ expectation, and, thus, enhance the consumer engagement. In this paper, we will examine the impact of adopting a casual communication style in brand posts on consumer engagement in the social media context.

2.3 Hypotheses Development

Emotionality

Emotionality refers to the emotion expressed by brand posts. As an internal state, emotion can be contagious. Evidence from animal research, developmental research, clinical research, social psychology, sociology, and psychophysiology suggests that, from moment to moment, people can and do indeed feel and catch one another’s emotions (Hatfield, Cacioppo, & Rapson, 1992; Hatfield, Cacioppo, & Rapson, 1993). This phenomenon was later named as emotional contagion effect. Emotional contagion is “*the tendency to automatically mimic and synchronize movements, expressions, postures, and vocalizations with those of another person and, consequently, to converge emotionally*” (Hatfield et al., 1992, pp. 153-154). Dependent on research on emotional contagion, marketing researchers investigated the effect of emotion in marketing communication, and found emotion expressed in a brand communication (e.g., advertising, service encounter) can affect how the communication is processed, and, thus, influence the effects of the communication

(Batra & Stayman, 1990; Edell & Burke, 1987; Percy, 2012; Morris, 2012). While, at an early stage, emotional contagion effect has been investigated regarding verbal, para-verbal, and non-verbal communications and mainly studied in a face-to-face context, it can happen via verbal communication solely and in CMC as well (Hancock, Gee, Ciaccio, & Lin, 2008). Research on emotional contagion in CMC found that emotional face-to-face communications and CMC are very similar, and, probably the only difference is that there are more frequent and explicit emotion expressions in CMC than face-to-face communications (Derks, Fischer, & Bos, 2008). For example, in social media contexts, when consumers are exposed to positive messages, emotional contagion can take place and lead them to experience the same positive emotions (Chen, Kim, & Lin, 2015; Kramer, Guillory, & Hancock, 2014). Besides, previous research has shown that, in CMC, emotionally-charged messages (e.g., using emotional words) can trigger more cognitive involvement (e.g., attention) (Bayer, Sommer, & Schacht, 2012; Kissler, Herbert, Peyk, & Junghofer, 2007; Smith & Petty, 1996) and higher psychological arousal (Berger, 2011; Berger & Milkman, 2012), which, in turn, can impact the message receivers' feedback and reciprocity (Dang-Xuan & Stieglitz, 2012; Huffaker, 2010; Stieglitz & Dang-Xuan, 2012), participation (Joyce & Kraut, 2006), and social sharing behavior (Heath, 1996; Luminet IV, Bouts, Delie, Manstead, & Rimé, 2000; Peters, Kashima, & Clark, 2009; Rimé, 2009; Kim & Johnson, 2016). For example, Phelps, Lewis, Mobilio, Perry, & Raman (2004) found that emails that spark strong emotions are likely to be forwarded. Schindler & Bickart (2012) found that positive emotion is related to consumers' perception of online review helpfulness. Stieglitz & Dang-Xuan (2013) found that tweets with emotion are likely to be shared more often and more quickly than neutral ones. Kim & Johnson (2016)

found that emotion in brand-related user-generated content on Facebook has an impact on consumers' emotional response, which, in turn, influences consumers' willingness to pass along the information and brand engagement. Furthermore, research on consumer engagement with brand posts has suggested that using emotional appeals in brand posts can enhance consumer engagement (e.g., number of likes, shares, and comments) (Coursaris, van Osch, & Balogh, 2016a; Lee et al., 2018; Swani et al., 2013; Swani & Milne, 2017). Therefore, we derive the following hypothesis:

H1: Emotionality of brand posts is positively related to consumer engagement.

H1a: The percent of positive emotional words in brand posts is positively related to consumer engagement.

H1b: The percent of negative emotional words in brand posts is positively related to consumer engagement.

Complexity

Message complexity refers to the extent to which a message is complex. It suggests the effort required by message receivers to read and understand the message (Arguello et al., 2006). A similar, but conversely, concept is readability, which is defined as the ease to read and understand a message (Agnihotri & Bhattacharya, 2016; Dubay, 2004; Zakaluk & Samuels, 1988). Complexity and readability are two variables that contrarily measure the same characteristic of a message. Specifically, the more difficult a message is to be processed cognitively, the higher the message complexity and the lower the readability. Previous research has shown that complexity has an impact on the consumers' perception

and can influence the persuasion of the advertising (Burgers, Konijn, Steen, & Iepma, 2015; Chatterjee, 2012; Cox & Cox, 1988). Furthermore, research on eWOM has found that complexity is negatively related to the perceived helpfulness and thus can decrease the persuasion of online reviews (Ghose & Ipeirotis, 2011; Hlee, Lee, Yang, & Koo, 2016; Kang & Zhou, 2016; Korfiatis, García-Bariocanal, & Sánchez-Alonso, 2012; Liu & Park, 2015; Park & Nicolau, 2015). However, research has shown some mixed results regarding the polarity of the impact of complexity; that is, complexity is not always negatively related to message persuasion. More specifically, research has identified a curvilinear relationship (an inverted U-curve) between complexity and persuasion, which suggested that resource matching theory might be appropriate to explain the role of complexity (Burgers et al., 2015). According to resource matching theory (Anand & Sternthal, 1989; Anand & Sternthal, 1990), most persuasion can be reached when the cognitive resource needed to process a message matches with the resource that is available to the message recipient so that the recipient can process the message with relative ease and pleasure (Burgers et al., 2015; Huhmann & Albinsson, 2012). In the case of social media, where information overload is ubiquitous, consumers are more likely to process social media content under low involvement/attention conditions without spending too many cognitive resources (Ashley & Tuten, 2015; Gomez-Rodriguez, Gummadi, & Schoelkopf, 2014; Gilliland & Johnston, 1997; Jensen & Jepsen, 2007). This is even true when consumer process the brand posts on social media. The recent finding that shorter Facebook posts can receive more engagement also suggests that the complexity might decrease consumer engagement (Buddy Media, 2011; Lee et al., 2018). Besides, research has shown that users are more

likely to respond to simpler messages in overload mass interaction (Arguello et al., 2006; Jones, Ravid, & Rafaeli, 2004). Therefore, we derive the following hypothesis:

H2: Complexity of brand posts is negatively related to consumer engagement.

Informality

Informality (vs. formality) of communication is a concept that has been widely addressed topic in sociolinguistics (Baron, 2003; Irvine, 1979). An informal communication style, according to McArthur (2003), is “*common, non-official, familiar, casual, and often colloquial, and contrasts in these senses with formal*”. The difference between informality and formality is often defined in accord to the difference between spoken and written languages (Ruekert & Walker Jr., 1987). More specifically, informality is often associated with spoken language and featured as a conversational style, while formality is usually related to written language (Biber, 1986; Fairclough, 1994). In the social media contexts, informality is related to many linguistic features, such as abbreviations (e.g., LOL for ‘laughing out loud’, OMW for ‘on my way’), emojis (e.g., 😊, 😂, ❤️), or non-standard spellings (e.g., hv for ‘have’, msg for ‘message’), contractions (e.g., *don’t*, *can’t*, and *it’s*), and personal pronouns (e.g., *we*, *you*, and *us*) (Mosquera & Moreda, 2012a & 2012b; Michael & Otterbacher, 2014; Gretry et al., 2017). For example, brand post, “You go, ghou! 🧛🍷 Zombie Frappuccino available in U.S. & Canada while supplies last!” [Starbucks Facebook page, on October 26, 2017, at 9:01 am], is more informal than the post, “Look what we caught under the mistletoe. Have you tried our Peppermint Mocha Latte?” [Tim Hortons Facebook page, on December 13, 2017, at 1:31 pm]. Sociolinguistics

research has suggested that the communication style (formal vs. informal) used by the communicators can reflect their perceptions of social norms and the relationship with the interlocutors, which in turn affect the interlocutors' response and the effects of the communication (see Giles & Sassoon, 1983; Irvine, 1979; Lenoir, Puntoni, & van Osselaer, 2014; Mallett & Wapshott, 2014; Otterbacher et al., 2017; Pérez-Sabater, 2013; Peterson, Hohensee, & Xia, 2011; Rennekamp & Witz, 2017; Scott, Sinclair, Short, & Bruce, 2014; Waldeck, Kearney, & Plax, 2001). For example, informal style is often used by communicators to convey an interpretation of closeness with their audience. Besides, research has suggested that the informal communication style can soften the hierarchical power relationships, reduces social distance between communicators, and thus can enhance the relationships (Delin, 2005; Gretry et al., 2017). While very little research has examined the impact of informality of brand communication on consumer engagement in social media contexts, much research has suggested that communicating in a conversational style can enhance consumers' interactivity with brand and in turn increase their evaluation of brand (Jakic et al., 2017; Kelleher, 2009; Kelleher & Miller, 2006; Searls & Weinberger, 2000; Beukeboom, Kerkhof, & de Vries, 2015). Furthermore, it has been proposed that communication strategy should fit the conditions of marketing channels (Mohr & Nevin, 1990). According to Mohr & Nevin (1990), in channels with conditions of relational structures, supportive climates, or symmetrical power, a collaborative communication strategy (e.g., high frequency, bidirectional flows and informal modes) could be employed to enhance the channels' coordination, satisfaction, commitment, and performance. The social media context has been identified to be relation-oriented (Chu & Kim, 2011; Fournier & Avery, 2011; Dholakia et al., 2004), supportive (Chen, Yen, & Hwang, 2012),

and brand-consumer interaction in social media has been described to be symmetrical regarding power (Hutter et al., 2013; Constantinides & Fountain, 2008). Therefore, a collaborative communication strategy (e.g., conversational, informal) should be employed by a brand to enhance the communication effects, such as consumer engagement. Thus, we derive the following hypothesis:

H3: Informality of brand posts is positively related to consumer engagement.

2.4 Methodology

2.4.1 Data Collection

A field study was conducted to test the hypotheses mentioned above. The field study is a research investigation “*of naturally occurring everyday events*” (Singleton Jr. & Straits, 2010, p. 354). It is defined as the systematic studies that “*rely on the collection of original data - qualitative or quantitative - in real organizations*” (Edmondson & McManus, 2007, p.1155) and aim to “*build a general, abstract understanding of social phenomena*” (Singleton Jr. & Straits, 2010, p. 354). In this paper, we investigated the impacts of brand post linguistic styles (i.e., emotionality, complexity, informality) on consumer engagement in the context of Facebook brand pages. Facebook is the most popular social network worldwide, with 2.32 billion global monthly active users, of which, 1.52 billion users visit Facebook on a daily basis (as of the fourth quarter of 2018) (Statista, 2018a & 2018b). Given its massive user community, Facebook provides a platform where brands can enhance presence, communicate with consumers, and build consumer communities. On Facebook, brands mainly interact with consumers through creating *pages* and posting

contents (e.g., products/services update, offers, events, or simply entertaining things) in many formats (e.g., text, image, video, gif, URL, hashtag) on the *pages*. Consumers who are interested in a brand can follow the brand by ‘*like*’ its *page(s)*, and once a consumer *like* a brand *page*, the contents posted by the brand will occur in his/her *wall* as the *news feed*. Consumers can interact with a brand by *like*, *comment* on, or *share* the contents posted by the brand, and, depending on the communication policy set by the brand, consumers can even post contents on the brand *page* by themselves. Each time a consumer interacts (i.e., *like*, *comment* on, *share*) with a brand post, the interaction will appear on the *walls* of the consumer’s Facebook friends; thus, the interaction is similar to an eWOM communication. More than 80 million businesses have created their brand pages on Facebook (Cooper, 2018), which makes Facebook the most popular social media marketing communication channel worldwide. Besides, since Facebook brand pages provide a natural setting where researchers can observe brand-consumer interactions in an unobtrusive way, much previous research has selected the Facebook brand pages as a research context (see Coursaris et al., 2016a; Cruz et al., 2017; Cvijikj & Michahelles, 2013; de Vries et al., 2012; Kim et al., 2015; Kwok & Yu, 2013; Lee et al., 2018; Lei, Pratt, & Wang, 2017; Luarn, Lin, & Chiu, 2015; Sabate, Berbegal-Mirabent, Cañabate, & Leberherz, 2014; Schultz, 2017; Swani et al., 2013; Swani & Milne, 2017; Swani et al., 2017; Wagner et al., 2017). Following previous research, in this paper, we conducted the field research in the context of the Facebook brand page as well.

We employed the Facebook Graph API (i.e., application programming interface) to collect a sample of brand posts. Previous research on consumer engagement with brand posts on

social media has selected brands either using a purposefully sampling strategy (e.g., selecting specific industries or brands) (see Coursaris et al., 2016a; Cruz et al., 2017; Cvijikj & Michahelles, 2013; de Vries et al., 2012; Swani et al., 2017; Wagner et al., 2017) or following available brand ranking lists, such as the Fortune 500 (see Swani et al., 2013; Swani & Milne, 2017), the Forbes 100 World's Most Valuable Brands (see Gretry, 2017), and the Interbrand 100 Best Global Brands (see Kim et al., 2015). In this paper, we created a brand list by combining the Forbes's 100 World's Most Valuable Brands in 2017 and the Interbrand's 100 Best Global Brands in 2017 and use the brands from the new list for future analysis. We exclude the Fortune 500 list for two reasons. First, since the Fortune 500 list only ranks the US public companies, it cannot provide global coverage. Second, many companies in the Fortune 500 list are B2B companies, which might be passive in engaging with consumers on social media. In total, the new list includes 131 global brands. After excluding the brands that did not have a Facebook page, did not post any contents during our data collection periods, or did not post in English, we got 124 brands. We also excluded four media brands since their posts are mainly news. Finally, we got 120 brands, which represents 18 industries, such as automotive, technology, and luxury. For brands with multiple Facebook pages, only the official page with the most fans was selected for data collection. The complete list of the 120 brands and additional brand (and its page) information is shown in Appendix 1.

Netvizz, a free application that extracts data from Facebook, was used to collect data (Rieder, 2013). We limited our data collection from 2017 and beyond to reduce the possible noise resulting from the platform changes made by Facebook. For each brand, we collected

the brand posts updated between June 1, 2017 and November 30, 2017. For brand pages that consumers are allowed to post on, only posts posted by brands were collected. Data collection was conducted on January 15, 2018, which is one and half months (at least) from the actual posting time, to filter out the possible change in consumer engagement after being recorded (Kim et al., 2015; Sabate et al., 2014; Wagner et al., 2017). In total, we got 16,234 posts. Then we removed the automatically updated posts (e.g., *brand xx updated their cover photo/profile picture*, *brand xx added a new photo/cover video*, and *brand xx shared yy's post/video/photo*), posts that are not in English, and posts without text messages and got 15,496 posts as our final dataset.

2.4.2 Operationalization of Variables

Independent variables

Emotionality

Linguistic Inquiry and Word Count (LIWC) was used to determine the use of positive and negative emotional words in brand posts. LIWC is a text analysis software that has been widely adopted in linguistic research. It can be used to determine the presence or absence of many types of style words such as affective psychological processes (e.g., positive emotion, negative emotion), perceptual processes (e.g., see, hear, and feel), and time orientations (e.g., past focus, present focus, and future focus) (Pennebaker, 2011). LIWC includes a dictionary of emotional words and can identify different types of emotions in the text. Based on the analysis of LIWC, we created two variables to respectively indicate the percentages of positive and negative emotional words in the brand posts.

Complexity

At the linguistic level, complexity can be measured either through some basic linguistic features, such as, word counts, message line counts, percentage of long words (e.g., words with six or more characters) (Arguello et al., 2006; Jones et al., 2004; Lee et al., 2018), or via many readability indexes, such as Automated Readability Index (ARI; Senter & Smith, 1967), Flesch Reading Ease Index (FRE; Flesch, 1948), Coleman-Liau Index (CLI; Coleman & Liau, 1975), FOG Index (FOG; Gunning, 1969), and Simple Measure of Gobbledygook Index (SMOG; Mc Laughlin, 1969). In this paper, we measured the complexity of brand posts using linguistic features for two reasons. First, the readability indexes were developed mainly within the context of long and more formal texts and, to the best of our knowledge, little research has tested their validity in measuring the readability of social media posts that are short and less formal. Second, the readability indexes overlooked the specific social media characteristics (e.g., use of #, use of @, etc.) that impact the complexity of the post. Based on previous research (see Arguello et al., 2006; Gretry, 2017; Jones et al., 2004; Lee et al., 2018; Temnikova, Vieweg, & Castillo, 2015; Venturi et al., 2015), we measured complexity in terms of five post features: 1) post length (total number of words per post); 2) average sentence length (average number of words per sentence); 3) percentage of long words (words that are six or more characters); 4) percentage of hashtags; 5) percentage of at-mentions.

Informality

Little previous research has examined how to measure the informality of social media texts. However, previous research has summarized some linguistic and social media content

features of informal social media posts (Gretry et al., 2017; Mosquera & Moreda, 2012a; Mosquera & Moreda, 2012b; Peterson et al., 2011). In line with previous research, we selected four linguistic features that are common in brand social media posts, namely, 1) emojis (e.g., 😊, 😍, 🌟, and 🎉), 2) contractions (e.g., “that’s”, “you’re”, and “we’re”), 3) informal punctuations (e.g., “...” and “!”), and 4) personal pronouns (e.g., we, us, you), and created four variables to correspondingly measure these features (see Table 2.1).

Dependent variables

Consumer Engagement

We measured the consumer engagement with a brand post using the popular social media metrics, namely, the number of likes, shares, and comments the post received. Previous research either treated the liking, sharing, and commenting as three types of consumer engagement and measured and analyzed them respectively (see de Vries et al., 2012; Kim et al., 2015; Lee et al., 2018; Lei et al., 2017; Luarn et al., 2015; Sabate et al., 2014; Schultz, 2017; Swani & Milne, 2017; Swani et al., 2017; Wagner et al., 2017) or created a new variable to measure consumer engagement by combining the number of likes, shares, and comments together (see Coursaris et al., 2016a; Cruz et al., 2017; Kwok & Yu, 2013). In this paper, we treated the liking, sharing, and commenting respectively for two reasons. First, previous research has shown that antecedents of liking, sharing, and commenting might be different, thus, it is necessary to treat and examine them as different types of consumer engagement (de Vries et al., 2012; Kim et al., 2015; Lei et al., 2017; Wagner et al., 2017). Second, the findings can be more insightful if we analyze the liking, sharing, and commenting respectively. Since we collected our data one and a half month (at least)

later than the actual posting date, our data should represent the final value of consumer engagement. While different brand pages have different numbers of followers and posts updated by brands with more followers might generate more consumer engagement than those with fewer followers, we controlled for the impact of follower size by using the relative rather than the absolute number of likes, shares, and comments. We created three variables to correspondingly measure likes, shares, and comments.

Control variables

The control variables include industry, posting time (i.e., weekend vs. weekday), and post media type. We selected these variables based on the findings of previous research. First, in line with previous research, we controlled for the industry since consumers tend to be more engaging with brands in some industries than those in others (de Vries et al., 2012; Schultz, 2017). Second, we controlled for the posting time. Previous research has shown that Facebook users are more active during the weekday than weekend (Golder, Wilkinson, & Huberman, 2007; Wagner et al., 2017). Therefore, consumers might be more engaged with brand posts on weekday than weekend. Recent research has shown some controversial results regarding the impact of posting time on consumer engagement with brand posts, that is, some found such impact (Cvijikj & Michahelles, 2013; Wagner et al., 2017) while others did not (Sabate et al., 2014; Schultz, 2017). To rule out the potential confounding effects, in this paper, we controlled for the posting time by creating a dummy variable to indicate whether a post was updated during weekday or weekend. Third, we controlled for the post type (i.e., status, link, photo, video, and event) since different post types generate different levels of media richness and interactivity, which, in turn, can influence the

consumer engagement with brand posts (Cvijikj & Michahelles, 2013; de Vries et al., 2012; Lei et al., 2017; Luarn et al., 2015; Kim et al., 2015; Kwok & Yu, 2013; Schultz, 2017).

Table 2.1 shows the variables, their operationalization, and data sources.

Table 2.1 Variable, Operationalization, and Data Source

Variable	Notation	Operationalization	Variable Type	Data Source
Dependent Variables				
<i>Consumer Engagement</i>				
Like	<i>LIKE</i>	Number of likes received, divided by the number of followers of the corresponding brand, multiplied by 10,000	Continuous	Facebook
Share	<i>SHARE</i>	Number of shares received, divided by the number of followers of the corresponding brand, multiplied by 10,000	Continuous	Facebook
Comment	<i>COMMENT</i>	Number of comments received, divided by the number of followers of the corresponding brand, multiplied by 10,000	Continuous	Facebook
Independent Variables				
<i>Emotionality</i>				
Positive Emotion Words	<i>EMOT₁</i>	Number of positive emotional words divided by post length.	Continuous	LIWC

Negative Emotion Words	$EMOT_2$	Number of negative emotional words divided by post length.	Continuous	LIWC
<i>Complexity</i>				
Post length	$COMP_1$	Total number of words.	Continuous	LIWC
Average sentence length	$COMP_2$	Average number of words per sentence.	Continuous	LIWC
Long words	$COMP_3$	Number of words with 6 or more characters divided by post length.	Continuous	LIWC
Hashtag	$COMP_4$	Number of hashtags divided by post length.	Continuous	Computed
At-mention	$COMP_5$	Number of at-mentions divided by post length.	Continuous	Computed
<i>Informality</i>				
Emojis	$INFO_1$	Number of emojis divided by post length.	Continuous	Computed
Contractions	$INFO_2$	Number of contractions, e.g., “that’s”, “you’re”, divided by post length.	Continuous	Computed
Informal punctuations	$INFO_3$	Number of informal punctuations, i.e., “...”, “!”, divided by post length.	Continuous	Computed
Personal pronouns	$INFO_4$	Number of personal pronouns, e.g., “we”, “you”, divided by post length.	Continuous	LIWC
<hr/> Control Variables				
Posting time	$TIME$	Post updated on weekday or weekend.	Dummy	Facebook

Post type

Status	<i>(Referent)</i>	Status-type post.	Dummy	Facebook
Link	<i>TYPE₁</i>	Link-type post.	Dummy	Facebook
Photo	<i>TYPE₂</i>	Photo-type post.	Dummy	Facebook
Video	<i>TYPE₃</i>	Video-type post.	Dummy	Facebook
Event	<i>TYPE₄</i>	Event-type post.	Dummy	Facebook

Industry

<i>INDUSTRY₁</i>	Aerospace			
<i>INDUSTRY₂</i>	Alcohol		Dummy	Forbes
<i>INDUSTRY₃</i>	Apparel		Dummy	Forbes
<i>INDUSTRY₄</i>	Automotive		Dummy	Forbes
<i>INDUSTRY₅</i>	Beverages		Dummy	Forbes
<i>INDUSTRY₆</i>	Business Services		Dummy	Forbes
<i>INDUSTRY₇</i>	Consumer Packaged Goods		Dummy	Forbes
<i>INDUSTRY₈</i>	Diversified		Dummy	Forbes
<i>INDUSTRY₉</i>	Financial Services		Dummy	Forbes
<i>INDUSTRY₁₀</i>	Heavy Equipment		Dummy	Forbes
<i>INDUSTRY₁₁</i>	Leisure		Dummy	Forbes
<i>INDUSTRY₁₂</i>	Luxury		Dummy	Forbes
<i>INDUSTRY₁₃</i>	Oil & Gas		Dummy	Forbes
<i>INDUSTRY₁₄</i>	Restaurants		Dummy	Forbes
<i>INDUSTRY₁₅</i>	Retail		Dummy	Forbes
<i>INDUSTRY₁₆</i>	Technology		Dummy	Forbes
<i>INDUSTRY₁₇</i>	Telecom		Dummy	Forbes
<i>(Referent)</i>	Transportation		Dummy	Forbes

Table 2.2 Descriptive Statistics

Variable	Notation	Mean	SD	Minimum	Maximum
Dependent Variables					
<i>Consumer Engagement</i>					
Like	<i>LIKE</i>	6.97	83.70	0	5356.14
Share	<i>SHARE</i>	.61	4.58	0	291.12
Comment	<i>COMMENT</i>	.16	.84	0	42.81
Independent Variables					
<i>Emotionality</i>					
Positive Emotion Words	<i>EMOT₁</i>	.04	.05	0	.50
Negative Emotion Words	<i>EMOT₂</i>	.01	.02	0	.67
<i>Complexity</i>					
Post length	<i>COMP₁</i>	28.11	21.68	1	381
Average sentence length	<i>COMP₂</i>	12.13	6.64	1	61
Long words	<i>COMP₃</i>	.23	.11	0	1
Hashtag	<i>COMP₄</i>	.04	.07	0	1
At-mention	<i>COMP₅</i>	.00	.01	0	.33
<i>Informality</i>					
Emojis	<i>INFO₁</i>	.01	.14	0	10
Contractions	<i>INFO₂</i>	.02	.03	0	.50
Informal punctuations	<i>INFO₃</i>	.01	.03	0	1.50
Personal pronouns	<i>INFO₄</i>	.04	.05	0	.50
Control Variables					
<i>Posting time</i>	<i>TIME</i>	.18	.38	0	1
<i>Post media type</i>					
Status	<i>(Referent)</i>	.01	.08	0	1
Link	<i>TYPE₁</i>	.17	.37	0	1

Photo	<i>TYPE₂</i>	.45	.50	0	1
Video	<i>TYPE₃</i>	.38	.50	0	1
Event	<i>TYPE₄</i>	.00	.04	0	1

2.4.3 Data Analysis

Model Specification

Before presenting the model, we address some pertinent issues. First, because the three dependent variables (i.e., like, share, comment) are highly skewed, we used their naturally logarithmic transformations, i.e., $\ln(\text{like}+1)$, $\ln(\text{share}+1)$, and $\ln(\text{comment}+1)$, in the following data analyses, which is consistent with previous research (Cvijikj & Michahelles, 2013; de Vries et al., 2012; Gretry et al., 2017; Schultz, 2017). Here, we add 1 to avoid taking logs of 0. Second, because brand posts were nested within brands, we conducted examinations to determine whether to include a hierarchical structure in the regression analyses. Specifically, we conducted the regressions with and without the hierarchical structure and compared the results. The results revealed that including hierarchical structure in the regressions can significantly improve the fit of our model of like ($-2LL_{\text{without hierarchical structure}} = 41556.37$, $-2LL_{\text{with hierarchical structure}} = 34248.67$, $\chi^2_{\text{change}} = 7307.7$, $df_{\text{change}} = 1$, $p < .001$), model of share ($-2LL_{\text{without hierarchical structure}} = 17037.70$, $-2LL_{\text{with hierarchical structure}} = 13935.26$, $\chi^2_{\text{change}} = 3102.44$, $df_{\text{change}} = 1$, $p < .001$), and model of comment ($-2LL_{\text{without hierarchical structure}} = -1740.67$, $-2LL_{\text{with hierarchical structure}} = -3437.52$, $\chi^2_{\text{change}} = 1696.85$, $df_{\text{change}} = 1$, $p < .001$). Moreover, the intra-class correlation (ICC) measures indicate that 46%, 27%, and 19% of the total variances in the number of likes, shares, and comments, respectively, was accounted for by differences between brands ($ICC_{\text{like}} = .46$; $ICC_{\text{share}} = .27$; ICC_{comment}

= .19; Hayes, 2006). These results affirmed the need to include the hierarchical structure in the regressions (Hayes, 2006; Kenny & Judd, 1986). Thus, following Hayes's (2006) recommendations, we conducted the data analyses by running the regressions with the hierarchical structure using group-mean centered predictors. The statistical models for the brand post i by brand j (using number of likes as an example) are:

Post Level 1:

$$(1) \text{Ln}(\text{LIKE}_{ij}+1) = \beta_{0j} + \sum_{f=1}^2 \beta_{fj} \text{EMOT}_{fij_GMC} + \sum_{g=1}^5 \beta_{(g+2)j} \text{COMP}_{gij_GMC} + \sum_{h=1}^4 \beta_{(h+7)j} \text{INFO}_{hij_GMC} + \beta_{12j} \text{TIME}_{ij} + \sum_{m=1}^4 \beta_{(m+12)j} \text{TYPE}_{mij} + \sum_{n=1}^{17} \beta_{(n+16)j} \text{INDUSTRY}_{nij} + \varepsilon_{ij}$$

Brand Level 2:

$$(2) \beta_{0j} = \gamma_{00} + \sum_{f=1}^2 \gamma_{0f} \overline{\text{EMOT}_{fj}} + \sum_{g=1}^5 \gamma_{0(g+2)} \overline{\text{COMP}_{gj}} + \sum_{h=1}^4 \gamma_{0(h+7)} \overline{\text{INFO}_{hj}} + \mu_{0j}$$

$$(3) \beta_{fj} = \gamma_{f0}, \text{ with } f \text{ ranging from 1 to 2}$$

$$(4) \beta_{(g+2)j} = \gamma_{(g+2)0}, \text{ with } g \text{ ranging from 1 to 5}$$

$$(5) \beta_{(h+7)j} = \gamma_{(h+7)0}, \text{ with } h \text{ ranging from 1 to 4}$$

$$(6) \beta_{12j} = \gamma_{120}$$

$$(7) \beta_{(m+12)j} = \gamma_{(m+12)0}, \text{ with } m \text{ ranging from 1 to 4}$$

$$(8) \beta_{(n+16)j} = \gamma_{(n+16)0}, \text{ with } n \text{ ranging from 1 to 17}$$

Then, the final model can be written as follows:

$$\begin{aligned}
(9) \text{ Ln(LIKE}_{ij}+1) = & \gamma_{00} + \sum_{f=1}^2 \gamma_{0f} \overline{\text{EMOT}}_{fj} + \sum_{g=1}^5 \gamma_{0(g+2)} \overline{\text{COMP}}_{gj} + \\
& \sum_{h=1}^4 \gamma_{0(h+7)} \overline{\text{INFO}}_{hj} + \sum_{f=1}^2 \gamma_{f0} \text{EMOT}_{fij_GMC} + \\
& \sum_{g=1}^5 \gamma_{(g+2)0} \text{COMP}_{gij_GMC} + \\
& \sum_{h=1}^4 \gamma_{(h+7)0} \text{INFO}_{hij_GMC} + \gamma_{120} \text{TIME}_{ij} + \sum_{m=1}^4 \gamma_{(m+12)0} \text{TYPE}_{mij} + \\
& \sum_{n=1}^{17} \gamma_{(n+16)0} \text{INDUSTRY}_{nij} + \varepsilon_{ij} + \mu_{0j}
\end{aligned}$$

where

$\text{Ln(LIKE}+1)$: logarithm transformation of the variable Like

EMOT_{f_GMC} : group-mean centered measure of the f^{th} emotionality variable

COMP_{g_GMC} : group-mean centered measure of the g^{th} complexity variable

INFO_{hij_GMC} : group-mean centered measure of the h^{th} informality variable

TIME: posting time variable

TYPE_m : dummy variable of the post type

INDUSTRY_n : dummy variable of industry

f: number of emotionality variables

g: number of complexity variables

h: number of informality variables

γ_{00} : brand-level intercepts

γ : parameters to be estimated

ε_{ij} : random error at the tweet level

μ_{0j} : random error at the brand level

Model Results

The estimation results are presented in Table 2.3. We can see from Table 2.3 that many brand posts' linguistic characteristics significantly impact consumer engagement, but the effects vary regarding the three types of consumer engagement (i.e., like, share, comment). Since our focus of analysis is on the within-group effects of brand linguistic styles, in the following section, we will primarily discuss the findings at the post level.

Emotionality

In terms of emotionality, the results revealed that the emotionality of brand posts is significantly related to the number of likes. Specifically, in support of H1a, using positive emotional words significantly increases the number of likes ($\gamma_{\text{Like, EMOT}_1\text{GMC}} = .26, p < .05$). However, different from our expectation, using negative emotional words significantly decreases the number of likes ($\gamma_{\text{Like, EMOT}_2\text{GMC}} = -1.13, p < .001$), thus, not supporting H1b. Our results indicated that consumers are influenced by the emotionality of brand posts, thus, showed that the emotional contagion effect exists in the non-concurrent F2C communications. Previous research has found that the emotional message can trigger more engagement (Bayer, Sommer, & Schacht, 2012; Kissler, Herbert, Peyk, & Junghofer, 2007; Smith & Petty, 1996; Stieglitz & Dang-Xuan, 2013). Built upon previous research, our results revealed that positive and negative emotional words have contrary effects on consumer engagement, indicating a need for further examination of the effects of positive and negative emotions on consumer engagement. The results did not reveal any significant relationships between the emotionality and the number of shares

($\gamma_{\text{Share, EMOT1_GMC}} = -.01, p > .10$; $\gamma_{\text{Share, EMOT2_GMC}} = -.04, p > .10$) or comments ($\gamma_{\text{Comment, EMOT1_GMC}} = -.02, p > .10$; $\gamma_{\text{Comment, EMOT2_GMC}} = -.10, p > .10$). One possible explanation is that, compared to *liking*, *sharing* and *commenting* are more cognitive-loaded activities that require the high level of involvement; thus, they need stronger stimuli than emotionality of brand posts to be triggered.

Complexity

In terms of complexity, the results revealed that the post length ($\gamma_{\text{Like, COMP1_GMC}} = -.00, p < .01$), the average sentence length ($\gamma_{\text{Like, COMP2_GMC}} = -.01, p < .001$), the hashtags ($\gamma_{\text{Like, COMP4_GMC}} = -.50, p < .001$), and the at-mentions ($\gamma_{\text{Like, COMP5_GMC}} = -.227, p < .001$) significantly and negatively impact the number of likes. The effect of long words on the number of likes is not significant ($\gamma_{\text{Like, COMP3_GMC}} = -.03, p > .10$). The results also showed that the average sentence length significantly and negatively impact the number of shares ($\gamma_{\text{Share, COMP2_GMC}} = -.00, p < .001$) and comments ($\gamma_{\text{Comment, COMP2_GMC}} = -.00, p < .001$), and the hashtags significantly and negatively impact the number of comments ($\gamma_{\text{Comment, COMP4_GMC}} = -.08, p < .05$). The effects of other complexity variables on other consumer engagement measures are not significant (all $p > .10$). Our analysis revealed that the complexity (i.e., at least one complexity variable) of brand posts negatively impacts consumer engagement measures (i.e., like, share, or comment). Thus, H2 was supported.

Table 2.3 Effects of Brand Post Linguistic Styles on Consumer Engagement

Variables	Like		Share		Comment	
	γ	SE	γ	SE	γ	SE
Intercept	.65	.76	.31	.27	.32*	.14
<i>Post-level effects</i>						
Emotionality						
EMOT ₁ _GMC (Positive Emotion Words)	.26*	.12	-.01	.06	-.02	.04
EMOT ₂ _GMC (Negative Emotion Words)	-1.13***	.30	-.04	.16	-.10	.09
Complexity						
COMP ₁ _GMC (Post length)	-.00**	.00	-.00	.00	.00	.00
COMP ₂ _GMC (Average sentence length)	-.01***	.00	-.00***	.00	-.00***	.00
COMP ₃ _GMC (Long words)	-.03	.06	-.02	.03	-.02	.02
COMP ₄ _GMC (Hashtag)	-.50***	.12	-.10	.06	-.08*	.04
COMP ₅ _GMC (At-mention)	-2.27***	.68	-.57	.35	-.26	.20
Informality						
INFO ₁ _GMC (Emojis)	.07	.04	.02	.02	.01	.01
INFO ₂ _GMC (Contractions)	-.19	.18	.06	.09	-.10	.05
INFO ₃ _GMC (Informal punctuations)	-.18	.19	-.16	.10	.12*	.06
INFO ₄ _GMC (Personal pronouns)	-.24	.13	-.16*	.07	.03	.04
Control variables						
TIME (Posting time)	-.04**	.02	-.02*	.01	-.01*	.00
TYPE ₁ (Link)	.01	.08	.04	.04	-.04	.02
TYPE ₂ (Photo)	.24**	.08	.08	.04	-.01	.02
TYPE ₃ (Video)	.19*	.08	.20***	.04	.02	.02
TYPE ₄ (Event)	-.10	.17	.01	.09	-.04	.05

*Brand-level effects***Emotionality**

$\overline{\text{EMOT}}_1$ (Positive Emotion Words)	-1.80	4.01	-.79	1.45	-.36	.73
$\overline{\text{EMOT}}_2$ (Negative Emotion Words)	47.22**	15.25	10.49	5.46	1.34	2.74

Complexity

$\overline{\text{COMP}}_1$ (Post length)	.00	.01	-.00	.00	-.00	.00
$\overline{\text{COMP}}_2$ (Average sentence length)	.02	.03	.01	.01	.00	.00
$\overline{\text{COMP}}_3$ (Long words)	3.50	2.39	.73	.85	.04	.43
$\overline{\text{COMP}}_4$ (Hashtag)	.79	2.33	-.72	.83	-.53	.41
$\overline{\text{COMP}}_5$ (At-mention)	-37.90	20.71	-8.80	7.63	-1.55	3.88

Informality

$\overline{\text{INFO}}_1$ (Emojis)	1.28	2.76	.51	.97	.56	.48
$\overline{\text{INFO}}_2$ (Contractions)	-4.21	6.28	-2.43	2.33	.17	1.19
$\overline{\text{INFO}}_3$ (Informal punctuations)	-10.01	6.94	-1.13	2.49	-.57	1.25
$\overline{\text{INFO}}_4$ (Personal pronouns)	-9.98*	4.26	-2.91	1.54	-1.18	.78

Fixed effects

INDUSTRY ₁ (Aerospace)	1.57*	.69	1.09***	.24	.33**	.12
INDUSTRY ₂ (Alcohol)	-.40	.48	-.24	.17	-.16	.08
INDUSTRY ₃ (Apparel)	.06	.61	.07	.22	-.10	.11
INDUSTRY ₄ (Automotive)	-.28	.40	-.20	.14	-.10	.07
INDUSTRY ₅ (Beverages)	-1.14*	.51	-.52**	.19	-.24*	.10
INDUSTRY ₆ (Business Services)	.56	.70	.10	.24	-.14	.12
INDUSTRY ₇ (Consumer Packaged Goods)	-.47	.41	-.24	.14	-.16*	.07
INDUSTRY ₈ (Diversified)	-.63	.45	-.33*	.16	-.18*	.08
INDUSTRY ₉ (Financial Services)	-.36	.41	-.25	.14	-.12	.07

INDUSTRY ₁₀ (Heavy Equipment)	.94	.63	-.19	.22	-.06	.11
INDUSTRY ₁₁ (Leisure)	-.79	.56	-.41*	.19	-.19*	.10
INDUSTRY ₁₂ (Luxury)	-.36	.43	-.34*	.15	-.16*	.08
INDUSTRY ₁₃ (Oil & Gas)	-.07	.68	-.22	.24	-.13	.12
INDUSTRY ₁₄ (Restaurants)	-.40	.46	-.17	.16	-.07	.08
INDUSTRY ₁₅ (Retail)	-.30	.41	-.26	.14	-.11	.07
INDUSTRY ₁₆ (Technology)	-.84*	.39	-.39**	.14	-.20**	.07
INDUSTRY ₁₇ (Telecom)	-.58	.49	-.32	.17	-.07	.09

*: $p < 0.05$

** : $p < 0.01$

***: $p < 0.001$

Informality

In terms of informality, the results revealed mixed effects. Specifically, the use of personal pronouns negatively influences the number of shares ($\gamma_{\text{Share, INFO}_4_GMC} = -.16, p < .05$), while the use of informal punctuations positively influences the number of comments ($\gamma_{\text{Comment, INFO}_3_GMC} = -.12, p < .05$). No significant relationship was found between the informality variables and the number of likes. Thus, H3 was partially supported. Our analysis revealed that the informality of brand posts seems to only loosely influence consumer engagement. One possible explanation is that our data was collected from real social media settings where consumers might already be familiar with and get used to the informal conversational style in these circumstances. Thus, adopting informal style in brand posts can no longer significantly influence consumers' engagement behavior.

Control variables

In our analyses, we controlled for the effects of several variables. First, posting time (weekday vs. weekend) might influence consumer engagement. Our results showed that brand posts updating during weekday tend to receive higher number of like ($\gamma_{\text{Like, TIME}} = -.04, p < .01$), shares ($\gamma_{\text{Share, TIME}} = -.02, p < .05$), and comments ($\gamma_{\text{Comment, TIME}} = -.01, p < .05$) than posts updating during weekend. Second, we controlled for the effect of the post type. Our results showed that, compared to the status type of posts, the photo type of posts receive significantly higher number of likes ($\gamma_{\text{Like, TYPE}_2} = .24, p < .01$) and the video type of posts receive significantly higher number of likes ($\gamma_{\text{Like, TYPE}_3} = .19, p < .05$) and shares ($\gamma_{\text{Share, TYPE}_3} = .20, p < .001$). Third, we controlled for the effects of industries. The industry-fixed effects showed that aerospace industry positively influences consumer engagement, while the beverages, consumer packaged goods, diversified, leisure, luxury, and technology industries negatively influence consumer engagement.

2.5 Discussion

This research examines how to enhance consumer engagement with brand posts on social media from a linguistic perspective. Specifically, it investigates the impacts of message linguistic styles (i.e., emotionality, complexity, and informality) on consumer engagement with brand posts on social media. The findings revealed that the brand posts' linguistic characteristics significantly impact consumer engagement, but the effects vary regarding the three types of consumer engagement (i.e., like, share, comment). Table 2.4 shows the summary of hypotheses testing results.

Table 2.4 Summary of Hypotheses Testing Results

Hypothesis	Expected	Results		
		Like	Share	Comment
Emotionality	(+)	Partially Supported	Not Supported	Not Supported
Positive Emotion Words	(+)	(+)		
Negative Emotion Words	(+)	(-)		
Complexity	(-)	Supported	Supported	Supported
Post length	(-)	(-)		
Average sentence length	(-)	(-)	(-)	(-)
Long words	(-)			
Hashtag	(-)	(-)		(-)
At-mention	(-)	(-)		
Informality	(+)	Not Supported	Not Supported	Supported
Emojis	(+)			
Contractions	(+)			
Informal punctuations	(+)			(+)
Personal pronouns	(+)		(-)	

Specifically, the results of this paper showed that brand posts' linguistic characteristics seem to have more impacts on the number of likes than shares and comments. One possible explanation is that, compared to *share* and *comment*, *like* is a relatively low-involving engagement behavior (Coursaris et al., 2016a; de Vries et al., 2017; Hwong et al., 2017). While brand posts' linguistic characteristics can impact all of the three engagement behaviors, their effects are not great enough to largely change consumers' engagement behaviors (i.e., share, comment) that require the high level of involvement. Consistent with

previous research (Cvijikj & Michahelles, 2013; de Vries et al., 2012; Kim et al., 2015; Luarn et al., 2015; Wagner et al., 2017), these findings confirmed that *like*, *share* and *comment* are three different consumer engagement behaviors and need to be studied individually. The findings of this research have many implications.

2.5.1 Implications

Theoretical implications

This research is among a small set of research that examines consumer engagement with brand posts on social media. It addresses recent calls for research on effective brand social media content strategies (Kumar, 2015; López et al., 2017; Marketing Science Institute, 2018) and brand linguistics (Carnevale et al., 2017) simultaneously. Different from previous research on consumer engagement with brand posts on social media, where the post characteristics such as content type, media type, and posting timing, were mainly examined, this paper adopts a theory-driven method to systematically investigate the effects of linguistic styles on consumer engagement with brand posts on social media.

This research extends the CAT in two ways. First, it extends the theoretical generalizability by applying the theory to a brand-to-consumer communication occurring in the social media context. While previous literature has shown that the positive effects of communication accommodation exist in both brand-to-consumer communication and CMC contexts, few have examined if these effects exist in the brand-to-consumer communication that occurs through CMC. In this paper, we investigated the applicability of CAT in a context of brand-to-consumer communications through social media. Second,

due to the massive proliferation of social media, the audience of one brand is usually at millions and all over the world. While, currently, it is almost impossible for a brand to accommodate its language to each consumer, accommodating its language to the context where the communication occurs become an alternative feasible and seemly-efficient way. However, little research has examined the effectiveness of such communication strategy. This paper investigated this strategy and tested if accommodating one's language to the context where communication occurs has similar effects as accommodating the language to the interlocutor.

Managerial implications

Social media has become one of the most important communication channels for marketers nowadays. According to Statista (2018c), the social media advertising spending only in the U.S. is 19.3 billion (US\$) in 2018. While consumer engagement is the most important and prevalent matrix to evaluate social media marketing, marketing practitioners are struggling with effective content strategies. Although research has explored how to enhance consumer engagement with brand posts on social media by using specific characteristics, such as content type, media type, etc., the findings from these research are relatively superficial and have not provided any guidelines on how to carefully organize the language for the brand posts. Based on the concept that language matters, this research takes a step further and investigates the role of linguistic style in this context and provides a more meaningful guideline for social media marketing practitioners. Our findings show that social media marketers need to carefully consider the linguistic styles of their brand posts and, to enhance consumer engagement, some linguistic styles need to be incorporated while others

avoided. For example, social media marketers could use more positively emotional words and less complex expressions to enhance consumer engagement. Furthermore, the results of this research also provide social media marketers with practical guidelines on how to manipulate specific language styles of brand posts through using basic linguistic features (e.g., post length, long words, pronouns, etc.) and social media content features (e.g., hashtags, at-mentions, emoji, etc.). For example, social media marketers could manipulate the informality of brand posts by purposefully incorporating emojis, contractions, informal punctuations, and personal pronouns, and the complexity of brand posts by designing the post length, the average sentence length, and so on.

2.5.2 Limitations and Future Research

This research is not without limitations. First, in this paper, we focused on the impacts of linguistic styles on consumer engagement with brand posts without investigating why consumers respond differently to different linguistics styles or how different consumers react differently to the same linguistic style. Employing a stimulus-organism-response (S-O-R) model (Mehrabian & Russell, 1974), future research could explore the underlying process by examining the organisms between different stimulus (e.g., different linguistic styles) and corresponding responses (e.g., consumer engagement, such as like, comment, and share) as well as how the underlying process varies with different consumers. Second, although, according to previous conceptual research on consumer engagement with brand social media contents, there are three types of engagement behaviors, namely, consuming (i.e., consuming brand content without interacting with brand), contributing (i.e., like, comment on, or share brand contents), and creating (i.e., posting brand-related content by

oneself) (Muntinga, Moorman, & Smit, 2011), in this paper, we only investigated consumer engagement in terms of consumers' contributing behaviors. We made this decision because, on the one hand, only consumer contributing behavior data are available on Facebook, and on the other hand, consumers' contributing engagement is both the main objectives and the most common metrics of current social media marketing (Lee et al., 2018). Future research could explore how consumers' consuming and creating engagement behaviors are affected by the linguistic style of brand posts through other research methods, such as survey and experiment. Third, our research was conducted in the context of Facebook brand pages, where brand posts, although often including images and videos, are usually centered in the text contents. In this case, it is not surprising that linguistic style can play a significant role in influencing consumers' engagement. However, in other social media platforms where the text is not at the heart of brand posts, such as Instagram (where brand posts are usually centered in photos) and YouTube (where brand posts are usually centered in videos), it would be worth exploring whether the linguistic style still influences consumer engagement. For example, future research could test the findings of this paper by employing the big data analytics method and investigate whether the communicative effects of linguistic styles of brand posts exist on other social media platforms and how these effects vary across these platforms.

3 Essay Two: Watch Your Tone: The Interactive Effects of Consumer Comment Valence and Brand Response Language Style on Consumer Engagement

3.1 Introduction

With its massive proliferation, social media has become an integral part of the marketing communication mix and changed the way that brands and consumers interact with each other (Chu & Kim, 2011; Constantinides & Fountain, 2008; Dolan et al., 2016; Kozinets et al., 2008; Merz et al., 2009). Nowadays, one of the primary tasks for social media marketers is to enhance consumer engagement with brand on social media, as it can enhance brand awareness, preference, and consideration (Coursaris et al., 2016b; Cruz et al., 2017; de Vries et al., 2017; Hutter et al., 2013), brand equity (Coursaris et al., 2016b; Wagner et al., 2017), brand trust (Habibi, Laroche, & Richard, 2014), brand loyalty (Jahn & Kunz, 2012; So, King, Sparks, & Wang, 2016), as well as brand performance (Chung et al., 2014; Colicev et al., 2016; de Vries et al., 2017; Kumar et al., 2016; Pansari & Kumar, 2017). Firm engagement¹ is a critical antecedent of consumer engagement with brands on social media (Barger, Peltier, & Schultz, 2016; Labrecque, 2014; Schamari & Schaefer, 2015). According to previous research, firm engagement could be passive or active

¹ Note: “brand engagement” is not used here because previous literature used “brand engagement” and “consumer engagement” interchangeably. Here, we follow Barger et al. (2016) and use “firm engagement” to refer brands’ engagement with consumers.

(Dholakia, Blazevic, Wiertz, & Algesheimer, 2009). Passive firm engagement is more of a push communication mode where brands post contents on social media without participating in the follow-up conversations initiated by consumers, while active firm engagement is a communication mode that brands engage with consumers by ‘liking’, ‘responding to’, and ‘sharing’ their comments on brands within the social networking sites. Previous research has indicated that to enhance consumer engagement is more than merely pushing brand contents to consumers and hoping them to engage with brand-related contents (Schultz & Peltier, 2013). In this process, active firm engagement interplays with consumer engagement; that is, active firm engagement and consumer engagement nurture each other (Barger et al., 2016). In fact, brands that are successful on social media have realized the importance of active firm engagement. According to a recent analysis of twenty largest brands on Twitter, only about 7% of brand-created messages are broadcast to all followers, while about 93% of messages are interactions with individual consumers (Spredfast, 2016). Interacting with consumers through active firm engagement is becoming the new norm for social media marketers.

Among the various types of active firm engagement, responding to consumer comments is the one that is mainly practiced by brands that are successful in social media and mostly expected by consumers. It has been reported that about 60% of consumers anticipate brands to respond to their comments on social media (Mickens, 2012), and, while looking for services, 84% of consumers expect brands to respond their comments within 24 hours after them posting on social media (Hutchinson, 2017). Previous research has shown that responding to consumer comments can enhance consumer engagement with brands on

social media because it creates actual brand-consumer interactions that are preferred by consumers (Culnan, McHugh, & Zubillaga, 2010; Labrecque, 2014). When brands respond to consumer comments, consumers perceive brands as more interactive and experience a feeling of parasocial interaction, which, in turn, increase their willingness to engage with brands (Labrecque, 2014). Unlike brand-consumer interactions in the offline world where messages can be conveyed through verbal (e.g., language), para-verbal (e.g., voice), and non-verbal (e.g., gesture) cues, brand responses on social media mostly happen through verbal cues (Jakic et al., 2017; Kurtzberg et al., 2009; Walther, 2012). Wherever brand-consumer communications occur within social media, language acts as the central medium; thus, the language style of brand response may affect consumers' perception, which, in turn, influences the consumers' intention for future engagement (Cruz et al., 2017). Nowadays, it is common that brands employ informal language style on social media, with the belief that the informality could create a conversational human voice and foster their relationships with consumers (Beukeboom et al., 2015). However, no evidence has shown that an informal language style is optimal for communicating with consumers in all situations (Gretry et al., 2017). On the contrary, recent research has demonstrated that in some situations, adopting an informal language style could even hurt brands' relationships with consumers (Barcelos, Dantas, & Sénécal, 2018; Gretry et al., 2017). Given to this, surprisingly few research efforts have been made to investigate how (i.e., regarding language style) brands should respond to consumer comments in different situations and how the interplay between brand language style and situation factors influence consumers' evaluation of brands and thus their engagement intentions.

This paper aims to examine the impacts of brand response language style on consumers' evaluation of the brand and their intention for future engagement with the brand. Specifically, drawing on the language expectancy theory (LET) (Burgoon, 1993; Burgoon & Miller, 1985), this paper examines which language style (i.e., formal vs. informal) should brands adopt in responding to consumer comments with different valences (i.e., positive vs. negative) to improve consumers' perception of brand and, in turn, enhance their intention to engage with brands in future. In this paper, we propose that brands should treat positive and negative consumer comments as two scenarios and use different language styles in responding to them. This paper has many implications. First, this paper addresses the recent call for research on brand linguistics (Carnevale et al., 2017) by investigating how brands could enhance consumer engagement on social media through adjusting their response language style in accordance with consumer comment valences. The findings of this paper also provide social media marketers with some practical guidelines on language style choice when responding to consumer comments. Second, the results of this paper are also meaningful to research on online consumer complaint (or negative word of mouth, i.e., negative WOM) management. Considering that consumers are increasingly using social media to convey their negative experiences with brands and the negative impacts of eWOM on consumer decision making, it is crucial for brands to develop effective communication mechanisms to manage online consumer complaint (Chang et al., 2015; Einwiller & Steilen, 2015; Istanbulluoglu, 2017). From the perspective of language style, this paper addresses the issue by investigating the impacts of brand response language style on brand-consumer relationships and provides some insights on effective communication mechanisms of online consumer complaint management. Finally, yet importantly, this paper extends the

application of the LET into a new context of brand-consumer interaction on social media. Furthermore, while previous research that drew on the LET investigated specific message features (e.g., language intensity) (Averbeck & Miller, 2014), this paper examines the effects of language formality through the lens of LET.

3.2 Theoretical Foundation

3.2.1 Language Expectancy Theory

The language expectancy theory (LET) is a message-centered theory of persuasion (Burgoon, 1995). It explains how language style and expectations interact to influence the message persuasiveness (Burgoon, Denning, & Roberts, 2002). According to the LET, language is a rule-governed system (Burgoon et al., 2002). People develop expectations concerning appropriate language style employed by others in given situations from interpersonal, social, and cultural norms (Parhankangas & Renko, 2017). During the communication, the message sender can use language that might positively or negatively violate the expectation of message receivers. Positive expectancy violations occur “*a) when the enacted behavior is better or more preferred than that which was expected in the situation and b) when negatively evaluated sources conform more closely than expected to cultural values, societal norms, or situational exigencies.*” (Burgoon et al., 2002, p. 121) When positive violations of expectation occur, the persuasive effectiveness of the message will be facilitated, and message receivers will change their attitude and behavior in the direction advocated by the message sender (Burgoon, 1989, 1990). For example, drawing on the LET, Averbeck & Miller (2014) found that, when designing messages regarding disease control, simple language is not always persuasive; instead, positively violating the

expectation by increasing the language complexity can increase the message persuasiveness to receivers who are cognitively complex. Negative expectancy violations result from “*language choices or the selection of message strategies that lie outside the bandwidth of socially acceptable behavior in a negative direction.*” (Burgoon et al., 2002, p. 121) When negative violations of expectation occur, the persuasive effectiveness of the message will be inhibited, and message receivers will maintain their attitude and behavior or even change them in opposition to the direction desired by the message sender (Burgoon, 1989, 1990). For example, when low-credible communicators, who are presumed to be expected to use less aggressive language, use aggressive language in their persuasive messages, the message persuasiveness will be inhibited (Burgoon, 1975).

To sum up, the message persuasiveness, usually reflected by receivers’ attitude or behavior change, is a function of message language style and the receivers’ expectation. Specifically, the message persuasiveness will be enhanced (inhibited) when message senders use language style that positively (negatively) violates receivers’ expectation. Since its infancy, the LET has been applied to address many research issues, such as health communication (Averbeck & Miller, 2014; Buller, Borland, & Burgoon, 1998), political campaign (Clementson, Pascual-Ferrá, & Beatty, 2016), eWOM (Jensen, Averbeck, Zhang, & Wright, 2013), crowdfunding (Parhankangas & Renko, 2017), and advertising (Baek, Yoon, & Kim, 2015; Kronrod, Grinstein, & Wathieu, 2012a; Kronrod, Grinstein, & Wathieu, 2012b), and to examine many language variables, such as language intensity (Buller et al., 1998; Clementson et al., 2016), verbal aggression (Burgoon, 1989, 1990), controlling language (Averbeck, 2015), language assertiveness (Baek et al., 2015; Kronrod

et al., 2012a; Kronrod et al., 2012b; Parhankangas & Renko, 2017) and language complexity (Averbeck & Miller, 2014; Jensen et al., 2013).

In this paper, we applied the LET in a new context, i.e., brand-consumer communication on social media, and use it to examine a relatively understudied language feature, i.e., language informality. The LET is applicable here for three reasons. First, brand-consumer communication on social media relies heavily on messages, and technical features of social media determine that the verbal cues (i.e., language) serve as the primary medium of these messages (Carnevale et al., 2017; Jakic et al., 2017; Walther, 2012). The LET, a message-centered theory that examines the interplay between language style and expectation, fits well with our research context and object. Second, although previous research has mainly applied the LET within the context of interpersonal communication and focused on specific language features, the LET per se is open to different contexts and language features (Averbeck & Miller, 2014; Jensen et al., 2013). In fact, there has been a call that more language features affecting message persuasiveness should be examined and the contexts where the language features have been examined should be broadened (Burgoon, 1995; Burgoon et al., 2002). Thus, the LET can be used to examine a new language feature in a new context. Third, previous research has applied the LET in the context of brand-consumer communication to investigate the persuasiveness of advertising (Baek et al., 2015; Hendriks, van Meurs, & van der Meij, 2015; Kronrod et al., 2012a, Kronrod et al., 2012b), as well as in the context of computer-mediated communication to examine the persuasiveness of eWOM (Folse, Porter III, Godbole, & Reynolds, 2016; Hong & Li, 2017;

Jensen et al., 2013; Wu, Shen, Fan, & Mattila, 2017). Therefore, it is appropriate to apply the LET in this paper.

One challenge of applying the LET within different contexts is that normative sociological communication behaviors or language expectations in these contexts are not always specified beforehand (Burgoon et al., 2002). Since little research has applied the LET in investigating the persuasiveness of language informality in brand-consumer communication on social media, the expected language style has not been routinely specified as a priori basis. Therefore, in the following sections, we will review previous literature on language style (informal vs. formal) and brand-consumer interaction and communication on social media to provide a specification of language style expectations in this context.

3.2.2 Language Style on Social Media: Informal vs. Formal

Informality (vs. formality) is a language feature that has been studied in sociolinguistics for a long time (Baron, 2003; Irvine, 1979). According to McArthur (2003), an informal language style is “*common, non-official, familiar, casual, and often colloquial, and contrasts in these senses with formal*”. The difference between informality and formality is often defined in accord with the difference between spoken and written languages (Ruekert & Walker Jr., 1987). More specifically, informal language is often similar to spoken language and featured as a conversational style, while formal language is usually parallel to written language (Biber, 1986; Fairclough, 1994). Traditionally, language informality was examined more at a conceptual level than at an operational level (Gretry

et al., 2017). Little research has systematically investigated the linguistic features that increase the informality of messages, especially in the context of social media. One exception is Gretry et al. (2017), where the researchers identified 14 features of informal language from the traditional communication literature and a survey of undergraduate students. However, this investigation overlooked some informal linguistic features that are routinely used by brands on social media, such as abbreviations (e.g., “PM” for “private message” and “DM” for “direct message”), upper-case words (e.g., “YOU”, “AMAZING”, and “DOES”), and repeated punctuations (e.g., “!!!!”, “???”). Thus, it is necessary to systematically investigate the linguistic features of the informal brand language in the context of social media. For this reason, we conducted a review of previous literature on language informality in computer-mediated communication (e.g., email and text message) and recent research that employed machine learning to evaluate social media language informality and identified 59 (including duplications) informal linguistic features. Based on several rounds of inductive analyses, we summarized 11 linguistic features that increase brand message informality in social media (see Table 3.1). Examples of how brands are using these features in their daily communications with consumers on social media are also shown in Table 3.1. We removed some features identified in previous research because we believe that these features are too informal to be used by brands in their communications with consumers. These features include the misspelled words (Mosquera & Moreda, 2012b; Pérez-Sabate, Turney, & Fleta, 2008), the incorrectly-written sentences (Mosquera & Moreda, 2012b; Peterson et al., 2011), and negative Internet slangs (Paris et al., 2012; Thelwall, 2009).

Table 3.1 Features of Informal Language in Social Media

Linguistic features	Examples of real brand messages on social media	References*								
		1	2	3	4	5	6	7	8	9
Abbreviation and acronym	“NYE” for “New Year’s Eve”, “Can you please DM us?”, for “Can you please direct message us?”, “Please send us a PM”, for “Please send us a private message”	X	X	X	X	X		X	X	
Emoji	“It's almost like we're 🎅's workshop! 😊”, “To inspire ❤️, one ☕ at a time...”, “Tap to orders yours now. 👉”	X	X	X		X			X	X
Contraction	“We’d”, “We’ll”, “That’s”, “You’re”, “I’m”			X	X	X		X	X	X
Upper-case word	“AGREE.”, “Thank YOU!”, “That DOES sound delicious.”, “Happy Valentine’s Day from the SWEETEST Valentine ever.”		X	X	X					
Informal word	“Great”, “Awesome”, “Check out”			X	X		X	X		X
Informal punctuation	“...”, “!”				X		X			X
Informal expression	“Not a problem!”, “Would love to help you out.”, “Hi there!”, “So happy you love it.”, “Stay tuned.”, “Haha, nice.”									X
Repetitions in word	“Let’s RRRoll Canada!”, “Tea - 24 houRRRs!”, “Uhhh yes.”, “Aww no!”			X					X	X

Repeated punctuation	“That looks AMAZING!!!”, “Beautiful!!!”, “Can you spot the difference???” , “Is it spring break yet???”		X		X	X				
First- and second-person pronouns	“I”, “We”, “us”, “you”				X			X		X
Active vs. passive voice	“You can find more details here.” vs. “More details can be found here.”							X		X
*: (1) Haberstroh, 2010; (2) Michael & Otterbacher, 2014; (3) Mosquera & Moreda, 2012b; (4) Paris et al., 2012; (5) Pérez-Sabate et al., 2008; (6) Peterson et al., 2011; (7) Rennekamp & Witz, 2017; (8) Thelwall, 2009; (9) Gretry et al. (2017)										

As shown in Table 3.1, in the social media contexts, brand message informality is related to many linguistic features, such as abbreviations (e.g., LOL for ‘laughing out loud’, OMW for ‘on my way’), emojis (e.g., 😊, 😂, ❤️), contractions (e.g., *we’re*, *I’m*, *that’s*, and *it’s*), and repetitions (e.g., *sooooo*, *awww*, *uhhh*, and *!!!!*) (Mosquera & Moreda, 2012a & 2012b; Michael & Otterbacher, 2014). The use of informal words (e.g., *great*, *awesome*, and *check out*), punctuations (e.g., “...” and “!”), or expressions (e.g., “Haha, nice.”, “Stay tuned.”, and “Not a problem”) could increase the message informality as well (Gretry et al., 2017; Paris et al., 2012; Peterson et al., 2011). For example, the brand response, “*Oh, no. We’re glad to hear you’re doing better, Lisa! Sending you lots of love. ❤️*” [Starbucks’s response to a consumer comment on Facebook, on December 30, 2017] is more informal than “*We always appreciate your kindness, love and commitment to sharing the truth.*” [Starbucks’s response to a consumer comment on Facebook, on December 6, 2017]. Nowadays, it is

common to see that brands employ these linguistic features in their messages to create an informal communication environment on social media, with the aim of fostering their relationships with consumers (Beukeboom et al., 2015). However, it is not clear what the consumers' expectation of brand social media language is (Gretry et al., 2017). Therefore, based on previous research, we will specify the consumers' expectation in the next section.

3.2.3 The Expectation on Brand Language Style in Social Media

What is consumers' expectation of brand language style in social media? To answer this question, one needs first to explain how the expectation is formed. According to LET (Burgoon, 1995; Burgoon et al., 2002), the expectation is a function of social, cultural, and interpersonal norms. At a macro level, the expectation is developed from social and cultural norms; that is, individuals form their expectations through observing language behaviors and learning what is appropriate (Averbeck & Miller, 2014; Burgoon et al., 2002). At a micro level, the expectations vary with interpersonal norms, such as the message senders' personality idiosyncrasies and the relationships between interlocutors (Averbeck & Miller, 2014; Burgoon, 1995). Given that expectations vary with individuals, a question that investigates the expectation of a group (i.e., consumers) might seem to be questionable at first glance. However, previous research has empirically demonstrated that the entire social categories (e.g., doctors, school administrators, online product reviewers, etc.) were bound by relative rigid norms and expectations regarding appropriate communication behaviors do exist (Burgoon et al., 2002). Furthermore, within the culturally and socially dominant environments, expectations only vary slightly with individuals (Miller & Burgoon, 1979). Thus, it is proper to specify consumers' expectation of brand social media language style,

at least at a general level. We draw on previous literature to portray the social, cultural, and interpersonal norms in the context of brand-consumer communication in social media.

At the macro level, we explore the social and cultural norms in social media by examining what the general social media language style is. The investigation of social media language style can be traced back to early efforts on defining the style of Internet language or language in computer-mediated communications in the sociolinguistic field. Among these efforts, one widely addressed question is whether Internet language is closer to speech or writing (Thelwall, 2009). The difference between speech and writing has been investigated by linguists since the infancy of the linguistics. After decades of exploration, many chief differences have been identified. Specifically, regarding linguistic style, speech is less formal, less complex, less structured, and more spontaneous than writing (Baron, 2003, Crystal, 2011). Through comparison with speech and writing, previous research found that different Internet languages (e.g., web, email, blogging, social networking sites, and microblogging) vary concerning their similarities with speech and writing (Barton & Lee, 2013; Crystal, 2006). Specifically, at one extreme, web language is more similar to writing, thus, more formal, while, at the other extreme, social media language (e.g., microblogging and social networking sites) are more similar to speech, and, subsequently, more informal (Barton & Lee, 2013). In line with the early efforts, research further found that social media language is both heterogeneous and homogeneous. On the one hand, social media language varies with medium and situational factors, such as gender (Bamman et al., 2014; Schwartz et al., 2013), age (Nguyen et al., 2013; Subramaniam & Razak, 2014), geolocation (Huang et al., 2016), and social media platforms (Hu et al., 2013; Kadir et al., 2012; Paris et al.,

2012). On the other hand, some structural language features (e.g., informal, less complex, emotional, spontaneous) are broadly observed across social media regardless of the medium and situational factors, showing that social media language is, in general, casual and informal (Baron, 2003; Herring, 2007; Walther, 2012; Muresan et al., 2016; Paris et al., 2012; Thelwall, 2009). Therefore, generally speaking, social media is a platform where informal language is normal and widely accepted.

At the micro level, we review the previous research on brand-consumer interactions, relationships, and communications in social media to examine the interpersonal norms that contribute to the expectation of brand language style. Different from the traditional marketing communication (i.e., one-way, e.g., advertising), brand-consumer communications in social media occur mainly in a bi-directional (i.e., two-way) mode (Berthon et al., 2008; Gretry et al., 2017; Hutter et al., 2013). The interactive nature of social media has changed the way that marketers and consumers perceive, interact and communicate with each other (Chen, Lin, Choi, & Hahm, 2015). In the realm of social media, even originally inanimate brands are becoming humanized through their daily interactions with consumers which largely resemble other interpersonal interactions in social media (Gensler, Völckner, Liu-Thompkins, & Wiertz, 2013; Gretry et al., 2017). Such interpersonal-resembled interactions have influenced the brand-consumer relationship in a way that consumers tend to interact with brands in similar ways as with their interpersonal relationships and use interpersonal relationship norms to guide their interactions with brands (Aaker, 1997; Aaker, Fournier, & Brasel 2004; Aggarwal, 2004; Aggarwal & McGill, 2007; Aggarwal & McGill, 2012; Fournier, 1998; Sela et al., 2012).

As a result, consumers are now more likely to perceive brands as humanlike social agents and brand communications as interpersonal communications (Aaker et al., 2004; Gretry et al., 2017). In the brand-consumer communications on social media, consumers expect brands to respect the social norms and ‘talk’ like their other interpersonal relationships do (Kwok & Yu, 2013). Therefore, it is reasonable to assume that consumers expect brands to communicate in an informal style. Some previous research has indirectly confirmed such expectation by empirically demonstrating that communicating in a conversational style can enhance consumers’ interaction with brand as well as their evaluation of brand (Delin, 2005; Jakic et al., 2017; Kelleher, 2009; Kelleher & Miller, 2006; Searls & Weinberger, 2000; Beukeboom et al., 2015).

To sum up, in the context of communication in social media, consumers generally expect brands to adopt a relatively informal language style. However, despite consumers’ general expectation of an informal language style, recent research has shown that, in some cases, brands can positively violate such expectation by adopting a formal language style to achieve even better results from their communications with consumers. For example, Gretry et al. (2017) found that, in communications with consumers who are unfamiliar with the brand on social media, adopting a formal language style can gain more consumers’ brand trust than an informal style. Barcelos et al. (2018) found that, in the high situational involvement contexts, using formal language style can increase the purchase intentions as it reduces the perceived risk associated with informality. One thing can be drawn from these studies is that situational factors, such as brand familiarity (i.e., familiar vs. unfamiliar), consumer situational involvement (i.e., high vs. low), consumer goals (i.e.,

hedonic vs. utilitarian) are important determinants of whether adopting a formal language style is a positive or negative violation of expectation. In the next section, we propose that consumer comment valence (i.e., positive vs. negative) is another important determinant and develop hypotheses on how brands should respond to positive and negative consumer comments using different language styles.

3.3 Hypotheses Development

Positive and negative consumer comments on brands are a regularly occurring phenomenon on social media nowadays and have been demonstrated to have significant but generally contrary impacts on consumers' evaluation of brands (Relling, Schnittka, Sattler, & Johnen, 2016; Jensen et al., 2013). Given this, they have often been treated as different scenarios and studied separately (Dellarocas, 2003; Higgins, 2002; Jensen et al., 2013). In social media, although positive and negative consumer comments occur together frequently, we propose that brands should treat them as two scenarios (i.e., the positive scenario vs. the negative scenario) and respond to them using according language styles because they can differently evoke situational factors that influence the effects of brand language style (i.e., informal vs. formal) (Barcelos et al., 2018; Chang et al., 2015; Einwiller & Steilen, 2015; Gretry et al., 2017; Jakic et al., 2017; Sparks, So, & Bradley, 2016). Specifically, regarding the evoking effects, positive and negative consumer comments are different in two aspects.

First, positive consumer comments are relatively low-involving while negative consumer comments are relatively high-involving. Positive and negative consumer comments are

different at the level of consumer involvement, for both comment creators (i.e., consumers who create and post the comments) and comment readers (i.e., consumers who read the comments posted by others). For comment creators, negative comments are more involving than positive comments. On the one hand, comment creators' expectation of negative consumer comments being responded by brands is more desired and urgent than that of positive consumer comments (Istanbulluoglu, 2017; Williams & Buttle, 2014). While about 60% of consumers anticipate brands to respond to consumer comments on social media (Mickens, 2012), 84% of consumers expect brands to respond to comments related to consumer services within 24 hours after posting on social media (Hutchinson, 2017). On the other hand, being overlooked by brands without appropriate responses, negative consumer comments would negatively impact comment creators' evaluation of brands very likely, while positive consumer comments usually would not (Balaji, Khong & Chong, 2016; Einwiller & Steilen, 2015; Williams & Buttle, 2014). For comment readers, negative comments are more involving than positive comments as well. According to the negativity bias, while reading online comments, consumers tend to weigh and trust negative comments more than positive comments (King, Racherla, & Bush, 2014; Stieglitz & Dang-Xuan, 2013). Previous research has shown that consumers engage more with negative comments than with positive comments (Stieglitz & Dang-Xuan, 2013; Williams & Buttle, 2014). When communicating with brands, consumers at different levels of involvement perceive the uncertainty and risk differently (Huang, 2006; Eroglu, Machleit, & Davis, 2003); specifically, consumers who are highly-involved perceive higher uncertainty and risk in brands than those who are low-involved (Barcelos et al., 2018). In the positive scenario, due to the positive sentiment and relative low involvement, consumers would

perceive low potential uncertainty and risk related to brands. Thus, adopting a formal language style in this scenario would negatively violate consumers' general expectation of an informal brand language since it might break the conversational atmosphere between consumer and brand (Kelleher, 2009). On the contrary, in the negative scenario, because of the negative sentiment and related practical issues to be addressed (e.g., negative brand experience, complaint about products, etc.), it is likely that consumers would perceive higher potential uncertainty and risk related to brands than consumers in the positive scenario (i.e., positive consumer comments). Thus, consumers would prefer brands using a language style that can address the feelings of uncertainty and risk related to brands. The formal language style, because of its rigidity and precision, is widely used in professional settings to reduce perceived risks (Heylighen, 1999; Rennekamp & Witz, 2017; Reyes, 2015). This style is also consistent with consumers' opinion of a company being able to and working hard to solve a serious matter (Barcelos et al., 2018). Therefore, in this scenario, adopting a formal language style would positively violate consumers' general expectation of an informal brand language as it is characterized as competent and qualified, and, thus, can create greater feelings of profession (Jakic et al., 2017; Van Dolen, Dabholkar, & De Ruyter, 2007). Previous research has shown that the feelings of the profession can increase the message receiver's trust in the message sender (Averbeck, 2015; Hollebeek & Chen, 2014). Research on the LET has demonstrated that positively (negatively) violating the expectation can enhance (reduce) the message senders' trustworthiness and credibility as well as improve (hurt) the message receivers' attitude towards to the persuasiveness of the message (Clementson et al., 2016; Folse et al., 2016; Hong & Li, 2017; Jensen et al., 2013). Thus, we derive the following hypotheses:

H1a: When responding to positive consumer comments, brands using informal language style will result in higher consumer trust than using formal language style.

H1b: When responding to negative consumer comments, brands using formal language style will result in higher consumer trust than using informal language style.

Second, the positive scenario is mainly hedonic-oriented while the negative scenario is mainly utilitarian-oriented. The hedonic-utilitarian differentiation has been employed by marketing researchers to study consumer behavior for a long time. Generally speaking, the hedonist looks mainly for enjoyment, while the utilitarian focuses on solving rational needs (Barcelos et al., 2018; Hirschman & Holbrook, 1982). One thing to notice is that the hedonic-utilitarian differentiation is not a dichotomy; instead, it is a unidimensional categorization, ranging from purely hedonic to purely utilitarian (Hirschman & Holbrook, 1982). When communicating with brands on social media, positive consumer comments are mainly initiated with the hedonic goals while negative consumer comments with utilitarian objectives. On the one hand, positive consumer comments are usually about consumers' favorite attitudes toward a brand or positive experiences with the brand (Relling et al., 2016). Thus, it is more likely that consumers initiate such comments to primarily seek endorsement through interacting with either the like-minded people who are passionate about the brand or the brand per se (Dholakia, Bagozzi, & Pearo, 2004; Nambisan & Baron, 2007; Relling et al., 2016). On the other hand, negative consumer comments are often about consumers' dissatisfactions with a brand or complaints about the negative experiences with the brand (Einwiller & Steilen, 2015; Relling et al., 2016). Although similar to consumers initiating positive comments, consumers might post

negative comments to seek social support from other consumers who have similar negative experiences with the brand, it is very likely that, simultaneously, consumers are seeking information from other consumers or responses from the brand to address their problems (Balaji et al., 2016; Einwiller & Steilen, 2015; Relling et al., 2016; Williams & Buttle, 2014). Recent research has empirically demonstrated that positive consumer comments are more favored by social-goal centered brand social media community, while negative consumer comments are more preferred by functional-goal centered brand social media community (Relling et al., 2016), indicating that positive consumer comments mainly convey social-oriented (i.e., hedonic) values while negative consumer comments primarily convey functional-oriented (i.e., utilitarian) values. Therefore, in the positive scenario, consumers will prefer brands to adopt the language style that improves the hedonic value of the communication, while in the negative scenario, consumers will prefer brands to adopt the language style that enhances the utilitarian value of the communication.

The informal language style is relationship-oriented and can be used to develop rapport between interlocutors (Gretry et al., 2017; Incelli, 2013; Rennekamp & Witz, 2017; Reyes, 2015). According to previous research, the informal language is a flexible and light way of communication that is conducive to the expressivity and interactivity (Beukeboom et al., 2015; Heylighen & Dewaele, 2002; Reyes, 2015). It can create greater feelings of personal engagement and relationship closeness which, in turn, can activate emotions related to the communication settings and increase the transference of emotions between interlocutors (McKenna, Green, & Gleason, 2002; Reyes, 2015; Schindler & Bickart, 2012; Sparks et al., 2016). Thus, it can be employed to increase the hedonic value of communication. The

formal language style is information-oriented and often used to share objective information (Heylighen & Dewaele, 2002; Incelli, 2013; Rennekamp & Witz, 2017). According to previous research, the formal language style can keep interlocutors focusing on the message they are attempting to communicate (Rennekamp & Witz, 2017). It can also improve the perceived effectiveness and efficiency of communication (Van Dolen et al., 2007). Thus, it can be used to increase the utilitarian value of communication. Therefore, in this positive scenario, adopting a formal language style would negatively violate consumers' general expectation of an informal brand language since it decreases the hedonic value of communication; while, in the negative scenario, adopting a formal language style would positively violate consumers' general expectation as it increases the utilitarian value of communication. Satisfaction is a concept that has been widely studied in marketing research. Previous research has shown that, when brand meets or exceeds (e.g., positively violates) consumers' expectation, consumers will be satisfied; when brand performance is below (e.g., negatively violates) consumers' expectations, consumers will be dissatisfied (Oliver, 1980; Xia, 2013). Therefore, we derive the following hypotheses:

H2a: When responding to positive consumer comments, brands using informal language style will result in higher consumer satisfaction than using formal language style.

H2b: When responding to negative consumer comments, brands using formal language style will result in higher consumer satisfaction than using informal language style.

Consumer engagement is a concept that has received much attention from marketing researchers since around 2005 (Brodie, Hollebeek, Jurić, & Ilić, 2011; Islam, Islam,

Rahman, & Rahman, 2016). Due to its massive convenience for consumer engagement to occur, social media has been a major context where consumer engagement has been studied (Brodie, Ilic, Juric, & Hollebeek, 2013). With a behavioral focus, consumer engagement is defined as “*behavioral manifestations that have a brand or firm focus, beyond purchase, resulting from motivational drivers*” (Van Doorn et al., 2010, p. 254). Previous research has found that consumer engagement with a brand post on social media is significantly affected by the valences of the comments following the post (de Vries et al., 2012). According to the LET, positive violations of language expectation will change message receivers’ behavior in the direction advocated by the message sender, while negative violations will maintain or even change message receivers’ behavior in opposition to the direction desired by the message sender (Burgoon, 1989, 1990). Thus, we argue that the brand response language style can moderate the relationship between consumer comment valence and engagement intention, and propose the following hypotheses:

H3a: When responding to positive consumer comments, brands using informal language style will result in higher engagement intention than using formal language style.

H3b: When responding to negative consumer comments, brands using formal language style will result in higher engagement intention than using informal language style.

In the social media context, both brand trust and satisfaction have been found to be positively related to consumer engagement (Brodie et al., 2013; Dessart, Veloutsou, & Morgan-Thomas, 2015; Habibi et al., 2014; Islam & Rahman, 2016a; Pansari & Kumar, 2017; So et al., 2016). Previous research has shown that brand trust and satisfaction are

both antecedents (Bowden, 2009; Van Doorn et al., 2010; Islam & Rahman, 2016b) and consequences (Brodie et al., 2011, 2013; Wallace, Buil, & de Chernatony, 2014; Islam & Rahman, 2016c) of consumer engagement, indicating a reciprocity between brand trust and satisfaction and consumer engagement. In this paper, given that our focus is on engagement intention (not engagement behavior), we propose that consumers' evaluations of the brand (i.e., brand trust and satisfaction) precede consumers' behavior intentions (i.e., engagement intention). Therefore, we develop the following hypotheses:

H4a: Brand trust mediates the effect of consumer comment valence on consumers' engagement intention.

H4b: Brand satisfaction mediates the effect of consumer comment valence on consumers' engagement intention.

H5a: Brand response language style moderates the mediation effect of brand trust between consumer comment valence and consumers' engagement intention.

H5b: Brand response language style moderates the mediation effect of brand satisfaction between consumer comment valence and consumers' engagement intention.

The scenario-based experimental method was employed to test our hypotheses. This method is appropriate because it can enhance the control over potential extraneous variables and enables one to manipulate different treatments (Smith, Bolton, & Wagner, 1999). The control allows “*precise predictions derived from a theory or a model to be tested*” (Kim & Jang, 2014, p. 126). Besides, the scenario-based experimental method can “*avoid the expense and ethical issues involved in real settings*” (Kim & Jang, 2014, p. 125).

Research that examines consumers' responses to brand language styles has been primarily based on the scenario-based experimental method (see Barcelos et al., 2018; Gretry et al., 2017; Jakic et al., 2017; Sparks et al., 2016; Xia, 2013). Therefore, in line with previous research, we conducted scenario-based experiments to test whether (and how) the brand language style impacts consumers' trust, satisfaction, and engagement intention in different situations. Two experiments were conducted in this paper, with one on a condition of extreme consumer comment valence and the other on a condition of less extreme consumer comment valence.

3.4 Experiment 1: A Condition of Extreme Consumer Comment Valence

The objective of the first experiment is to test our hypotheses in the scenarios with the extreme consumer comment valence. In this experiment, we adopted a 2 (consumer comment valence: positive vs. negative) \times 2 (brand response language style: formal vs. informal) between-subjects design.

Stimuli

A simulated Facebook brand post that featured the communications between a fictitious resort brand, i.e., *Paradise Resort*, and eight consumers were developed and used as the experiment stimuli. In total, four versions of the brand-consumer communications were designed (see Appendix 2a). The stimuli were selected for three reasons. First, we chose the Facebook brand post as the experimental context because Facebook has become the most popular social media marketing channel worldwide (Barcelos et al., 2018; Cooper, 2018) and a lot of previous research has used the Facebook brand post as the research

context for investigating the consumer-brand interactions and communications (see Barcelos et al., 2018; de Vries et al., 2012; Gretry et al., 2017; Sparks et al., 2016; Swani & Milne, 2017). Second, since our primary objective is to investigate consumers' response to the language style adopted by brands, we used a fictitious brand here to eliminate the potential biases from consumers' prior experience with and attitude towards existing brands (Barcelos et al., 2018; Jakic et al., 2017; LeBoeuf, & Simmons, 2010). Third, we selected a resort brand as our focus because that maintaining relationships with consumers through communication is important for hospitality management and it represents service consumption with a relatively high purchase decision involvement.

Regarding the manipulation of the consumer comment valence, to create the extreme comment valence, in the positive scenario, we designed eight positive comments, and in the negative scenario, we designed eight negative comments. Positive and negative comments were designed in pairs and, where possible, be phrased to be the opposite of each other. The brand language style (i.e., formal vs. informal) were manipulated by (whether or not) using the linguistic features identified in previous research (see Table 3.1). Similar to consumer comments, brand responses were also developed in pairs to ensure the contents of formal brand responses are similar to that of informal brand responses. To ensure the realism of manipulations, the initial brand post and the following communications were developed based on real resorts' Facebook brand pages (Barcelos et al., 2018; Gretry et al., 2017; Jensen et al. 2013; Sparks et al., 2016).

Participants and procedure

A total of 198 undergraduate students (52% female, $M_{\text{age}} = 20.0$) participated in this experiment. At the beginning of the experiment, participants were informed that they are participating in a study on brand-consumer communications. Then, participants were randomly assigned to one of the four conditions (i.e., positive & informal, positive & formal, negative & informal, negative & formal) and instructed that they would be reading a Facebook post and following brand-consumer communications from a famous resort brand. Participants were then exposed to the simulated resort Facebook post that featured the communications between the resort brand and eight consumers. After reading the assigned treatment for as long as they wanted, participants completed a survey that includes the measures of this research's interest. After the experiment, the full purpose of the experiment was explained to the participants.

Measurement

The measures of the variables of interests were adapted from previous research. For dependent variables, we measured brand trust, brand satisfaction and intention to engage. Brand trust was measured using five items adapted from Gretry et al. (2017), Jakic et al. (2017), and Relling et al. (2016): “Based on its responses, *I feel that I can trust the Paradise Resort / I expect the Paradise Resort to deliver its promise / I feel that the Paradise Resort can be counted on to help me and other consumers / I am confident in the Paradise Resort's ability to perform well; The Paradise Resort appears reliable*” (1 = strongly disagree, 7 = strongly agree; $\alpha = .98$). Brand satisfaction was measured using three items adapted from Xia (2013): “I am satisfied/pleased/happy with the Paradise Resort's responses” (1 = strongly disagree, 7 = strongly agree; $\alpha = .96$). Intention to engage was measured using

three items adapted from de Oliveira, Huertas, & Lin (2016) and Jin & Huang (2017): “If you were one follower of the Paradise Resort on Facebook, how likely are you to *contribute to the conversation with this brand on Facebook in the future / interact with this brand on Facebook in the future / engage with this brand on Facebook by liking, sharing, or commenting on its posts in the future*” (1 = very unlikely, 7 = very likely; $\alpha = .87$). For manipulation check, we measured the consumer comment valence and brand response language style. The consumer comment valence was measured using one item adapted from Rim & Song (2016): “Overall, how positive or negative are the comments posted by the consumers” (1 = very negative, 7 = very positive). For brand response language style, we measured the brand language informality using four items adapted from Gretry et al. (2017): “Paradise Resort communicates in an informal way / Paradise Resort communicates in an unofficial way / Paradise Resort communicates in an easygoing way / Paradise Resort communicates in a casual way” (1 = strongly disagree, 7 = strongly agree; $\alpha = .80$). We also measured the manipulation realism using one item adapted from Barcelos, et al. (2018): “To what extent did you find this social media content realistic” (1 = not realistic at all, 7 = very realistic).

In addition to the primary measures of interest, we measured participants’ age, gender, first language (i.e., whether English or not), product involvement and Facebook intensity as control variables. The product involvement was measured using six items adapted from Zaichkowsky (1985): “In your personal perceptions, resorts are: 1 = unimportant/of no concern to me/irrelevant/useless/do not matter to me/not needed; 7 = important/of concern to me/relevant/useful/matters to me/needed” ($\alpha = .91$). The Facebook intensity was

measured using six items adapted from Ellison, Steinfield, & Lampe (2007): “Facebook is part of my everyday activity / I am proud to tell people I’m on Facebook / Facebook has become part of my daily routine / I feel out of touch when I haven’t logged onto Facebook for a while / I feel I am part of the Facebook community / I would be sorry if Facebook shut down” (1 = strongly disagree, 7 = strongly agree; $\alpha = .92$).

Results

Manipulation checks

The manipulation checks indicated that our manipulations were effective. Specifically, participants in the positive condition indicated that the consumer comments were significantly more positive than did those in the negative condition ($M_{\text{positive}} = 6.63$; $M_{\text{negative}} = 1.43$; $F(1,196) = 1959.08$, $p < .001$). Participants in the informal condition indicated that the brand language informality was significantly higher than did those in the formal condition ($M_{\text{informal}} = 4.58$; $M_{\text{formal}} = 3.18$; $F(1,196) = 71.85$, $p < .001$). For realism check, a one-sample t-test revealed that the mean of perceived realism is significantly higher than the neutral scale point of 4 ($M = 5.02$, $t(197) = 9.34$, $p = .000$) indicating that participants perceived our manipulations to be realistic. In addition, a one-way ANOVA showed that the perceived realism did not differ across the four conditions ($F(3,194) = 1.94$, $p = .13$).

Hypotheses testing

To test H1, H2 and H3, we conducted a 2 (consumer comment valence: positive vs. negative) \times 2 (brand language style: formal vs. informal) between-subjects MANCOVA in which brand trust, brand satisfaction and intention to engage served as dependent variables

and first language served as the covariate. We only include first language as the covariate as we did not observe any significant effects of age, gender, product involvement, or Facebook intensity. As expected, the MANCOVA revealed a significant interactive effect of consumer comment valence and brand response language style (Wilks' $\lambda = .887$, $F(3,191) = 8.12$, $p = .000$, $\eta_p^2 = .113$). The results also revealed a significant main effect of consumer comment valence (Wilks' $\lambda = .316$, $F(3,191) = 137.72$, $p = .000$, $\eta_p^2 = .684$). However, no significant main effect of brand response language style was found (Wilks' $\lambda = .993$, $F(3,191) = .438$, $p = .73$). The effect of covariate was significant (Wilks' $\lambda = .932$, $F(3,191) = 4.68$, $p = .004$, $\eta_p^2 = .068$).

Then, we conducted a series of univariate analyses for each of the dependent variables. Regarding brand trust, the two-way ANCOVA revealed a significant interactive effect of consumer comment valence and brand response language style on brand trust ($F(1,193) = 9.78$, $p = .002$) (see Figure 3.1). Planned contrasts revealed that in the positive scenario, participants exposed to informal brand responses had more brand trust than those exposed to formal brand responses ($M_{\text{informal}} = 5.80$; $M_{\text{formal}} = 5.33$; $F(1,194) = 3.95$, $p = .048$), thereby supporting H1a. In the negative scenario, participants exposed to formal brand responses had more brand trust than those exposed to informal brand responses ($M_{\text{informal}} = 1.88$; $M_{\text{formal}} = 2.53$; $F(1,194) = 7.57$, $p = .007$), thereby supporting H1b.

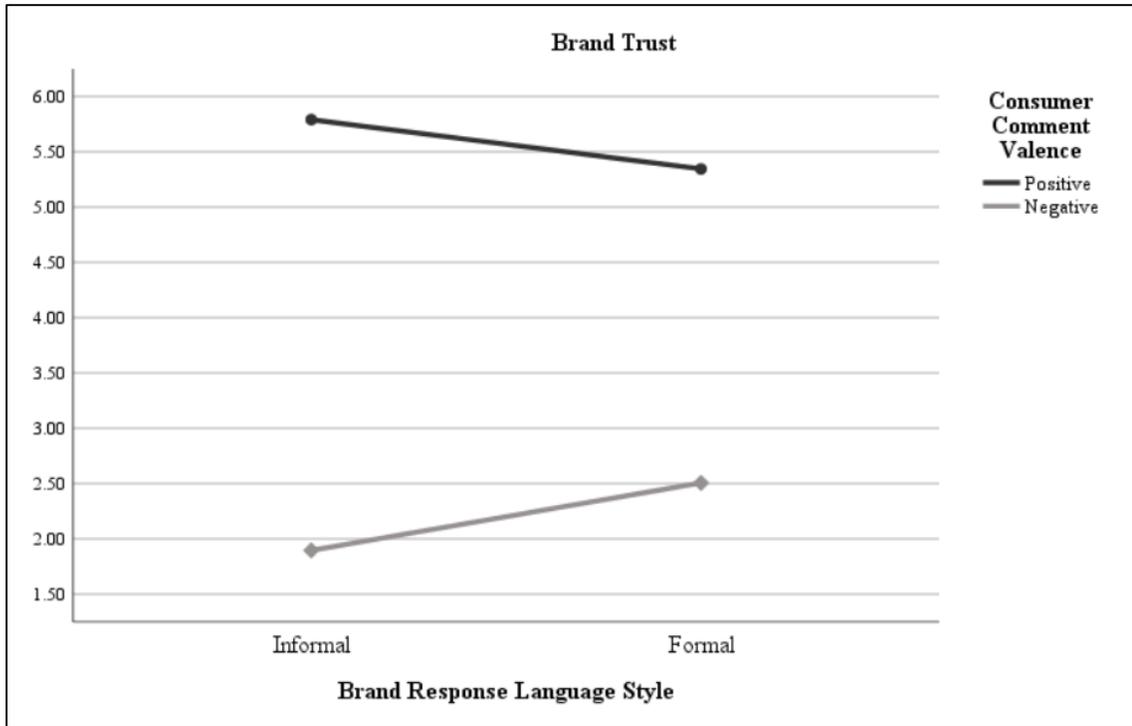


Figure 3.1 Two-way Interaction Effect on Brand Trust

Regarding brand satisfaction, the two-way ANCOVA revealed a significant interactive effect of consumer comment valence and brand response language style on brand satisfaction ($F(1,193) = 12.34, p < .001$) (see Figure 3.2). Planned contrasts revealed that in the positive scenario, participants exposed to informal brand responses had more brand satisfaction than those exposed to formal brand responses ($M_{\text{informal}} = 5.75; M_{\text{formal}} = 4.89; F(1,194) = 9.67, p = .002$), thereby supporting H2a. In the negative scenario, participants exposed to formal brand responses had more brand satisfaction than those exposed to informal brand responses ($M_{\text{informal}} = 2.90; M_{\text{formal}} = 3.55; F(1,194) = 5.55, p = .019$), thereby supporting H2b.

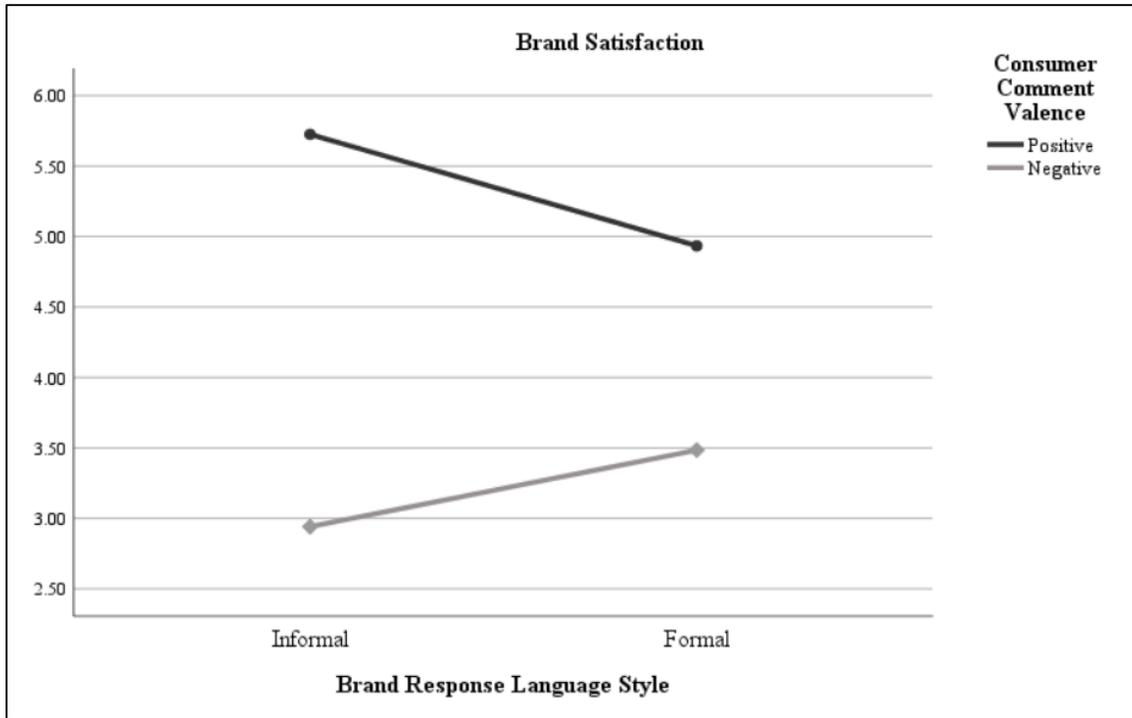


Figure 3.2 Two-way Interaction Effect on Brand Satisfaction

Regarding intention to engage, the two-way ANCOVA revealed a significant interactive effect of consumer comment valence and brand response language style on intention to engage ($F(1,193) = 16.20, p = .000$) (see Figure 3.3). Planned contrasts revealed that in the positive scenario, participants exposed to informal brand responses had more engagement intention than those exposed to formal brand responses ($M_{\text{informal}} = 3.56; M_{\text{formal}} = 2.86; F(1,194) = 6.56, p = .01$), thereby supporting H3a. In the negative scenario, participants exposed to formal brand responses had more engagement intention than those exposed to informal brand responses ($M_{\text{informal}} = 1.67; M_{\text{formal}} = 2.57; F(1,194) = 10.88, p = .001$), thereby supporting H3b.

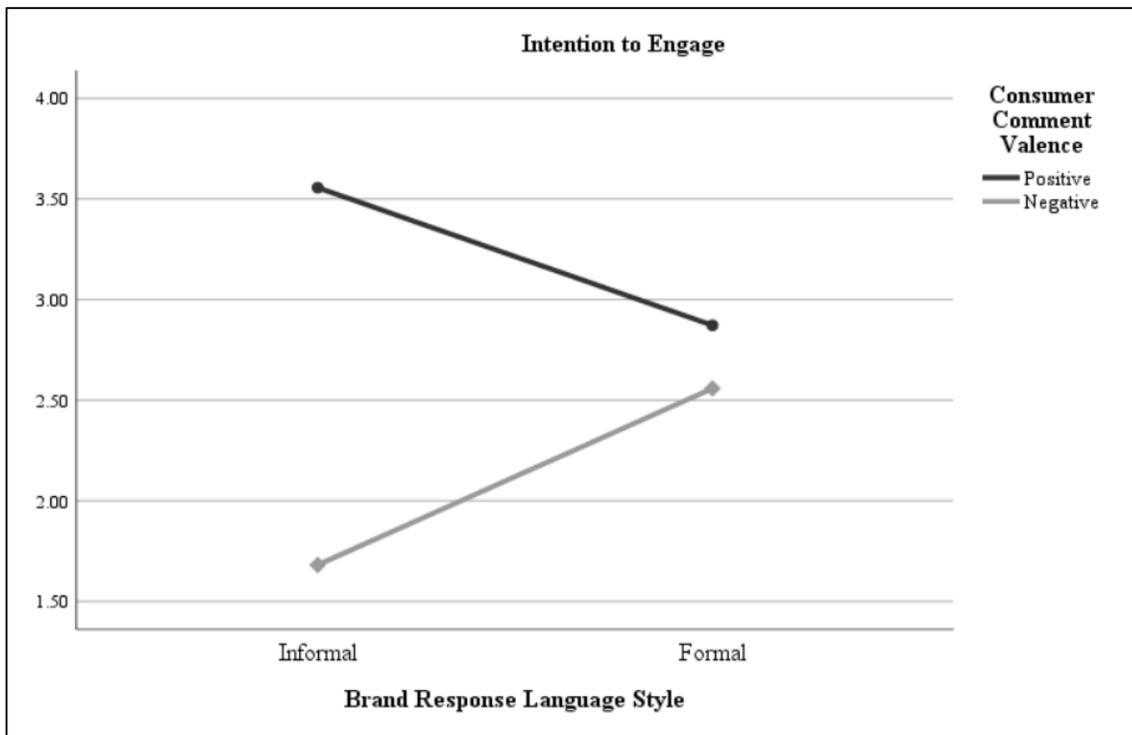


Figure 3.3 Two-way Interaction Effect on Intention to Engage

H4 and H5 predicted the mediation effects of brand trust and satisfaction on the relationship between consumer comment valence and consumers' engagement intention and the moderation role of brand response language style on such mediation effects. In line with previous research (Gretry et al., 2017; Rim & Song, 2016), we tested the mediation (H4) and moderated mediation (H5) effects using the PROCESS Model 8 with 5,000 bootstrapping samples (Hayes, 2017) (see Figure 3.4). In the regression model, the dependent variable was intention to engage, the independent variable was consumer comment valence, the mediators were brand trust and brand satisfaction, the moderator was brand response language style, and the covariate was first language. In terms of brand trust, the results revealed that brand trust was significantly influenced by the consumer comment

valence ($b = -3.89$, $t = -16.40$, $p = .000$) and the interaction of consumer comment valence and brand response language style ($b = 1.06$, $t = 3.13$, $p = .002$). The increased brand trust led participants to have higher intention to engage with brand ($b = .30$, $t = 3.47$, $p = .000$). Further, the results revealed that brand trust mediated the effect of consumer comment valence on intention to engage both when brand response language style is informal (indirect effect = -1.15 , 95% CI = -1.91 to $-.52$) and formal (indirect effect = $-.84$, 95% CI = -1.46 to $-.38$), as the bootstrap confidence intervals for the indirect effects did not include zero. Thus, H4a was supported. More interestingly, the results revealed that the brand response language style moderates the mediation effect of brand trust ($b = .31$, 95% CI = $.09$ to $.61$). Thus, H5a was supported. In terms of brand satisfaction, the results revealed that brand satisfaction was significantly influenced by the consumer comment valence ($b = -2.78$, $t = -10.42$, $p = .000$) and the interaction of consumer comment valence and brand response language style ($b = 1.33$, $t = 3.51$, $p = .000$). However, the increased brand satisfaction did not lead participants to have higher intention to engage with brand ($b = .13$, $t = 1.67$, $p = .10$). Thus, brand satisfaction did not mediate the effect of consumer comment valence on intention to engage either when brand response language style is informal (indirect effect = $-.35$, 95% CI = $-.77$ to $.03$) or formal (indirect effect = $-.18$, 95% CI = $-.43$ to $.02$). Similarly, brand response language style did not moderate the mediation effect of brand satisfaction ($b = .17$, 95% CI = $-.02$ to $.42$). Therefore, H4b and H5b were not supported.

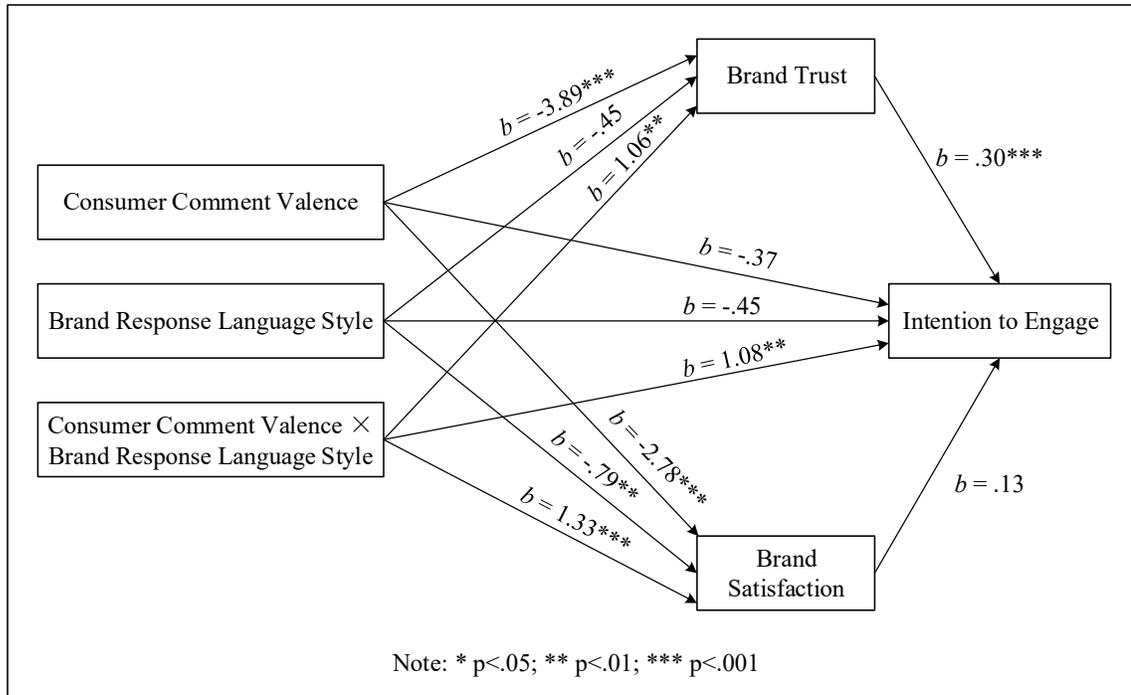


Figure 3.4 The Results of Moderated Mediation Analyses

Discussion

The results of Experiment 1 showed that, when responding to positive consumer comments, brands using informal language style will result in higher brand trust (H1a), satisfaction (H2a), and engagement intention (H3a) than using formal language style; when responding to negative consumer comments, brands using formal language style will result in higher brand trust (H1b), satisfaction (H2b), and engagement intention (H3a) than using informal language style. The results also revealed that positive consumer comments could lead to higher brand trust, which, in turn, lead to higher engagement intention than negative consumer comments (H4a). More interestingly, we found the mediating role of brand trust in driving the effect of consumer comment valence on engagement intention is moderated by brand response language style (H5a). Specifically, brand response using informal

language style can enlarge the positive effect of positive consumer comments on engagement intention through brand trust; while brand response using formal language style can dilute the negative effect of negative consumer comments on engagement intention through brand trust. In this experiment, we did not find the mediating role of brand satisfaction in driving the effect of consumer comment valence on engagement intention (H4b & H5b). One possible reason for this is that, in the extreme comment-valence scenario, brand trust plays a more important role in inducing engagement intention than brand satisfaction. In Experiment 1, we tested our hypotheses in the scenarios with extreme comment valence (i.e., pure positive/negative consumer comments). However, on social media, positive and negative comments sometimes occur together (Jensen et al., 2013). Therefore, we conducted another experiment to test our hypotheses in the scenarios with less extreme comment valences.

3.5 Experiment 2: A Condition of Less Extreme Consumer Comment Valence

The objective of experiment 2 is to test our hypotheses in the scenarios with less extreme consumer comment valences. Similar to experiment 1, experiment 2 followed a 2 (consumer comment valence: predominantly positive vs. predominantly negative) \times 2 (brand response language style: formal vs. informal) between-subjects design.

Stimuli

A simulated Facebook brand post that featured the communications between a fictitious smartphone brand, i.e., *Link Mobile*, and eight consumer comments were designed and used as the experiment stimulus (see Appendix 2b). We select smartphone to extend our

findings to product consumption. To manipulate the less extreme valence of consumer comments, in line with Barcelos et al. (2018) and Sparks & Browning (2011), we employed the predominance of valence. Specifically, in the predominantly positive scenario, we designed five positive, one negative, and two neutral consumer comments; while, in the predominantly negative scenario, we designed five negative, one positive, and two neutral consumer comments. Similar to experiment 1, positive and negative comments were designed in pairs and, where possible, were phrased to be the opposite of each other. We manipulated the brand language style (i.e., informal vs. formal) by incorporating (or not) the informal linguistic features in Table 3.1. In the informal (formal) conditions, all brand responses (i.e., responses to positive, negative, and neutral consumer comments) were designed as informal (formal). Similar to consumer comments, brand responses were developed in pairs. To ensure the realism, the initial brand post and the following communications were developed based on real smartphone brands' Facebook pages (Barcelos et al., 2018; Gretry et al., 2017; Jensen et al. 2013; Sparks et al., 2016).

Participants and procedure

A total of 219 U.S. residents were recruited from the Amazon Mechanical Turk (MTurk) as participants. MTurk is a crowdsourcing marketplace for work that requires human intelligence. It allows requesters to access human intelligence in a simple, scalable, and cost-effective way. Previous research has suggested that MTurk can provide more demographically diverse samples than traditional convenience samples (e.g., student samples, standard Internet samples) (Berinsky, Huber, & Lenz, 2012; Buhrmester, Kwang, & Gosling, 2011), thus, is a viable alternative for conducting online experiments (Chen,

Kim, & Lin, 2015; Paolacci, Chandler, & Ipeirotis, 2010). To ensure the data quality, in line with previous research (e.g., Barcelos et al., 2018; Lee et al., 2018; Peer, Vosgerau, & Acquisti, 2014), we restricted participants to MTurk workers with high reputation (above 95% task-approval rates, minimum 500 completed HITs). The procedure is similar to experiment 1. Participants were randomly assigned to one of the four conditions (i.e., predominantly positive & informal, predominantly positive & formal, predominantly negative & informal, predominantly negative & formal) and instructed that they would be reading a Facebook post and following brand-consumer communications from a popular smartphone brand. Then, participants were exposed to the corresponding stimuli. After reading the stimuli for as long as they wanted, participants were asked to complete a survey including the measures of this research's interest. We included an attention check question (i.e., "This is an attention check question, please click the response corresponding to 'strongly disagree' for this question.") in the survey to filter out the rushed answers. Three participants who did not comply were removed, and our final sample includes 216 participants (49% female, $M_{age} = 37.9$). We also implemented an objective-guessing question at the end of the survey to assess whether participants are aware of the research objective. Responses indicated that participants were not aware of the research objective.

Measurement

The measures of the variables are the same as that of Experiment 1. For dependent variables, we used the same measures (with the modification of brand name) of brand trust ($\alpha = .97$), brand satisfaction ($\alpha = .97$), and intention to engage ($\alpha = .94$). For manipulation check, we measured the consumer comment valence and brand response language style ($\alpha = .81$).

Similar to Experiment 1, for control variables, we measured participants' age, gender, first language (i.e., whether English or not), product involvement ($\alpha = .94$) and Facebook intensity ($\alpha = .93$).

Analysis

Manipulation checks

The manipulation checks indicated that our manipulations were effective. Participants in the positive condition indicated that the consumer comments were significantly more positive than did those in the negative condition ($M_{\text{positive}} = 5.92$; $M_{\text{negative}} = 2.83$; $F(1,214) = 344.13$, $p < .001$). Similarly, participants in the informal condition indicated that the brand language informality was significantly higher than did those in the formal condition ($M_{\text{informal}} = 4.81$; $M_{\text{formal}} = 4.11$; $F(1,214) = 21.04$, $p < .001$). The realism check showed that the mean of perceived realism is significantly higher than the neutral scale point of 4 ($M = 5.91$, $t(215) = 21.74$, $p = .000$) indicating that participants perceived our manipulations to be realistic. In addition, a one-way ANOVA showed that the perceived realism did not differ among the four conditions ($F(3,212) = 1.48$, $p = .22$).

Hypotheses testing

To test our hypotheses, we first conducted a 2 (consumer comment valence: positive vs. negative) \times 2 (brand language style: formal vs. informal) between-subjects MANCOVA in which brand trust, brand satisfaction and intention to engage served as dependent variables. In this model, we only included product involvement and Facebook intensity as the covariates because we did not observe any significant effects of age, gender, or first

language. As expected, the results of MANCOVA revealed a significant interactive effect of consumer comment valence and brand response language style (Wilks' $\lambda = .950$, $F(3,208) = 3.68$, $p = .01$, $\eta_p^2 = .050$). The MANCOVA also revealed a significant main effect of consumer comment valence (Wilks' $\lambda = .472$, $F(3,208) = 77.68$, $p = .000$, $\eta_p^2 = .528$). However, no significant main effect of brand response language style was found (Wilks' $\lambda = .998$, $F(3,208) = .12$, $p = .95$). As the covariates, the effects of product involvement (Wilks' $\lambda = .928$, $F(3,208) = 5.36$, $p = .001$, $\eta_p^2 = .072$) and Facebook intensity (Wilks' $\lambda = .837$, $F(3,208) = 13.54$, $p = .000$, $\eta_p^2 = .163$) were significant.

Then, we conducted a series of univariate analyses for each of the dependent variables. Regarding brand trust, the two-way ANCOVA revealed a significant interactive effect of consumer comment valence and brand response language style on brand trust ($F(1,210) = 8.86$, $p = .003$) (see Figure 3.5). Planned contrasts revealed that in the predominantly positive scenario, participants exposed to informal brand responses had more brand trust than those exposed to formal brand responses ($M_{\text{informal}} = 5.78$; $M_{\text{formal}} = 5.32$; $F(1,212) = 4.23$, $p = .041$), thereby supporting H1a. In the predominantly negative scenario, participants exposed to formal brand responses had more brand trust than those exposed to informal brand responses ($M_{\text{informal}} = 2.94$; $M_{\text{formal}} = 3.40$; $F(1,212) = 4.37$, $p = .038$), thereby supporting H1b.

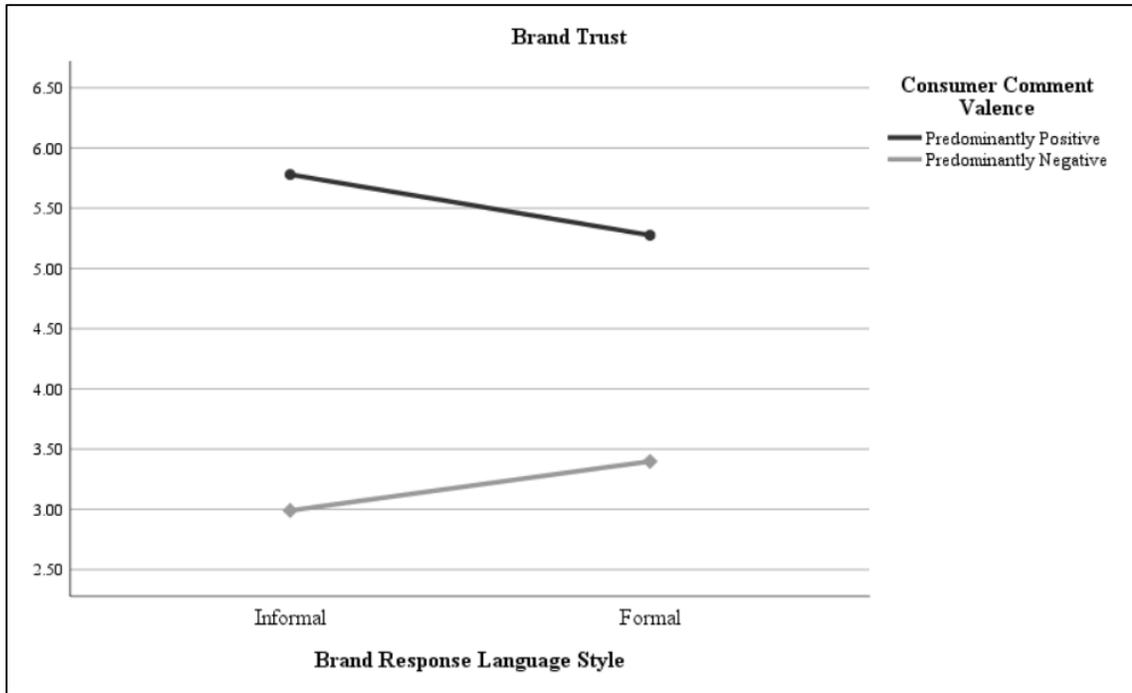


Figure 3.5 Two-way Interaction Effect on Brand Trust

Regarding brand satisfaction, the two-way ANCOVA revealed a significant interactive effect of consumer comment valence and brand response language style on brand trust ($F(1,210) = 8.37, p = .004$) (see Figure 3.6). Planned contrasts revealed that in the predominantly positive scenario, participants exposed to informal brand responses had more brand satisfaction than those exposed to formal brand responses ($M_{\text{informal}} = 5.98; M_{\text{formal}} = 5.50; F(1,212) = 3.90, p = .05$), thereby supporting H2a. In the predominantly negative scenario, participants exposed to formal brand responses had more brand satisfaction than those exposed to informal brand responses ($M_{\text{informal}} = 3.53; M_{\text{formal}} = 4.08; F(1,212) = 5.08, p = .03$), thereby supporting H2b.

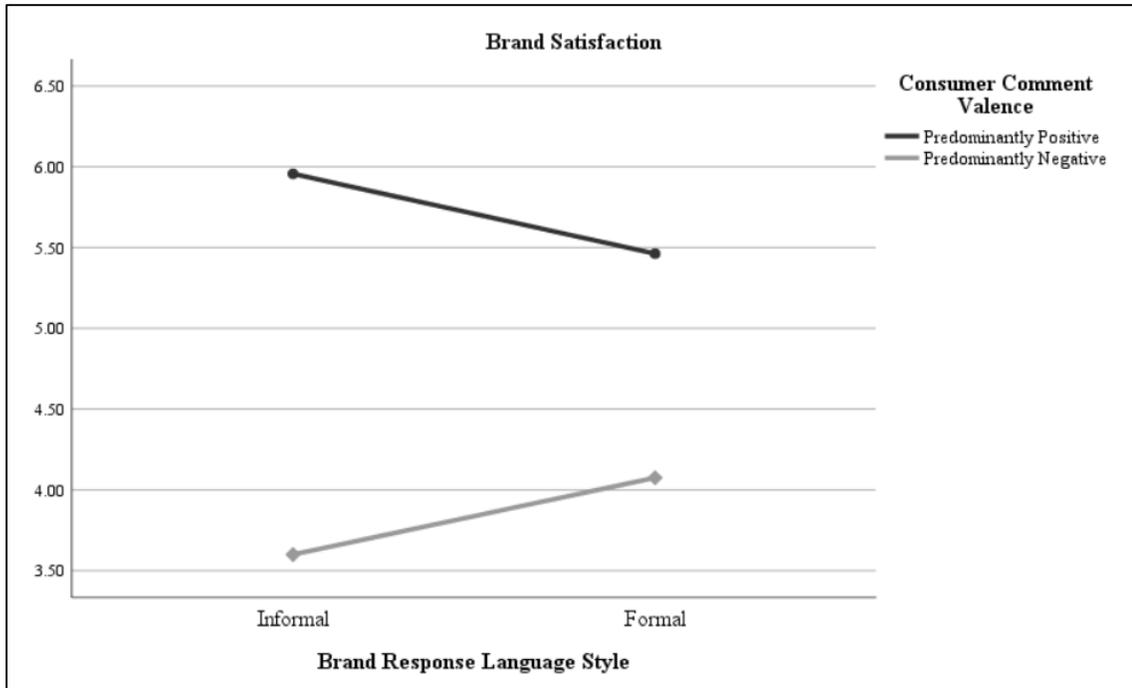


Figure 3.6 Two-way Interaction Effect on Brand Satisfaction

Regarding intention to engage, the two-way ANCOVA revealed a significant interactive effect of consumer comment valence and brand response language style on intention to engage ($F(1,210) = 4.85, p = .03$) (see Figure 3.7). However, the planned contrasts did not reveal the significantly different engagement intention between participants exposed to informal brand responses and formal brand responses in either the predominantly positive scenario ($M_{\text{informal}} = 4.32; M_{\text{formal}} = 3.85; F(1,212) = 1.91, p = .168$) or the predominantly negative scenario ($M_{\text{informal}} = 2.62; M_{\text{formal}} = 3.12; F(1,212) = 2.17, p = .142$). Thus, H3a and H3b were not supported.

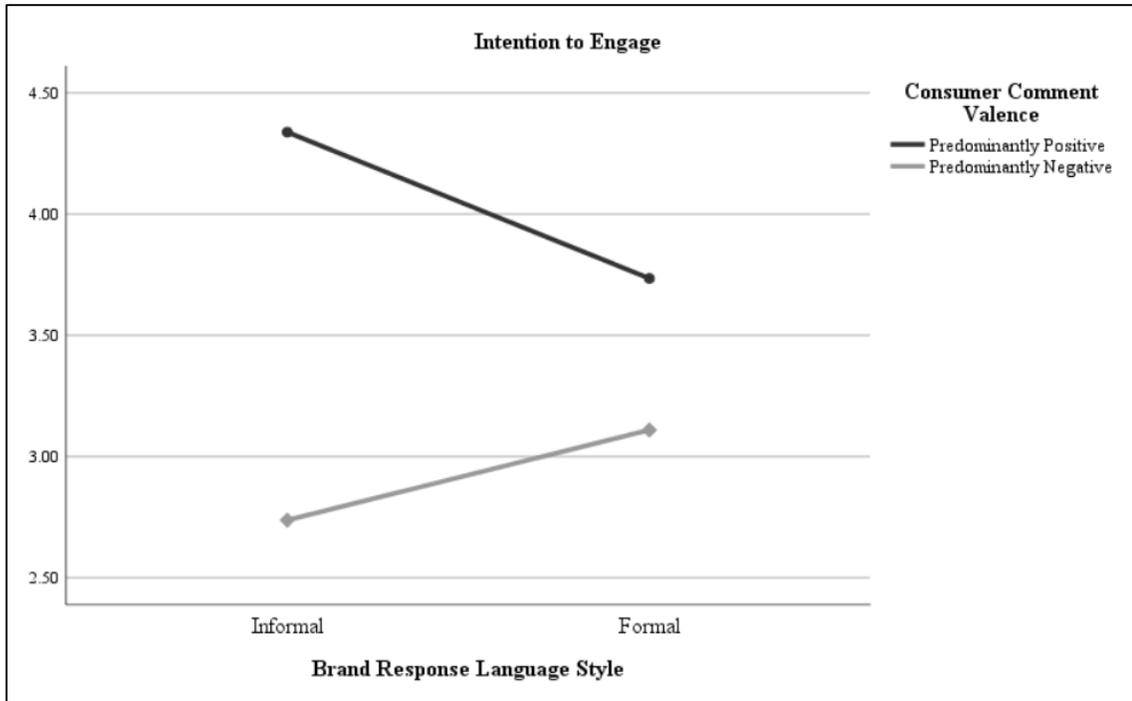


Figure 3.7 Two-way Interaction Effect on Intention to Engage

To test the H4 and H5, we conducted a mediation analysis using the PROCESS Model 8 with 5,000 bootstrapping samples (Hayes, 2017) (see Figure 3.8). The regression model was same as the one in Experiment 1 except that the covariates were product involvement and Facebook intensity. The results revealed that brand trust was significantly influenced by the consumer comment valence ($b = -2.79$, $t = -12.84$, $p = .000$) and the interaction of consumer comment valence and brand response language style ($b = .91$, $t = 2.98$, $p = .003$). The increased brand trust led participants to have higher intention to engage with brand ($b = .43$, $t = 3.50$, $p = .000$). Further, the results revealed that brand trust mediated the effect of consumer comment valence on intention to engage both when brand response language style is informal (indirect effect = -1.19 , 95% CI = -1.94 to $-.54$) and formal (indirect effect = $-.80$, 95% CI = -1.32 to $-.36$), as the bootstrap confidence intervals for the indirect effect

did not include zero. Thus, H4a was supported. More interestingly, the results revealed that the brand response language style moderates the mediation effect of brand trust ($b = .39$, 95% CI = .10 to .79). Thus, H5a was supported. In terms of brand satisfaction, the results revealed that brand satisfaction was significantly influenced by the consumer comment valence ($b = -2.36$, $t = -9.91$, $p = .000$) and the interaction of consumer comment valence and brand response language style ($b = .97$, $t = 2.89$, $p = .004$). Moreover, similar to brand trust, the increased brand satisfaction led participants to have a higher intention to engage with the brand ($b = .24$, $t = 2.13$, $p = .03$). Thus, brand satisfaction also mediated the effect of consumer comment valence on intention to engage both when brand response language style is informal (indirect effect = $-.56$, 95% CI = -1.13 to $-.04$) and formal (indirect effect = $-.33$, 95% CI = $-.70$ to $-.02$). The results also revealed that brand response language style moderated the mediation effect of brand satisfaction ($b = .23$, 95% CI = $.01$ to $.56$). Therefore, H4b and H5b were supported.

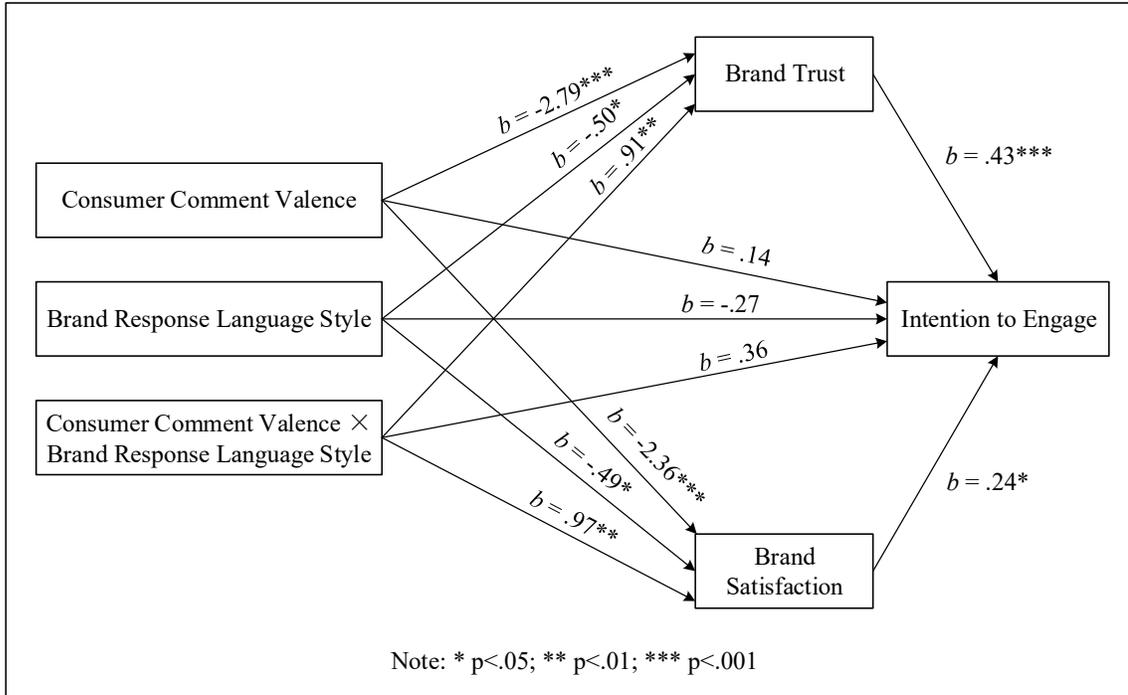


Figure 3.8 The Results of Moderated Mediation Analyses

Discussion

The results of Experiment 2 showed that, when responding to predominantly positive consumer comments, brands using informal language style will result in higher brand trust (H1a) and satisfaction (H2a) than using formal language style; when responding to predominantly negative consumer comments, brands using formal language style will result in higher brand trust (H1b) and satisfaction (H2b) than using informal language style. Different from Experiment 1, although we identified a significant moderating effect of brand response language style on the relationship between consumer comment valence and engagement intention, we did not find significantly different levels of engagement intention induced by different brand response language style in either the predominantly positive (H3a) or the predominantly negative (H4a) scenarios. One possible explanation is

that, in the scenarios with less extreme consumer comment valences, the effect of brand response language style is not large enough to directly impact consumers' engagement intention. The results also revealed that predominantly positive consumer comments could lead to higher brand trust and brand satisfaction, which, in turn, lead to higher engagement intention than predominantly negative consumer comments (H4a & H4b). More interestingly, we found the mediating roles of brand trust and satisfaction in driving the effect of consumer comment valence on engagement intention are moderated by brand response language style (H5a & H5b). Specifically, brand response using informal language style can enlarge the positive effect of predominantly positive consumer comments on engagement intention through brand trust and satisfaction; while brand response using formal language style can dilute the negative effect of predominantly negative consumer comments on engagement intention through brand trust and satisfaction.

3.6 Discussion

The massive proliferation of social media has revolutionized the way that brands and consumers interact with each other. The soaring volume of brand-consumer conversations and the diversified social media language characteristics have highlighted the need for guidelines regarding which language style brands should use to improve their relationships with consumers. This paper investigates how the consumer comment valence and brand response language style interactively influence consumers' perception of the brand and their intention for future engagement with the brand in different scenarios.

3.6.1 Implications

Theoretical implications

This paper has many theoretical implications. First, this paper addresses the recent calls for research on brand linguistics (Carnevale et al., 2017) and consumer engagement (Marketing Science Institute, 2018) by exploring how brands could enhance consumers' trust and satisfaction and engagement intention within social media through adjusting the language style of their responses to consumer comments with different valences. Second, this paper complements previous research on brand conversational human voice by indicating that the informal language style is not universally good for brands. While research has demonstrated that adopting an informal language can enhance consumers' evaluation of brands (Kelleher, 2009; Kelleher & Miller, 2006; Sparks et al., 2016; van Noort & Willemsen, 2012), few of them have considered the situational factors that might diminish or even reverse such effects. In line with recent research on brand language style (Barcelos et al., 2018; Gretry et al., 2017), we demonstrated that, in the negative scenarios, adopting an informal style could hurt consumers' evaluation of brands. Third, this paper enriches the current understanding of eWOM. While previous research on positive and negative eWOMs mainly focused on the valence difference, few of them has considered potential different conversational situations evoked by the contrary valences. Through investigating the different conversational situations evoked by positive and negative eWOMs, this paper shows that the effects of brand response language style are determined by not only the language style but also the valence of eWOM. From this perspective, this paper is consistent with the recent notion that positive and negative eWOMs need to be studied separately (Jensen et al., 2013). Finally yet importantly, this paper extends LET in

two ways. While previous research mainly applies LET in inter-personal communications, this paper, through applying the LET in the context of brand-consumer interaction on social media, responds to the call for examining more language features affecting message persuasiveness in different contexts (Burgoon, 1995; Burgoon et al., 2002).

Managerial implications

This paper also has many implications for social media marketers. First, nowadays, one primary task of social media marketers is to enhance consumer engagement with brands on social media. However, research has shown that the percent of consumer engagement is surprisingly low. For example, only about 1% of brands' followers on Facebook engage with the brands (Creamer, 2012; Lee et al., 2018), and even within the biggest Facebook brand pages, the fan engagement with brands is only about 4.3% (eMarketer, 2015). Social media marketers are struggling with how to design effective interactions to improve consumer engagement. This paper indicates that choosing the right language style in communications with consumers can make a positive impact, thus, provides social media marketers with a practical guideline on language style choice when responding to consumer comments. Second, brands now seem to use informal language style widely in their communications with consumers on social media as they believe that the informal language style can convey relationship closeness, create a conversational circumstance, and enhance the consumer-brand interactions (Beukeboom et al., 2015). However, there is no evidence that adopting an informal language style is optimal for all situations. This paper identified a situation (i.e., responding to negative consumer comments) where using the informal language style is inappropriate, reminding social media marketers to be cautionary about

the language style they might have been consistently employed. Third, this paper is also meaningful to online consumer complaint (or negative word of mouth, i.e., negative WOM) management. As consumers are increasingly using social media to convey their negative experiences with brands, online consumer complaint management is becoming a big challenge for social media marketers. Therefore, it is significant for brands to develop effective communication mechanisms to manage online consumer complaint (Chang et al., 2015; Einwiller & Steilen, 2015; Istanbuluoglu, 2017). From the perspective of language style, this paper addresses the issue by investigating the impacts of language style in brand responses to negative WOM on brand-consumer relationships. The results of this paper provide some insights on effective communication mechanisms for online consumer complaint management. Specifically, when responding to consumer complaint online, using formal language is better than inform language as, in this context, formal language can lead to higher brand trust and satisfaction.

3.6.2 Limitations and Future Research

This paper also has some limitations that offer opportunities for future research. First, while this paper adopts an online experimental design to enhance the control over potential extraneous variables, it might lose some authenticities of real social media context. Future research could further validate the findings in this paper using a field study method. For instance, future research could employ text analytics methods (e.g., text mining, sentiment analysis, etc.) to analyze real consumer-brand communications occurring in Facebook brand pages. Second, this paper only focuses on two aspects (i.e., trust and satisfaction) of consumer evaluation of brands because their formations are closely related to consumers'

expectation. However, previous research has shown that brand language style can also impact other aspects of consumer evaluation of brands, such as perceived interaction effort, sincerity, and appropriateness (Gretry et al., 2017; Jakic et al., 2017; Van Noort & Willemsen, 2012; Xia, 2013). It is likely that these aspects of consumer evaluation might also affect consumers' intention to engage with brands. Therefore, future research could investigate how these aspects being affected by brand language style as well as how they influence consumers' engagement intention. Third, this paper examines the impact of brand language style on consumer evaluations without considering the possible moderating role of brand personality. Consumers might expect brands with different personalities to use different language styles (i.e., informal vs. formal) (Gretry et al., 2017), thus adopting a formal style might positively violate consumers' expectation for some brands while negatively violate consumers' expectation for others. Future research could investigate how brand personality moderates the relationship between brand language style and consumer evaluation of brands.

4 Essay Three: Emojifying the Brand Social Media Posts to Enhance Consumer Engagement

4.1 Introduction

Emoji (previously known as emoticon) is an important communication tool and a lingua franca in the digital world (Pardes, 2018). Started as a sequence of keyboard symbols imitating facial expressions (e.g., “:-)”, “:-(”, and “^_^”), emoji has evolved into the visual icon spanning various categories, such as smileys & people (e.g., 😊, 😄, 😂, 🙋, and 😍), animals & nature (e.g., 🐼, 🐸, 🙈, 🌴, 🌍, and 🌻), food & drink (e.g., 🍔, 🥑, 🍰, 🥤, 🍷, and ☕), activity (e.g., 🏈, 🏐, 🔍, 📷, and 🏀), and so on (Riordan, 2017a). The current version, Emoji v12.0, has 3019 emojis in total and is still expanding (Unicode.org, 2019). According to a report, 74% of Americans use emojis regularly and, on average, they send 96 emojis per day in text messages and social media (Seiter, 2015). Nearly 50% of the Instagram comments include emojis, overtaking the use of internet slangs, such as OMG (i.e., oh my god), LOL (i.e., laugh out loud), and AMA (i.e., ask me anything) (Dimson, 2015). Moreover, on average, over 60 million emojis are sent every day on Facebook, and over 5 billion emojis are sent every day on Messenger (Emojipedia.org, 2017). In spite of its early adoption in leisure-centered instant message and social media, emoji is gradually making its way into task-oriented platforms, such as working emails (Skovholt, Grønning, & Kankaanranta, 2014; Walther & D’Addario, 2001), working text messages (Luor et al., 2010; Wang, Zhao, Qiu, & Zhu, 2014; Willoughby & Liu, 2018), and even government

reports (Mosendz, 2014). Emojis have become a significant phenomenon and revolutionized the way people communicate in the digital age (Willoughby & Liu, 2018).

The popularity of emojis also attracts social media marketers' attention. Social media has become an important marketing communication channel and provides a platform where brands and consumers can engage with each other in a bi-directional way (Dolan et al., 2016; Gretry et al., 2017; Hutter et al., 2013). On social media, because of the social contagion effects, higher consumer engagement usually leads to higher brand awareness and consideration (Coursaris et al., 2016b; Cruz et al., 2017; de Vries et al., 2017; Hutter et al., 2013), more brand equity and loyalty (Jahn & Kunz, 2012; Wagner et al., 2017), and better brand performance (Chung et al., 2014; Colicev et al., 2016; de Vries et al., 2017; Kumar et al., 2016). Thus, one primary task of social media marketers is to approach creative brand posts to maximize consumer engagement (Evans, 2010; Kacholia, 2013; Kim et al., 2015; Tuten & Solomon, 2013). In this case, because of its popularity and communicative potential, emoji is increasingly used by brands in their posts on social media with the aim of enhancing consumer engagement. It is now common to see brands incorporating emojis in their posts, such as “To inspire , one  at a time...” [*Facebook Post by Starbucks on February 26, 2018, at 12:42 pm*] and “Make some #GoogleDuo noise for DJ Dada. ” [*Tweet Post by Google on April 3, 2018, at 9:27 am*]. However, there is little evidence that using emojis in brand social media posts positively influences consumer engagement. In fact, according to a recent report, consumers think that brands using emojis are trying too hard (Hiebert, 2016). Given the prevalence of emojis in brand social media

posts, there is a need to better understand the influence of emojis in social media communications.

Thus, in this paper, we investigate whether and how incorporating emojis in brand social media posts affects consumer engagement with the posts. Specifically, this paper will address two research questions:

- 1) How are emojis used in brand social media posts presently?
- 2) Can (how) emojis in brand social media posts influence consumers' perceptions which, in turn, enhance their engagement?

To answer these research questions, we adopted a mixed-method design and conducted two studies. First, a field study was conducted to analyze 4,549 social media posts from 100 brands for two months to answer the first research question. Then, to answer the second question, two online experiments were conducted to investigate how using emojis in brand social media posts affects consumers' perceptions of brand posts, which, in turn, influence their engagement intention. This paper has many implications. First, this paper investigates the impacts of emojis on consumer engagement with brand posts on social media, which, deepens our understanding of the communicative effects of emojis in firm-to-consumer (F2C) communication on social media. Second, drawing on a perspective of non-verbal communication, this paper responds to the recent calls for research on effective brand social media content strategies (Kumar, 2015; López et al., 2017; Marketing Science

Institute, 2018). Last but not least, this paper provides some practical guidelines for social media marketers on their use of emojis in brand posts.

4.2 Theoretical Foundation

4.2.1 The Communicative Role of Emojis

An emoji is “*iconic, visual representation of an idea, entity, feeling, status or event, that is used alongside or instead of words in digital messaging and social media*” (Evans, 2015, p. 1). Emojis were initially designed as the surrogates for facial expressions or body languages to convey emotional tones and non-verbal cues, such as facial expressions, gestures, and postures in the computer-mediated communication (CMC) (Crystal, 2006; Huang et al., 2008; Luor et al., 2010). Unlike face-to-face communications, where non-verbal cues are simultaneously sent as the complements to help clarify verbal messages, early CMCs lacked non-verbal cues, largely constraining its communicative ability (Lo, 2008; Walther & D’Addario, 2001). The development and adoption of emojis helped address this issue by providing communicators with an easy way to add non-verbal cues on their verbal messages in the CMC (Derks, Bos, & Von Grumbkow, 2008; Thompson & Filik, 2016; Willoughby & Liu, 2018; Yuasa, Saito, & Mukawa, 2011). Currently, there are two general types of emojis, namely, face emojis and non-face emojis (Riordan, 2017a). Face emojis were evolved from its predecessor, emoticons (i.e., emotional icons), while non-face emojis were added later as the extension (Thompson & Filik, 2016). Because of its early emergence as emoticons, face emojis were the major focus of previous research, and their communicative roles have been studied widely. Generally, previous research has identified two primary communicative roles of face emojis, which are, to portray emotions

and to disambiguate messages (Derks et al., 2008; Kaye, Wall, & Malone, 2016; Riordan, 2017a). First, the face emojis serve as an effective tool for conveying emotions (Kaye et al., 2016). Pairing a neutral message with a smiley face makes the message appear more positive while pairing it with a frowning face makes it appear more negative than the equivalent message without an emoji (Lo, 2008; Luor et al., 2010). In addition to conveying emotions, face emojis can also strengthen the emotional intensity of the initial messages. For example, a positive message with a smiley face is perceived more positively, and a negative message with a frowning face is perceived more negatively than the original messages (Derks et al., 2008). Given its significant role in portraying emotional information, emojis are increasingly used as a useful machine learning feature for sentiment analysis (Wolny, 2016). Second, including face emojis in a message could reduce the possibility of misinterpretation of the message, especially when the message is ambiguous (Riordan, 2017a; Walther & D'Addario, 2001). That is, face emojis could be added to ensure that the message receiver interprets the message as the message sender intends (Kaye et al., 2016). For example, when expressing negative feedbacks, including liking face emojis (e.g., 😍, 😊, and 😄) in the feedbacks can help ensure that message receivers perceive the intention of the feedback provider in a good way. Although the majority of research focuses on face emojis, researchers are increasingly paying attention to non-face emojis recently. In practice, non-face emojis are as popular as face emojis on social media. According to the [Emojitracker.com](http://emojitracker.com), a website that monitors the emoji use on Twitter in real time, 24 of the top 50 emojis are non-face emojis (at the time accessed by the author on April 10, 2018, at 6:00 pm), implying a widely accepted communicative role of non-face emojis. Indeed, recent research has shown that non-face emojis can serve the

two communicative roles of face emojis as well (Kaye et al., 2016; Riordan, 2017a & 2017b). For example, it was found that tweets with emojis (either face or non-face) were consistently more positive than those without, indicating that non-face emojis carry emotional information as well (Novak, Smailović, Sluban, & Mozetič, 2015). Research has demonstrated that messages with non-face emojis led to lower ambiguity and higher rating confidence than messages without emojis, suggesting that non-face emojis can disambiguate messages as well (Riordan, 2017a).

Because of the communicative roles emojis play, it is widely believed that the adoption of emojis can lead to many positive effects on the communication (Hsieh & Tseng, 2017; Huang et al., 2008; Rodrigues, Lopes, Prada, Thompson, & Garrido, 2017; Skovholt et al., 2014). However, these positive effects of emojis are not context-free (Luor et al., 2010; Kaye et al., 2016). Previous research has shown that people in different genders (Luor et al., 2010; Tossell et al., 2012; Wolf, 2000) and ages (Chen & Siu, 2017) or with different personalities (Marengo, Giannotta, & Settanni, 2017; Wall, Kaye, & Malone, 2016) and cultural backgrounds (Park, Baek, & Cha, 2012; Takahashi, Oishi, & Shimada, 2017) have different emoji use preferences and behaviors, implying that one emoji might generate different effects on different receivers. Besides, the effects of emojis also vary with communication contexts, such as simple vs. complex task-oriented communication (Luor et al., 2010), task-oriented vs. socio-emotional contexts (Derks, Bos, & Von Grumbkow, 2007), positive vs. negative message valences (Derks et al., 2008; Ganster, Eimler, & Krämer, 2012), and different virtual platforms (Kaye et al., 2016). For example, while a neutral message with a smiley emoji is usually perceived as positivity (Luor et al., 2010),

a negative message with a smiley emoji could be perceived as great sarcasm (Derks et al., 2008). Therefore, before adopting emojis in a new communication context, it is critical to investigate whether their positive communicative effects hold in the new context. Since using emojis in brand social media posts is a relatively new phenomenon, little research has been conducted to examine if the previously identified positive effects of emojis on interpersonal communication can be extrapolated to this new context of F2C communication. However, given the prevalence of emojis in brand social media posts, the effects of emojis in brand social media posts on consumers are worthy of examination. Thus, this paper will address this research gap and investigate whether and how the emojis in brand social media posts affects consumers in F2C communications.

4.2.2 Consumer Engagement with Brand Posts on Social Media

Consumer engagement with brand posts on social media has been empirically studied in previous research under many conceptualizations (e.g., brand post popularity, brand content popularity, message popularity, user interaction, consumer engagement, consumer involvement, and consumer response, etc.), being operationalized using different measurements (e.g., number of like/comment/share, like/comment/share ratios to impression, and other variables calculated from number of like/comment/share, etc.), and within a variety of contexts (e.g., single/multiple industries, B2B/B2C, product/service, etc.) (*see* Coursaris et al., 2016a; Cruz et al., 2017; Cvijikj & Michahelles, 2013; de Vries et al., 2012; Gutiérrez-Cillán, Camarero-Izquierdo, & San José-Cabezudo, 2017; Kim et al., 2015; Kwok & Yu, 2013; Lee et al., 2018; Lei et al., 2017; López et al., 2017; Luarn et al., 2015; Sabate et al., 2014; Schultz, 2017; Swani et al., 2013; Swani & Milne, 2017;

Swani et al., 2017; Wagner et al., 2017). Across this extant research, three primary characteristics of brand social media posts that impact the consumer engagement have been identified and empirically tested, namely, 1) content type, 2) media type, and 3) posting timing (Cvijikj & Michahelles, 2013; de Vries et al., 2012; Gutiérrez-Cillán et al., 2017; Lei et al., 2017; Luarn et al., 2015; Sabate et al., 2014; Schultz, 2017).

Content type refers to ‘what’ brands say. Previous research has categorized the content type of brand social media posts using two general methods. Drawing on the uses and gratifications theory (U&G theory), the first method categorized the brand posts into four categories, i.e., informational, entertainment, remuneration, and social/relational, which are consistent with consumers’ motivations of using social media (see Cvijikj & Michahelles, 2013; de Vries et al., 2012; de Vries et al., 2017; Jin & Huang, 2017; Gutiérrez-Cillán et al., 2017; Luarn et al., 2015; Schultz, 2017). The second categorization method, rooted in traditional advertising literature, classified the brand posts into two categories, namely, rational (or functional/informational/utilitarian) appeal and emotional (or transformational) appeal (see Swani et al., 2014; Swani & Milne, 2017; Swani et al., 2017; Coursaris et al., 2016a; Wagner et al., 2017). Research using both methods has found that consumer engagement varies with the content type of brand posts. Media type refers to ‘how’ brands communicate. In practice, brand social media posts are usually in four forms, i.e., 1) text, 2) text and picture, 3) text and video, and 4) text and link. Research examining media type usually investigated how the different brand post forms impact the perceived vividness (or media richness) and interactivity, which, in turn, influence consumer engagement. For example, de Vries et al. (2012) found that the vividness level

of a brand post is positively related to the number of likes, and the high interactivity level of a brand post is negatively related to the number of likes but positively related to the number of comments. Luarn et al. (2015) found that consumers are more engaging (i.e., like, comment, share) with brand posts of high interactivity than medium and low interactivities. Except for the content and media types, posting timing, which refers to ‘when’ brands communicate (e.g., weekday/weekend), was also found to influence consumer engagement (Cvijikj & Michahelles, 2013; de Vries et al., 2012; Gutiérrez-Cillán et al., 2017; Lei et al., 2017; Luarn et al., 2015; Sabate et al., 2014; Schultz, 2017). For example, Cvijikj & Michahelles (2013) found that posting on workday can increase the number of comments but decrease the number of likes, and posting during the peak hours has a negative effect on the number of likes and shares.

While previous research mainly focused on the characteristics of brand posts per se, little of them has examined the emojis incorporated in brand social media posts. As a characteristic increasingly adopted by brands in their social media posts, the effects of emojis remain open to question. However, given the communicative roles that emojis play in CMCs, it is very likely that the adoption of emojis in brand posts could positively influence consumers’ perception of the posts, and, in turn, enhance their engagement behaviors, such as liking, sharing, and commenting on the posts. Taken together, the current research will examine whether and how the use of emojis in brand social media posts affects consumer engagement with the brand posts.

4.3 Hypotheses Development

Emoji use, perceived media richness, and consumer engagement

Media richness refers to a communication channel's transaction capability of rich information (Daft & Lengel, 1986). Different communication media vary in richness (Daft & Lengel, 1984). For example, at a general level, face-to-face communication has the highest media richness, while, the CMC has a relatively low media richness (Daft & Lengel, 1984). According to media richness theory (Daft & Lengel, 1984 & 1986), the richness of a communication medium is determined by four factors: 1) the medium's capability for immediate feedback; 2) the medium's ability to convey multiple cues (i.e., verbal and non-verbal cues); 3) the medium's ability to convey personalization; and 4) language variety (e.g., various language symbols). Taking the brand social media post as a communication medium, incorporating emojis in it can increase its richness in three ways. First, the CMC has been recognized for its lack of non-verbal cues for a long time (Derks et al., 2007; Lo, 2008; Walther & D'Addario, 2001). Given its communicative role, emojis can enrich the non-verbal cues of brand social media posts, thus, improving the brand posts' ability to convey multiple cues (Derks et al., 2008; Thompson & Filik, 2016; Willoughby & Liu, 2018; Yuasa et al., 2011). Second, in the digital world, the use of emojis is often related to the communicator's personality. On the one hand, emoji use reflects the personality of the communicator (Marengo et al., 2017; Wall et al., 2016). On the other hand, communicators can intentionally convey their personalities by selectively using emojis (Hsieh & Tseng, 2017; Kaye et al., 2016). Thus, using emojis can improve the brand social media posts' capability to convey personalization. Third, emojis, as a creative visual language that adds expressions to the otherwise strictly text-based message, can also increase the linguistic

variety of brand social media posts (Luor et al., 2010). Therefore, brand social media posts with emojis demonstrate higher richness than posts without emojis. Previous research has shown that the richness of brand social media posts is positively related to consumer engagement with these posts (Chung et al., 2014; Coursaris et al., 2016a). In the online world, media richness is commonly referred to as the vividness (Cvijikj & Michahelles, 2013; Fortin & Dholakia, 2005; Luarn et al., 2015). Research has found that increasing the vividness of a brand social media post can enhance its consumer engagement (Cvijikj & Michahelles, 2013; de Vries et al., 2012; Swani & Milne, 2017), but posts with overly-high vividness (e.g., posts with video) generate less consumer engagement than posts with medium level of vividness (e.g., posts with photos) (Luarn et al., 2015). While adding emojis can increase the vividness of brand social media posts, it seems unlikely that such effect could be as strong as videos. Therefore, taken the discussions above together, the following hypotheses were derived:

H1a: Compared to brand social media posts without emojis, brand posts with emojis will result in a higher level of perceived media richness.

H1b: The increased perceived media richness from emojis leads to higher consumers' intention to engage with brand social media posts.

Emoji use, perceived playfulness, and consumer engagement

Perceived playfulness refers to an intrinsic belief that is shaped by the individual's experiences with the environment (Moon & Kim, 2001). It is a factor that has been widely examined in the field of human-computer interaction. Previous research on perceived

playfulness has mainly treated it as an extension of the technology acceptance model (TAM) and examined its effects on individuals' attitudes toward technologies, such as website (Ahn, Ryu, & Han, 2007; Chung & Tan, 2004; Hsu, Chang, & Chen, 2012; Lin, Wu, & Tsai, 2005), digital advertising (Gao, Rau, & Salvendy, 2009), social media (Sledgianowski & Kulviwat, 2009; Vasalou et al., 2008). According to Moon & Kim (2001), there are three dimensions of perceived playfulness: 1) concentration, i.e., the extent to which the individual perceives that his/her attention is focused on the interaction; 2) curiosity, i.e., the extent to which the individual is curious during the interaction; and 3) enjoyment, i.e., the extent to which the individual finds the interaction intrinsically enjoyable or interesting. While the three dimensions of playfulness are interdependent, in practice, they do not always emerge together (Moon & Kim, 2001). Emojis can influence the perceived playfulness of brand posts in two ways. For one thing, previous research has demonstrated that presenting messages with emojis in CMC is a useful strategy to have receivers pay attention to the messages (Willoughby & Liu, 2018). Thus, adding emojis can enhance consumers' concentration on brand posts. For another thing, previous research has shown that the majority of emojis convey positive sentiment (e.g., joy) (Novak et al., 2015; Riordan, 2017b), and using emojis in the text-based CMC can increase message receivers' enjoyment (Huang et al., 2008). Therefore, incorporating emojis can increase the perceived playfulness of brand social media posts (Hsieh & Tseng, 2017). Perceived playfulness has been found to be positively related to individuals' engagement intention (Ahn et al., 2007; Gao et al., 2009; Lin et al., 2005; Moon & Kim, 2001). Besides, previous research has shown that the entertainment value (e.g., perceived degree of enjoyment, fun or feelings of relaxation) of brand social media posts can positively influence the consumer

engagement with these posts (de Oliveira et al., 2016; Dolan et al., 2016; Luarn et al., 2015), indicating that the perceived playfulness is positively related to consumer engagement with brand posts on social media. Taken together, the following hypotheses were derived:

H2a: Compared to brand social media posts without emojis, brand posts with emojis will result in a higher level of perceived playfulness.

H2b: The increased perceived playfulness from emojis leads to higher consumers' intention to engage with brand social media posts.

Emoji use, perceived conversational human voice, and consumer engagement

The conversational human voice is “*an engaging and natural style of organizational communication as perceived by an organization’s publics based on interactions between individuals in the organization and individuals in publics*” (Kelleher, 2009, p. 177). It is a concept that was first proposed as the opposite of corporate voice to respond to the calls for building a collaborative relationship with publics rather than treating them as targets (Kelleher & Miller, 2006). Generally speaking, conversational human voice is a more natural, informal, and humanizing style of communication that sounds more like relationship-oriented conversation, while corporate voice is a more distant, formal, and respectful corporate communication that sounds more like task-oriented and profit-driven machinery (Barcelos et al., 2018; Sparks et al., 2016; Van Noort & Willemsen, 2012). According to Kelleher & Miller (2006), company communication is high regarding the level of conversational human voice if it is open to dialog, welcomes conversational communication, and provides prompt feedback. Using emojis in brand social media posts

can influence their perceived conversational human voice in two ways. First, using emojis can create a light mood through making the brand posts less formal and serious and more informal and friendly (Kaye et al., 2016), conveying an attitude of welcoming conversational communication. Second, since emojis are widely used in inter-personal communications on social media, incorporating them in brand social media posts demonstrates a convergence-accommodation of brand communication, which, in turn, increases the brand communication effort perceived by consumers (Jakic et al., 2017). Brands with high perceived communication effort are more likely to be perceived as being open to dialog. Therefore, using emojis can increase the perceived conversational human voice of brand social media posts. Previous research has shown that adopting a conversational human voice in brand online communication can positively influence consumers' evaluation of brand (Barcelos et al., 2018; Gretry et al., 2017; Kelleher, 2009; Park & Cameron, 2014; Sparks et al., 2016; Van Noort & Willemsen, 2012). Besides, research has found that using a conversational human voice can increase consumers' engagement with the brand (Schamari & Schaefer, 2015). Therefore, taken together, the following hypotheses were derived:

H3a: Compared to brand social media posts without emojis, brand posts with emojis will result in a higher level of perceived conversational human voice.

H3b: The increased perceived conversational human voice from emojis leads to higher consumers' intention to engage with brand social media posts.

Emoji use, perceived intimacy, and consumer engagement

Intimacy refers to the feelings of closeness, connectedness, and bondedness (Sternberg, 1986). Originally developed to portray the interpersonal relationship, the concept of intimacy was later introduced by marketing researchers to the field of relational marketing and used to describe the consumer-brand relationship. Emojis in brand social media posts can affect the perceived intimacy in three ways. First, emojis help convey the non-verbal cues that are absent in the CMC. While bandwidth narrows, media allow less social presence and create more psychological distance and, as a result, the communication becomes to be less friendly, impersonal and more serious (Rice & Love, 1987). Emojis, because their ability in conveying social cues, can help increase the social presence and decrease the psychological distance, which, in turn, increase the perceived intimacy (Derks et al., 2007). Second, emojis can express intimacy by showing informality in the communication environment (Kelly & Watts, 2015). Emoji use creates an informal and conversational mood for communication, thus, increasing the feelings of intimacy (Kaye et al., 2016; Riordan, 2017b). Third, the use of emojis intensifies the emotions communicated through the messages, and thus, provides the feelings of social intimacy (Ayres, 2014; Willoughby & Liu, 2018). Previous research has shown that emoji use indeed increases perceived intimacy between communicators (Huang et al., 2008; Janssen et al., 2014). Besides, previous research has found that intimacy is positively related to consumer engagement (Dimitriu & Guesalaga, 2017; Fang, 2017; Graffigna & Gambetti, 2015; Islam & Rahman, 2016a; Labrecque, 2014). Therefore, it is reasonable to assume that using emojis can increase the perceived intimacy, which, in turn, increase consumer engagement with brand posts on social media. Taken the discussions above together, the following hypotheses were derived:

H4a: Compared to brand social media posts without emojis, brand posts with emojis will result in a higher level of perceived intimacy.

H4b: The increased perceived intimacy from emojis leads to higher consumers' intention to engage with brand social media posts.

4.4 Study 1

4.4.1 Study Design

The objective of Study 1 is to answer the first research question: how are emojis used in brand social media posts currently. We conducted a field study using Facebook brand pages as the research context because Facebook is the most popular social network worldwide, with 2.32 billion global monthly active users, of which, 1.52 billion users visit Facebook on a daily basis (as of the fourth quarter of 2018) (Statista, 2018a & 2018b). Moreover, more than 80 million businesses have created their brand pages on Facebook (Cooper, 2018), making Facebook the most popular social media marketing communication channel worldwide.

4.4.2 Data Collection

In line with previous research (see Kim et al., 2015), we selected the 100 brands listed in the 2018 Interbrand Best Global Brands as our research sample. For brands with multiple Facebook pages, only the official pages with the most fans were selected for data collection. For each brand, we collected its Facebook posts updated between January 1, 2019 and February 28, 2019. For those brand pages where consumers are allowed to post contents on the pages, only posts posted by brands were collected. The automatically updated

system posts (e.g., *xx updated their cover photo/profile picture*, and *xx added a new photo/cover video*) and posts that were not in English were excluded. For each brand post, the screenshot was taken and saved. Ten brands that did not post any contents during our data collection periods were excluded from our sample. Our final dataset included 4,549 Facebook posts from 90 brands across 16 industries (See Appendix 3a).

4.4.3 Data Analysis

To analyze the data, we conducted a content analysis following the coding framework in Table 4.1. Specifically, for each post, four perspectives were coded: 1) whether the post includes emoji(s), 2) the type of emoji(s), and 3) the number of emoji(s).

Table 4.1 Coding Framework for Content Analysis

Variables	Coding	Descriptions
Emoji	• Yes	The post includes at least one emoji.
	• No	The post does not include any emojis.
Type	• Face	The number of face emojis (e.g., 😍, 😊, and 😄) included in the post.
	• Non-Face	The number of non-face emojis (e.g., 📷, ❤️, and 🙌) included in the post.
Number		The number of emojis in the post.

4.4.4 Findings

Of the 4,549 brand posts collected, 728 (16%) used 1,130 emojis. Our analysis found that the use of emojis varies across industries. First, in terms of the percent of brands using

emojis, we found that media, logistics, and restaurants are three industries that used the emojis most broadly (see Figure 4.1). Specifically, all of the brands in the media and logistics industries used emojis in their Facebook posts. Energy, luxury, and financial services are the three industries that used the emojis least broadly (see Figure 4.1). Specifically, no brands in the energy industry used emojis in their Facebook posts.

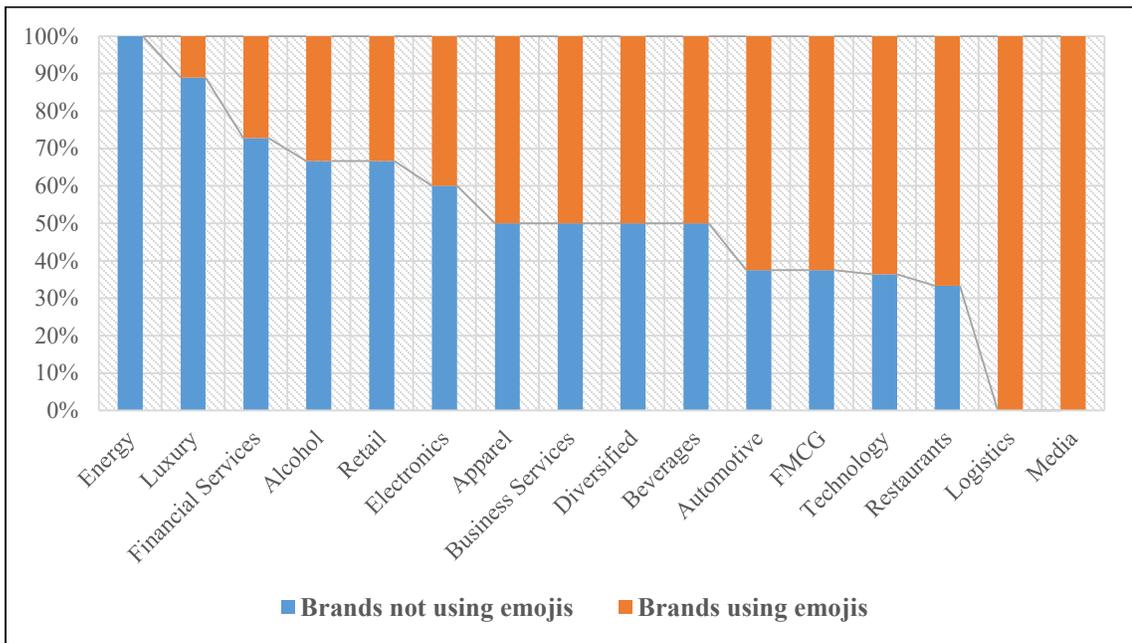


Figure 4.1 The Percent of Brands Using Emojis

Second, in terms of the percent of posts with emojis, we found that beverages, media, FMCG are the three industries that used the emojis most widely (see Figure 4.2). The percent of posts with emojis of these three industries are 50%, 45%, and 42%, respectively. Energy, luxury, and apparel are the three industries that used the emojis least widely (see Figure 4.2). Specifically, the percent of posts with emojis of these three industries are 0%, 0.1%, and 2.4%, respectively.

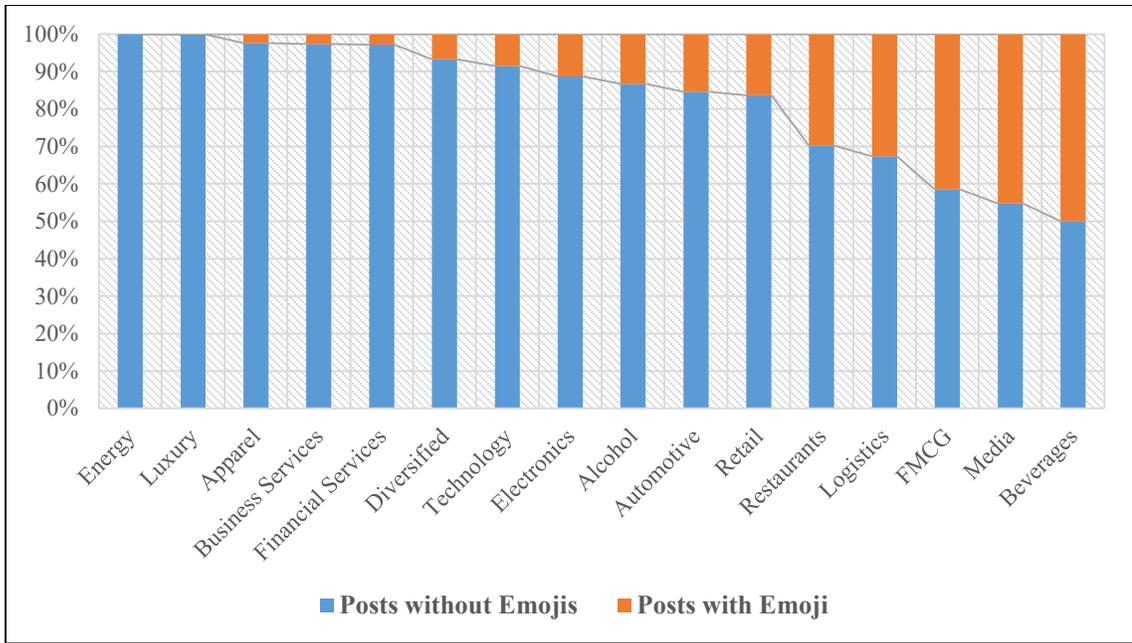


Figure 4.2 The Percent of Posts with Emojis

Third, in terms of the average number of emojis per post (i.e., posts with emojis), we found that business services, FMCG and logistics are the three industries that used the emojis most intensively (see Figure 4.3). The average numbers of emojis per post for the three industries are 4.5, 2.2, and 2.1, respectively. Luxury, apparel, and beverages are the three industries that used the emojis least intensively (see Figure 4.3). Specifically, the three industries have the same average number of emojis per post of 1.

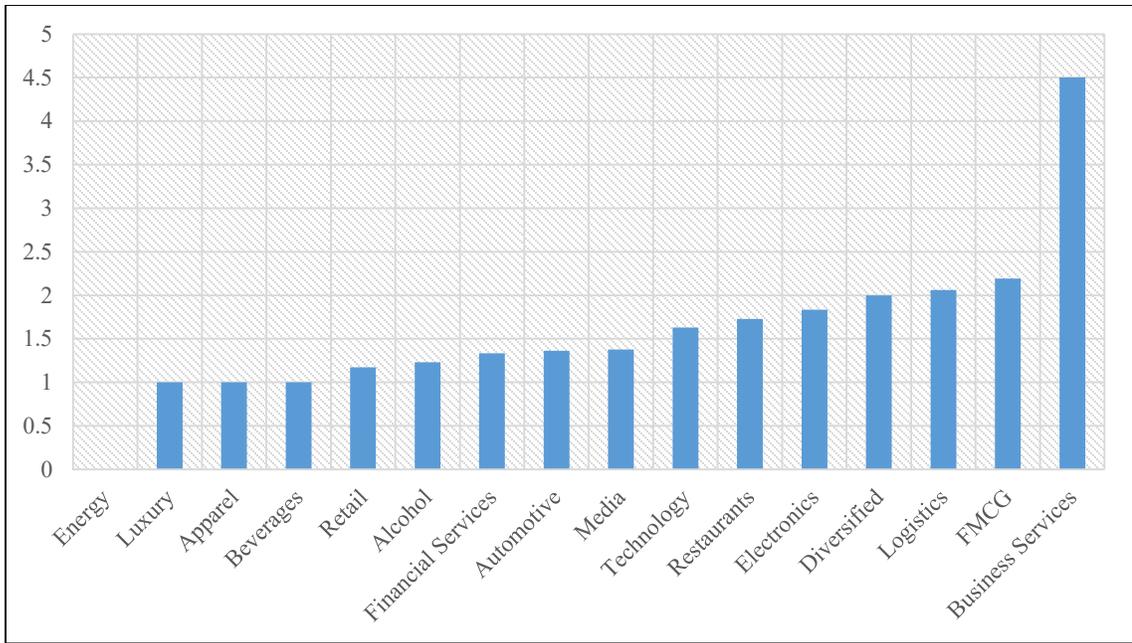


Figure 4.3 Average Number of Emojis per Post

In terms of the type (i.e., face vs. non-face) of emojis (see Figure 4.4), of the 1,130 emojis, 137 were face emojis, while 993 were non-face emojis. The numbers of brand posts that use face emojis, non-face emojis and both are 62, 610, and 56, respectively. Thus, non-face emojis are the most popular type used in brand Facebook posts.

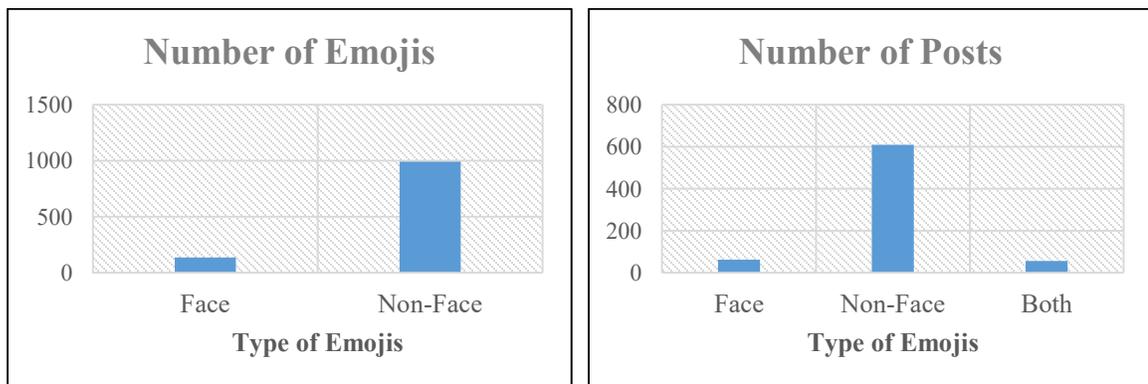


Figure 4.4 Type of Emojis

4.4.5 Discussion

In Study 1, we answered the question, how emojis are used in brand social media posts currently. Based on the analyses of Facebook posts updated by 100 brands in two months, we found that 1) the use of emojis varies largely across industries; 2) the most widely used emoji type is non-face emojis.

4.5 Study 2

4.5.1 Study Design

In Study 2, the scenario-based experimental method was employed to answer our second research question. The experimental method is appropriate because it can enhance the control over potential extraneous variables and enables one to manipulate different treatments (Smith, Bolton, & Wagner, 1999). Research that examines the communicative effects of emojis has been primarily based on the scenario-based experimental method (see Derks et al., 2007; Derks et al., 2008; Luor et al., 2010; Riordan, 2017a; Wang, Zhao, Qiu, & Zhu, 2014; Willoughby & Liu, 2018). Therefore, in line with previous research, we conducted scenario-based experiments to test the hypotheses developed in this paper. In this study, we adopted the one factor (Emoji use: with emoji vs. without emoji) between-subjects design and conducted two experiments to test our hypotheses.

4.5.2 Experiment 1

The objective of Experiment 1 is to test our hypotheses using a B2C brand. In this experiment, we followed the one factor (Emoji use: with emoji vs. without emoji) between-subjects design.

Stimuli

The simulated Facebook brand posts from a fictitious grocery store brand, *Farm Fresh Grocery*, were designed and used as the experimental stimuli. Specifically, we designed a post that interacts with consumers by asking a question. Two versions of the post were designed to manipulate the use of emoji (see Appendix 3b). The posts were designed in the ‘text + picture’ style because it is the most common type of Facebook posts. To ensure the realism, we developed the brand posts based on real Facebook posts of grocery store brands (Barcelos et al., 2018; Gretry et al., 2017; Jensen et al. 2013; Sparks et al., 2016).

Participants and procedure

A total of 109 U.S. residents (48% female, $M_{\text{age}} = 29.8$) were recruited from the Amazon Mechanical Turk (MTurk) as participants. MTurk is a crowdsourcing marketplace for work that requires human intelligence. It allows requesters to access human intelligence in a simple, scalable, and cost-effective way. Previous research has suggested that MTurk can provide more demographically diverse samples than traditional convenience samples (e.g., student samples, standard Internet samples) (Berinsky et al., 2012; Buhrmester et al., 2011), thus, is a viable alternative for conducting online experiments (Chen, Kim, & Lin, 2015; Paolacci et al., 2010). To ensure the data quality, in line with previous research (e.g., Barcelos et al., 2018; Lee et al., 2018; Peer et al., 2014), we restricted participants to MTurk workers with high reputation (above 95% task-approval rates, minimum 500 completed HITs). The procedure is described as follows. Participants were randomly assigned to one of the two conditions (i.e., post with emojis vs. post without emojis) and instructed that they would be reading a Facebook post. After reading the assigned post for as long as they

wanted, participants were asked to complete a survey including the measures of this research's interest.

Measurement

The measurements were adapted from previous research (see Table 4.2). Perceived media richness, perceived playfulness, perceived conversational human voice, perceived intimacy, and intention to engage were all measured using multiple items. All items were evaluated in a 7-point Likert scale. For manipulation check, we measured the participants' awareness of the existence of emojis by asking "Does the Facebook post that you read include any emoji(s)?" We also measured the manipulation realism using one item adapted from Barcelos et al. (2018): "To what extent did you find this social media content realistic" (1 = not realistic at all, 7 = very realistic). In addition to the primary measures of interest, we also measured participants' age, gender, first language (i.e., whether English or not), and Facebook intensity as control variables. To potentially identify and remove participants who do not respond to the questionnaire carefully, an instructed response item was included as an attention check (see Meade & Craig, 2012; Sparks et al., 2016). The item was included amongst the measure of perceived conversational human voice and phrased as follows: "This is an attention check question, please click the response corresponding to 'strongly disagree' for this question". Four participants who did not comply were removed from our sample. We also implemented an objective-guessing question at the end of the survey to assess whether participants are aware of the research objective. Responses indicated that participants were not aware of the research objective.

Table 4.2 The Measurement of Variables

Variable	Source	Measurement Items	α
Perceived media richness	Carlson & Zmud (1999)	<ul style="list-style-type: none"> • The brand communicates a variety of different cues in this post. • The brand uses rich and varied language in this post. 	.74
Perceived playfulness	Hsieh & Tseng (2017); Huang et al. (2008); Moon & Kim (2001)	<ul style="list-style-type: none"> • When reading this brand post, I do not realize the time elapsed. • When reading this brand post, I am not aware of any noise. • I enjoy reading this brand post. • It is fun to read this brand post. • Reading this brand post stimulates my curiosity. • Reading this brand post arouses my imagination. 	.93
Perceived conversational human voice	Kelleher & Miller (2006); Van Noort & Willemsen (2012)	<ul style="list-style-type: none"> • The brand invites people to conversation. • The brand is open to dialogue. • The brand uses conversation-style communication. • The brand tries to communicate in a human voice. 	.91
Perceived intimacy	Barcelos et al. (2018)	<ul style="list-style-type: none"> • The brand post creates a sense of closeness. • I feel close to the brand. 	.87
Intention to engage	de Oliveira et al. (2016)	<p>If you were one follower of this brand on Facebook, how likely are you to</p> <ul style="list-style-type: none"> • to engage with this post • to like this post • to share this post • to comment on this post 	.90

Facebook Intensity	Ellison et al. (2007)	<ul style="list-style-type: none"> • Facebook is part of my everyday activity • I am proud to tell people I'm on Facebook • Facebook has become part of my daily routine • I feel out of touch when I haven't logged onto Facebook for a while • I feel I am part of the Facebook community • I would be sorry if Facebook shut down 	.94
--------------------	-----------------------	--	-----

Results

Manipulation checks

The manipulation checks indicated that our manipulations were effective. Participants in the with-emoji condition showed a significantly higher emoji awareness than did those in the without-emoji condition ($M_{\text{with-emoji}} = .79$; $M_{\text{without-emoji}} = .25$; $F(1,104) = 44.53$, $p = .000$). The realism check showed that the mean of perceived realism is significantly higher than the neutral scale point of 4 ($M = 5.83$, $t(105) = 14.43$, $p = .000$) indicating that participants perceived our manipulations to be realistic. In addition, a one-way ANOVA showed that the perceived realism did not differ between the two conditions ($F(1,104) = .551$, $p = .46$).

Hypotheses testing

To test our hypotheses, we first conducted a one-way MANCOVA in which perceived playfulness, perceived conversational human voice, perceived intimacy, and perceived media richness served as dependent variables, the emoji manipulation served as independent variable, and Facebook intensity as the covariate. In this model, we only included Facebook intensity as the covariate because we did not observe any significant

effects of age, gender, or first language. As expected, the results of MANCOVA revealed a significant main effect of emoji manipulation (Wilks' $\lambda = .849$, $F(4,99) = 4.39$, $p = .003$, $\eta_p^2 = .151$). Specifically, participants exposed to the post with emojis showed higher perceived media richness ($M_{\text{with-emoji}} = 4.49$; $M_{\text{without-emoji}} = 3.88$; $F(1,102) = 7.09$, $p = .009$), perceived playfulness ($M_{\text{with-emoji}} = 5.14$; $M_{\text{without-emoji}} = 4.23$; $F(1,102) = 14.62$, $p = .000$), perceived conversational human voice ($M_{\text{with-emoji}} = 5.47$; $M_{\text{without-emoji}} = 4.98$; $F(1,102) = 4.80$, $p = .03$), and perceived intimacy ($M_{\text{with-emoji}} = 4.53$; $M_{\text{without-emoji}} = 3.99$; $F(1,102) = 3.81$, $p = .054$) than those exposed to the post without emojis; thereby, H1a, H2a, H3a were supported and H4a was marginally supported.

To test the rest of the hypotheses, we conducted the mediation analyses using the PROCESS Model 4 with 5,000 bootstrapping samples (Hayes, 2017). In the regression model, the dependent variable was intention to engage, the independent variable was emoji manipulation, the mediators were perceived media richness, perceived playfulness, perceived conversational human voice, and perceived intimacy, and the covariate was Facebook intensity. The results revealed that the use of emojis significantly increases the perceived playfulness ($b = .91$, $t = 3.82$, $p = .000$), which, in turn, leads to significantly higher intention to engage ($b = .73$, $t = 5.20$, $p = .000$) (see Figure 4.5). Further, the results revealed that the perceived playfulness mediated the effect of emoji on intention to engage (indirect effect = .66, 95% CI = .26 to 1.09), as the bootstrap confidence intervals for the indirect effects did not include zero. Therefore, the H1b was supported. We did not find similar mediation effects of perceived conversational human voice (indirect effect = -.11, 95% CI = -.32 to .03), perceived intimacy (indirect effect = .22, 95% CI = -.01 to .52), and

perceived media richness (indirect effect = .03, 95% CI = -.11 to .19); thereby, H2b, H3b and H4b were not supported.

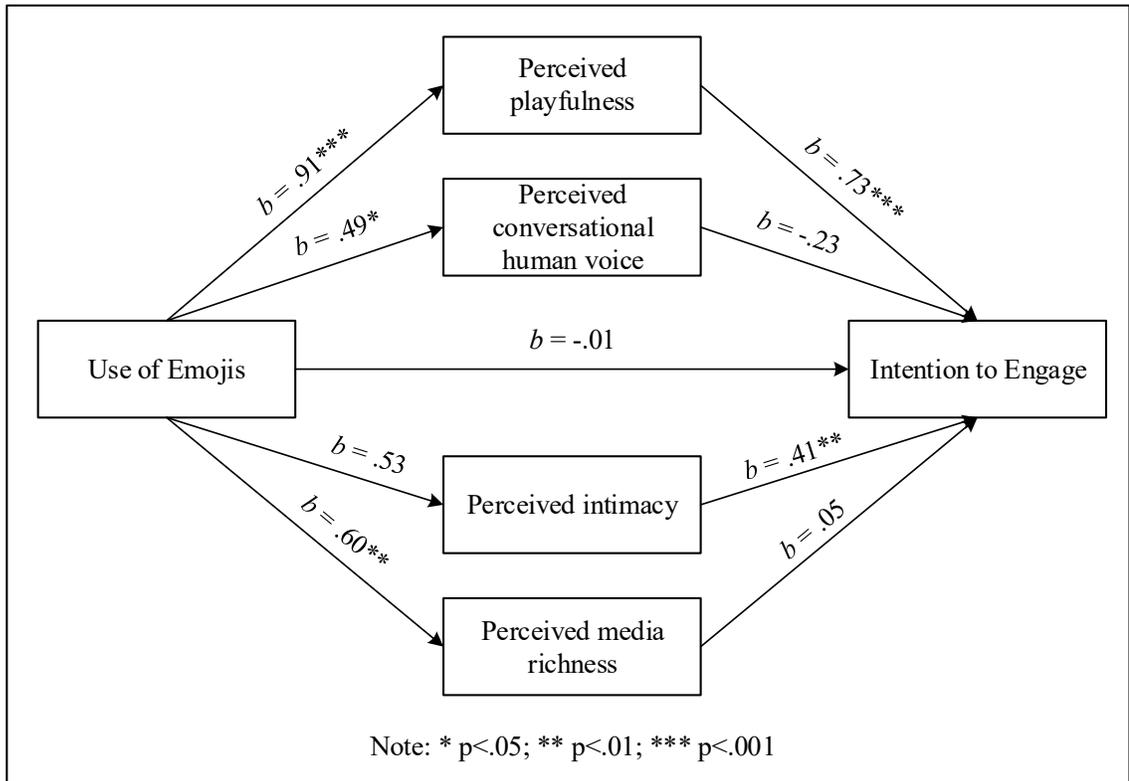


Figure 4.5 The Results of Mediation Analysis

Discussion

The results of Experiment 1 showed that incorporating emojis in the B2C brand post can increase consumers' perception of playfulness (H1a), conversational human voice (H2a), intimacy (H3a), and media richness (H4a). However, only the increased perceived playfulness can lead to higher engagement intention (H1b). One possible explanation for this is that the effect of perceived playfulness ruled out the effects of other consumer

perceptions (i.e., perceived conversational human voice, perceived intimacy, and perceived media richness). Our results revealed a significant role that perceived playfulness plays in enhancing consumer engagement and perceived playfulness, which receives relatively little attention in current brand communications literature, should be examined more in future research. In Experiment 1, we tested our hypotheses using the post from a fictitious B2C brand. However, the results of Study 1 indicated that now B2B brands also use emojis in their social media posts. So we conducted another experiment to test our hypotheses using a fictitious B2B brand.

4.5.3 Experiment 2

The objective of Experiment 2 is to test our hypotheses using a B2B brand. In this experiment, we still followed the one factor (Emoji use: with emoji vs. without emoji) between-subjects design.

Stimuli

Similar to Experiment 1, we designed and used the simulated Facebook brand posts from a fictitious marketing consulting brand, *Innovax Consulting*, as the experimental stimuli. In this experiment, we designed a post that announces a product update. Two versions of the post were designed to manipulate the use of emoji (see Appendix 3c). The posts were designed in the ‘text + picture’ style, and, to ensure the realism, we developed the brand posts based on real Facebook posts of marketing consulting brands (Barcelos et al., 2018; Gretry et al., 2017; Jensen et al. 2013; Sparks et al., 2016).

Participants and procedure

A total of 113 U.S. residents (52% female, $M_{\text{age}} = 30.2$) were recruited from the Amazon Mechanical Turk (MTurk) as participants. Similar to Experiment 1, we restricted participants to MTurk workers with high reputation (above 95% task-approval rates, minimum 500 completed HITs). The procedure is same as Experiment 1.

Measurement

The measures of the variables are the same as that of Experiment 1. For dependent variables, we used the perceived media richness ($\alpha = .83$), perceived playfulness ($\alpha = .94$), perceived conversational human voice ($\alpha = .91$), perceived intimacy ($\alpha = .91$), and intention to engage ($\alpha = .87$). For manipulation check, we measured the participants' awareness of the existence of emojis and perceived realism of manipulation. Similar to Experiment 1, for control variables, we measured participants' age, gender, first language (i.e., whether English or not), and Facebook intensity ($\alpha = .93$).

Results

Manipulation checks

The manipulation checks indicated that our manipulations were effective. Participants in the with-emoji condition showed a significantly higher emoji awareness than did those in the without-emoji condition ($M_{\text{with-emoji}} = .74$; $M_{\text{without-emoji}} = .14$; $F(1,111) = 61.77$, $p = .000$). The realism check showed that the mean of perceived realism is significantly higher than the neutral scale point of 4 ($M = 5.65$, $t(112) = 11.30$, $p = .000$) indicating that participants

perceived our manipulations to be realistic. In addition, a one-way ANOVA showed that the perceived realism did not differ between the two conditions ($F(1,111) = .16, p = .69$).

Hypotheses testing

To test our hypotheses, we first conducted a one-way MANCOVA in which perceived media richness, perceived playfulness, perceived conversational human voice, and perceived intimacy served as dependent variables, the emoji manipulation served as independent variable, and Facebook intensity as the covariate. In this model, we only included Facebook intensity as the covariate because we did not observe any significant effects of age, gender, or first language. The results of MANCOVA did not reveal a significant main effect of emoji manipulation (Wilks' $\lambda = .981, F(4,107) = .51, p = .73, \eta_p^2 = .019$). The univariate analyses revealed that participants exposed to the post with emojis did not show higher perceived media richness ($M_{\text{with-emoji}} = 3.63; M_{\text{without-emoji}} = 3.53; F(1,110) = .25, p = .62$), perceived playfulness ($M_{\text{with-emoji}} = 3.67; M_{\text{without-emoji}} = 3.57; F(1,110) = .30, p = .58$), perceived conversational human voice ($M_{\text{with-emoji}} = 4.20; M_{\text{without-emoji}} = 4.26; F(1,110) = .05, p = .83$), or perceived intimacy ($M_{\text{with-emoji}} = 3.33; M_{\text{without-emoji}} = 3.51; F(1,110) = .23, p = .63$) than those exposed to the post without emojis. Thus, our hypotheses were not supported in this experiment.

Discussion

The results of Experiment 2 showed that incorporating emojis in the B2B brand post cannot increase consumers' perception of playfulness (H1a), conversational human voice (H2a), intimacy (H3a), or media richness (H4a). Therefore, the mediation effects of consumers'

perceptions were not supported (H1b, H2b, H3b, H4b). Considering the role of emojis in communication (i.e., the supplement of textual content), one possible explanation for this result is that the effects of emojis are primarily reinforced, not transformative. For example, properly using emojis can reinforce a playful brand post (e.g., B2C brand post) to be more playful, but cannot transform a non-playful brand post (e.g., B2B brand post) to be playful. Thus, in designing the engaging social media posts, brands cannot solely rely on the use of emojis; instead, brands should also pay attention to the contents of the posts as well.

4.6 Discussion

Through a mixed-method research, this paper investigated 1) the current state of emoji use in brand social media posts; and 2) how incorporating emojis in brand social media posts affects consumers' perceptions and, in turn, engagement intention. Based on the analyses of 4,549 Facebook posts updated by 100 brands in two months, we found that, although varying across industries, brands currently mainly use non-face emojis to reinforce the post contents. We also found that incorporating emojis in the B2C brand post can increase consumers' perception of playfulness (H1a), conversational human voice (H2a), intimacy (H3a), and media richness (H4a) and the increased perceived playfulness can further lead to higher intention to engage with the posts. However, we did not find similar effects of emojis for B2B brand posts.

4.6.1 Implications

Theoretical implications

This paper has many theoretical implications. First, this paper examines the communicative effects of emojis in the context of brand-consumer communication on social media. Since emojis are a relatively new phenomenon, only a little research has been done to investigate how they affect the way people communicate and process information (Luor et al., 2010; Willoughby & Liu, 2018). While these research efforts have been limited in the context of interpersonal communication (see Derks et al., 2007; Hsieh & Tseng, 2017; Huang et al., 2008; Kaye et al., 2016; Luor et al., 2010; Riordan, 2017a; Wang, Zhao, Qiu, & Zhu, 2014; Willoughby & Liu, 2018), this paper investigates the effects of emojis in a new context of firm-to-consumer (F2C) communication on social media, thus, extends the previous research. Second, this paper responds to the recent calls for research on effective brand social media content strategies (Kumar, 2015; López et al., 2017; Marketing Science Institute, 2018). Different from previous research that examines the effects of brand social media posts on consumer engagement, where specific post characteristics (e.g., content type, media type, and posting timing) were major focuses, this paper investigates whether and how the use of emojis in brand social media posts affects consumers' engagement, presenting a complement to previous research. Third, while previous research has identified the impacts of brand social media post characteristics (see Coursaris et al., 2016a; Cruz et al., 2017; Cvijikj & Michahelles, 2013; de Vries et al., 2012; Kim et al., 2015; Kwok & Yu, 2013; Lee et al., 2018; Lei et al., 2017; Luarn et al., 2015; Sabate et al., 2014; Schultz, 2017; Swani et al., 2013; Swani & Milne, 2017; Swani et al., 2017; Wagner et al., 2017), few of them has explained how such impacts occur. This paper, except for the impact of emojis on consumer engagement with brand posts on social media, also examines

how the impact occurs by investigating its occurrence mechanism, providing a more profound understanding of the role that emojis play in enhancing consumer engagement.

Managerial implications

This paper also has many implications for social media marketers. First, emojis now are widely used by B2C brands in social media posts as they are believed to be able to enhance the consumer-brand interactions. However, no evidence has demonstrated that such effects indeed exist. The paper provides empirical evidence for the effects of emojis on consumer engagement with brand posts on social media, thus, provides support for the wide use of emojis in brand social media posts. While some B2B brands are also using emojis in their social media posts, the results of this paper revealed that, to benefit from the use of emojis, B2B brands might need to pay more attention to create new innovative ways of using emojis. Second, although this paper adopted a lens of emoji, the findings can be extended to other brand social media post characteristics as well. In this paper, we found that perceived playfulness of brand social media posts can lead to higher consumer engagement intention. Thus, to enhance consumer engagement, social media marketers can also try to incorporate other brand post features that improve the perceived playfulness. For example, social media marketers could incorporate gamification in the posts as it can improve the perceived playfulness. Third, for the brands that have not employed the communicative effects of emojis in social media posts, the portrayal of the current state of emoji use provide a roadmap and a practical guide for how emojis could be incorporated in their social media posts.

4.6.2 Limitations and Future Research

The proposed research is not without limitations. First, our research was conducted in the context of Facebook brand pages. However, previous research has shown that users' attitudes toward emojis vary across social media platforms (Kaye et al., 2016). Thus, the communicative effects of emojis might vary across social media platforms. Future research can repeat our research on other social media platforms (e.g., Twitter, Instagram, and Pinterest) to examine whether the findings in this paper are valid across different social media platforms. Second, our examination of the current state of emoji use in brand social media posts is limited by our sample size and time duration of data collection. Future research could employ big data analytics and examine a bigger sample within a longer time duration to provide a longitudinal and evolutionary analysis for emoji use in brand social media posts. Future research also could do a comparative analysis to explore how emojis are used differently across social media platforms. Third, the proposed research examines the impact of emojis on consumer engagement without considering the possible moderating role of consumers' characteristics (e.g., personality and cultural backgrounds). Consumers with different characteristics might respond to emojis in different ways (Chen & Siu, 2017; Luor et al., 2010; Marengo et al., 2017; Tossell et al., 2012; Wall et al., 2016; Wolf, 2000). For example, adopting emojis in brand social media posts might largely influence some consumers; while only slightly (or even not) influence the others. Future research could investigate how consumer characteristics moderate the impacts of emojis on consumer engagement with brand posts on social media.

5 Conclusion

The rapid and massive proliferation of social media has revolutionized the way that brands and consumers connect, communicate, and interact with each other. Traditional one-way (i.e., from brands to consumers) communication is gradually being replaced with the new two-way and multiple-way (i.e., between brands and consumers) communications. The role that consumers play in shaping brands has never been as important as today. Regarding marketing communication, this might be the best of the times, i.e., it has never been this easy for brands to reach millions of consumers with just one ‘click’; this might also be the worst of the times, i.e., it has never been such challenging for brands to contend for consumers’ attention, induce consumers’ interaction, and maintain consumers’ engagement. This thesis addresses one small piece of the big puzzle of marketing communication in the social media era, with the aim of improving our understanding of consumer-brand engagement behavior on social media. The omnibus objective of this thesis is to *understand how to enhance consumer engagement with brand posts on social media through the lens of linguistics*.

To achieve this goal, we conducted three independent but related studies. In essay one, we investigate how the linguistic styles (i.e., emotionality, complexity, and informality) of brand social media posts influence consumer engagement. Drawing on the communication accommodation theory (CAT) (Giles, Taylor, & Bourhis, 1973) and literature on psycholinguistic and sociolinguistic research, we conducted a field study and found that the brand posts’ linguistic styles significantly impact consumer engagement, but the effects

vary regarding the three types of consumer engagement (i.e., like, share, comment). In essay two, we examine which language style (i.e., formal vs. informal) should brand adopt in responding to consumer comments with different valences (i.e., positive vs. negative) to improve consumers' trust and satisfaction toward the brand and, in turn, enhance their intention to engage with the brand in future. Drawing on the language expectancy theory (LET) (Burgoon, 1993; Burgoon & Miller, 1985), we conducted two scenario-based experiments and found that the consumer comment valence and brand response language style interactively impact consumers' evaluation of the brand, which, in turn, influence their intention to engage with the brand in the future. In essay three, we explore whether and how incorporating emojis in brand social media posts affects consumer engagement with the posts. Drawing on the media richness theory (MRT) (Daft & Lengel, 1984 & 1986) and computer-mediated communication (CMC) literature (Crystal, 2006; Huang, Yen, & Zhang, 2008; Luor, Wu, Lu, & Tao, 2010), we conducted two studies. First, we conducted a field study to portray the current state of emoji use in brand social media posts. Second, we conducted two online experiments to investigate the impacts of emojis in brand social media posts on consumers' perceptions of brand posts and engagement intention. We found that incorporating emojis in B2C brand posts positively impact consumers' perceptions of the brand, which, in turn, improve their engagement intention; however, we did not find such relationship in case of B2B brand posts. Together, the findings of three essays deepen our understanding of the role that brand language plays in brand-consumer communications on social media, especially, in improving consumers' perceptions of brands and enhancing their engagement with brand posts on social media. While the implications and limitations of each essay are presented in the preceding chapters, from an

integrative aspect, this thesis, as a whole, has a number of theoretical and managerial implications, as well as some limitations.

5.1 Theoretical Implications

This thesis has many theoretical implications. First, it addresses many research gaps and responds to recent calls for research on consumer engagement (Kumar, 2015; Marketing Science Institute, 2018) and research on brand linguistics (Carnevale et al., 2017). Consumer engagement with brand posts on social media has been empirically studied in previous research under many conceptualizations (e.g., brand post popularity, brand content popularity, message popularity, user interaction, consumer engagement, and consumer involvement, etc.), being operationalized using different measurements (e.g., number of like/comment/share, like/comment/share ratios to impression, and other variables calculated from number of like/comment/share, etc.), and within a variety of contexts (e.g., single/multiple industries, B2B/B2C, product/service, etc.) (see Coursaris, van Osch, & Balogh, 2016; Cruz, Leonhardt, & Pezzuti, 2017; Cvijikj & Michahelles, 2013; de Vries, Gensler, & Leeflang, 2012; Gutiérrez-Cillán, Camarero-Izquierdo, & San José-Cabezudo, 2017; Kim, Spiller, & Hettche, 2015; Kwok & Yu, 2013; Lee, Hosanagar, & Nair, 2018; Lei, Pratt, & Wang, 2017; López et al., 2017; Luarn, Lin, & Chiu, 2015; Sabate et al., 2014; Schultz, 2017; Wagner, Baccarella, & Voigt, 2017). Slightly differing in research design (e.g., sample size and variable operationalization), previous research is mainly rooted in a *stimuli-response* model; that is, they only focused on investigating the relationship between characteristics of brand posts, e.g., content type, media type, and posting time, (the stimuli) and consumer engagement (the behavioral response). This thesis

contributes to current research on consumer engagement with brand posts on social media by extending this oversimplified model in three ways (see Figure 5.1).

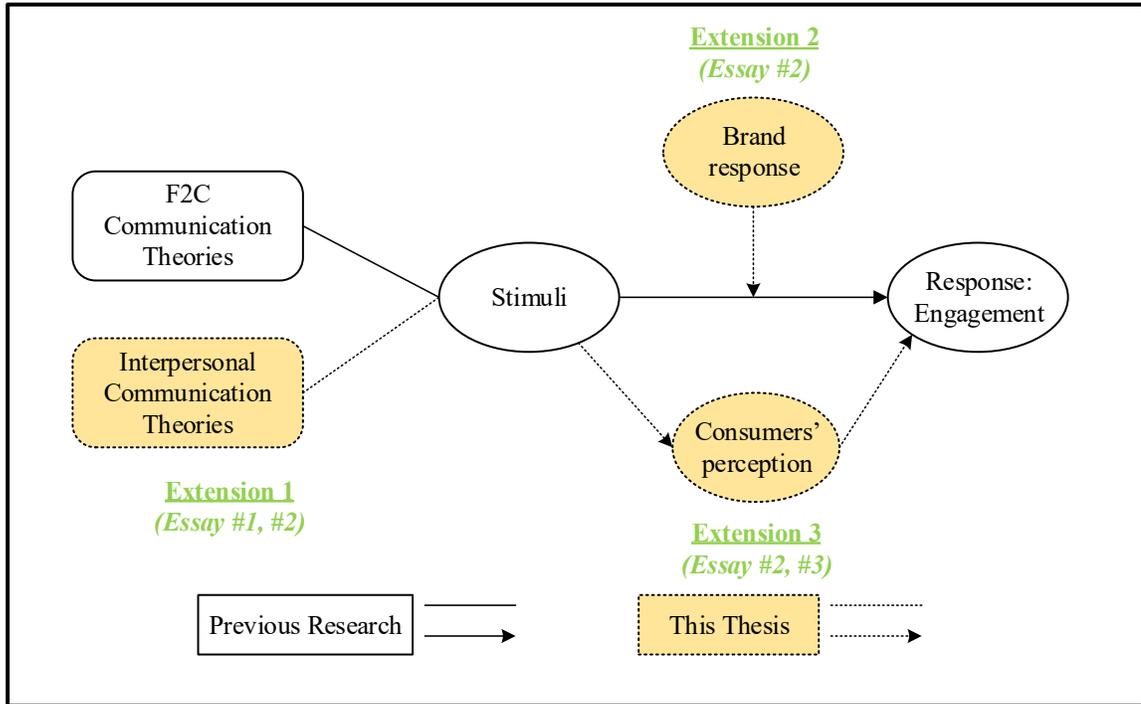


Figure 5.1 Summary of Three Papers at the Conceptual Level

First, this thesis extends the current research model by introducing the application of interpersonal communication theories (e.g., CAT and LET) in a F2C communication context. While previous research was mainly dependent on the F2C communication theories (e.g., traditional advertising literature and marketing communication theory), recent research has proposed that interpersonal communication theories could also be employed to understand brand social media content strategy as the brand-consumer engagement on social media has a far more complicated structure than traditional F2C communication, and consumers tend to relate to brands the same way as they relate to

people in general (Kim, Spiller, & Hettche, 2015; Pinto & Yagnik, 2017). Through positioning on a broader theoretical foundation, this thesis provides many new insights for researchers. For example, through the lens of brand language style (i.e., verbal and non-verbal), this thesis identifies some opportunities for future research. As language becomes an essential medium that connects brands and consumers in the context of social media, it is worth unveiling its communicative role and impacts on consumers. This thesis presents a step forward towards this direction that future research can stride. Second, this thesis extends the current research model by considering the potential moderating effects on the relationship between *stimuli* and *response*. Specifically, in essay two, we examined the moderating effects of brand response informality on the relationship between consumer comment valence and consumers' perception and engagement intention. Through considering the possible moderators, this thesis identifies many research opportunities and extends the current research model. Third, this thesis extends the current research model by taking a step further and digging into the black box between the stimuli and the behavior. Due to the dependence on the *stimuli-response* model, current understanding of consumer engagement with brand social media posts is at a superficial level; that is, researchers know what (i.e., what brand post characteristics can impact consumer engagement) but do not know why (i.e., why some brand post characteristics can impact consumer engagement while others cannot). For example, previous research revealed that, to increase consumer engagement, the best media type of brand posts is a combination of text and image, but did not explain why this media type is mostly embraced by consumers. This thesis uncovers the mechanism between *stimuli* (e.g., linguistic styles of brand posts, brand response informality, use of emojis) and *response* (e.g., like, share, and comment) by investigating

the mediation role of consumer perceptions, through which, this thesis further deepens our understanding of consumer engagement behavior.

Second, this thesis extends the traditional communication theories (i.e., CAT, LET, MRT) by applying them in a new research context, through which, it re-validates these theories and extends their generalizability. While previous research mainly applied the traditional communication theories in the studies of inter-personal communications, this paper extends the theoretical generalizability of these theories by applying them in a relatively new research context of brand-consumer communications on social media. This new research context brings in a new interlocutor-relationship (i.e., brand-consumer communication), a new communication modality (i.e., non-concurrent computer-mediated communication on social media) as well as many new linguistic features (i.e., social media language, e.g., at-mention, hashtag, and emojis); thus re-examines and re-validates these traditional communication theories.

Last, but not the least, this thesis presents and demonstrates the value of interdisciplinary and mixed-method designed research. This thesis is rooted in many disciplines, i.e., *Information Systems, Marketing, Communication, and Linguistics*, and dependent on literature on various topics, e.g., consumer engagement, computer-mediated communication (both verbal and non-verbal), advertising, psycholinguistic, and sociolinguistics. In terms of research design, this thesis employed both field study based on text mining and experiment approaches. The interdisciplinary and mixed-method design brings many new theoretical insights that help us achieve the research objective and

provides a solid foundation that supports the extension of the previous research model. From this perspective, this thesis provides an example that, to some extent, demonstrates the value of the interdisciplinary and mixed-method designed research.

5.2 Managerial Implications

Social media has become one of the most important communication channels for marketers. In the current practice, one primary task of social media marketers is to enhance consumer engagement with brand posts on social media. While consumer engagement is the most prevalent matrix to evaluate social media marketing, marketing practitioners are struggling with effective content strategies. Previous research has explored how to enhance consumer engagement with brand posts on social media from many perspectives, but little of them have examined the potential role of brand language. The soaring volume of brand-consumer conversations, the high dependence on verbal language in online communications, and the diversified social media language characteristics highlight the need for research that investigates the effects of brand language in the context of social media and provides guidelines regarding which language style brands should use to improve their relationships with consumers. With the concept that language matters, this thesis investigates the role that brand language plays in marketing communications on social media and provides many guidelines that are highly relevant to current social media marketing practices.

This thesis has many managerial implications. First, our findings show that social media marketers can purposefully manipulate their linguistic styles by incorporating specific

linguistic features (e.g., long words, pronouns, emojis, hashtags, etc.) and enhance consumer engagement by carefully designing their linguistic styles for every touch-point (i.e., designing brand post content, responding consumer comments) of their communications with consumers on social media. From this perspective, this thesis provides social media marketers with many guidelines regarding how to enhance consumer engagement with brand posts by adjusting their language styles. Second, social media marketers now tend to use some language features (e.g., informal expressions, emojis, etc.) widely and, sometimes, unconsciously in their communications with consumers on social media as they think that these features, while being consistent with the social media environment, might help create a conversational circumstance and enhance consumer engagement (Beukeboom et al., 2015). However, there is no evidence that adopting these language features is optimal for all situations. The findings of this thesis indicate that the communicative effects of language styles vary across different communication scenarios (e.g., positive and negative consumer emotions). While using some language styles is appropriate in some scenarios, using these language styles might be inappropriate in the other scenarios. Therefore, social media marketers should test the effects of a language style before applying it in their communications with consumers. Third, although this thesis focuses on how to enhance consumer engagement with brand posts on social media, its findings are meaningful to many other marketing areas as well. For example, the findings of this paper are meaningful to online consumer complaint (or negative word of mouth) management. As consumers are increasingly using social media to convey their negative experiences with brands, online consumer complaint management is becoming a big challenge for social media marketers. Therefore, it is significant for brands to develop effective communication mechanisms to manage online

consumer complaint (Chang et al., 2015; Einwiller & Steilen, 2015; Istanbuluoglu, 2017). Through the lens of linguistic style, this paper revealed that communicating with consumers using the proper language style can address the harms caused by negative consumer comments, thus, identifying a useful strategy for online consumer complaint management.

5.3 Limitations and Future Research

Despite the implications mentioned above, this thesis is not without its limitation. First, this thesis does not break the realm of current social media marketing practice. In this thesis, we examine the linguistic styles of brand social media posts, the informality of brand response, and the use of emojis in brand social media posts and their impacts on consumer engagement. These techniques, despite the lack of theoretical support, have been more or less incorporated in the current social media marketing practices by some brands. Future research could explore other potential forms of brand social media posts and design new features that are currently not being used by brands to enhance consumer engagement. Second, in this thesis, our studies were conducted in the context of Facebook brand pages. We chose Facebook as the research context because it is the largest social media platform that is embraced by most brands. However, previous research has shown that users' behaviors vary across social media platforms (Hughes, Rowe, Batey, & Lee, 2012; Kaye et al., 2016). Thus, the communicative effects of linguistic styles might vary across social media platforms. Future research can repeat our research on other social media platforms (e.g., Twitter, Instagram, and Pinterest) to examine whether the findings in this thesis are valid across different social media platforms. Third, our studies were conducted in the context of Facebook brand pages, where brand posts, although often including images and

videos, are usually centered in the text contents. In this case, it is not surprising that linguistic styles can play significant roles in influencing consumers' engagement. However, in other social media platforms where the text is not at the center of brand posts, such as Instagram (where brand posts are usually centered in photos) and YouTube (where brand posts are usually centered in videos), it would be worth exploring whether the linguistic style still influences consumer engagement.

Given the novelty of social media marketing communication, enhancing and maintaining consumer engagement seems to be an exploratory journey filled with trials and errors. The potential of social media is so huge that even the most successful brand seems to have not wholly unfolded its benefits. We hope that this thesis could deepen our understanding of consumer-brand engagement behavior on social media as well as take a step further unfolding the benefits of social media for marketing.

Reference

- Aaker, J. L. (1997). Dimensions of brand personality. *Journal of Marketing Research*, 34(3), 347-356.
- Aaker, J., Fournier, S., & Brasel, S. A. (2004). When good brands do bad. *Journal of Consumer Research*, 31(1), 1-16.
- Aggarwal, P. (2004). The effects of brand relationship norms on consumer attitudes and behavior. *Journal of Consumer Research*, 31(1), 87-101.
- Aggarwal, P., & McGill, A. L. (2007). Is that car smiling at me? Schema congruity as a basis for evaluating anthropomorphized products. *Journal of Consumer Research*, 34(4), 468-479.
- Aggarwal, P., & McGill, A. L. (2012). When brands seem human, do humans act like brands? Automatic behavioral priming effects of brand anthropomorphism. *Journal of Consumer Research*, 39(2), 307-323.
- Agnew, C. R., Van Lange, P. A., Rusbult, C. E., & Langston, C. A. (1998). Cognitive interdependence: Commitment and the mental representation of close relationships. *Journal of Personality and Social Psychology*, 74(4), 939.
- Agnihotri, A., & Bhattacharya, S. (2016). Online review helpfulness: Role of qualitative factors. *Psychology & Marketing*, 33(11), 1006-1017.
- Ahn, J., La Ferle, C., & Lee, D. (2017). Language and advertising effectiveness: Code-switching in the Korean marketplace. *International Journal of Advertising*, 36(3), 477-495.
- Ahn, T., Ryu, S., & Han, I. (2007). The impact of web quality and playfulness on user acceptance of online retailing. *Information & Management*, 44(3), 263-275.

- Albers-Miller, N. D., & Stafford, M. R. (1999). An international analysis of emotional and rational appeals in services vs goods advertising. *Journal of Consumer Marketing, 16*(1), 42-57.
- Anand, P., & Sternthal, B. (1989). Strategies for designing persuasive messages: Deductions from the resource matching hypothesis. In P. Cafferata & A. M. Tybout (Eds.), *Cognitive and affective responses to advertising* (pp. 135-159). Lexington, MA, England: Lexington Books/D. C. Heath and Com.
- Anand, P., & Sternthal, B. (1990). Ease of message processing as a moderator of repetition effects in advertising. *Journal of Marketing Research, 27*(3), 345-353.
- Arguello, J., Butler, B. S., Joyce, E., Kraut, R., Ling, K. S., Rosé, C., & Wang, X. (2006). Talk to me: foundations for successful individual-group interactions in online communities. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, 959-968*.
- Ashley, C., & Tuten, T. (2015). Creative strategies in social media marketing: An exploratory study of branded social content and consumer engagement. *Psychology & Marketing, 32*(1), 15-27.
- Atamturk, N., Atamturk, H., & Dimililer, C. (2017). Investigating accommodation in native–non-native interactions. *International Journal of Economic Perspectives, 11*(1), 522-526.
- Averbeck, J. M. (2015). Patient–provider orientation as a language expectancy origin for controlling language in doctor–patient interactions. *Communication Reports, 28*(2), 65-79.

- Averbeck, J. M., & Miller, C. (2014). Expanding language expectancy theory: The suatory effects of lexical complexity and syntactic complexity on effective message design. *Communication Studies*, 65(1), 72-95.
- Ayres, A. (2014). Emoji love: The science behind emoticons. Retrieved from: <https://crew.co/blog/emoji-love-the-science-behind-emoticons/>
- Azab, C., & Clark, T. (2017). Speak my language or look like me? – Language and ethnicity in bilingual customer service recovery. *Journal of Business Research*, 72, 57-68.
- Babić Rosario, A., Sotgiu, F., De Valck, K., & Bijmolt, T. H. (2016). The effect of electronic word of mouth on sales: a meta-analytic review of platform, product, and metric factors. *Journal of Marketing Research*, 53(3), 297-318.
- Baek, T. H., Yoon, S., & Kim, S. (2015). When environmental messages should be assertive: Examining the moderating role of effort investment. *International Journal of Advertising*, 34(1), 135-157.
- Balaji, M. S., Khong, K. W., & Chong, A. Y. L. (2016). Determinants of negative word-of-mouth communication using social networking sites. *Information & Management*, 53(4), 528-540.
- Bamman, D., Eisenstein, J., & Schnoebelen, T. (2014). Gender identity and lexical variation in social media. *Journal of Sociolinguistics*, 18(2), 135-160.
- Barcelos, R. H., Dantas, D. C., & Sénécal, S. (2018). Watch Your Tone: How a Brand's Tone of Voice on Social Media Influences Consumer Responses. *Journal of Interactive Marketing*, 41, 60-80.

- Barger, V., Peltier, J. W., & Schultz, D. E. (2016). Social media and consumer engagement: a review and research agenda. *Journal of Research in Interactive Marketing, 10*(4), 268-287.
- Baron, N. S. (2003). Language of the Internet. In A. Farghali (ed.), *The Stanford handbook for language engineers* (pp. 59-127). Stanford: CSLI Publications.
- Barry, T. E., & Howard, D. J. (1990). A review and critique of the hierarchy of effects in advertising. *International Journal of Advertising, 9*(2), 121-135.
- Barton, D., & Lee, C. (2013). *Language online: Investigating digital texts and practices*. Milton Park, Abingdon, Oxon: Routledge.
- Batra, R., & Stayman, D. M. (1990). The role of mood in advertising effectiveness. *Journal of Consumer Research, 17*(2), 203-214.
- Bayer, M., Sommer, W., & Schacht, A. (2012). Font size matters—emotion and attention in cortical responses to written words. *PLoS One, 7*(5), e36042.
- Berger, J. (2011). Arousal increases social transmission of information. *Psychological Science, 22*(7), 891-893.
- Berger, J., & Milkman, K. L. (2012). What makes online content viral?. *Journal of Marketing Research, 49*(2), 192-205.
- Berinsky, A. J., Huber, G. A., & Lenz, G. S. (2012). Evaluating online labor markets for experimental research: Amazon. com's Mechanical Turk. *Political Analysis, 20*(3), 351-368.
- Berthon, P., Pitt, L., & Campbell, C. (2008). Ad lib: When customers create the ad. *California Management Review, 50*(4), 6-30.

- Beukeboom, C. J., Kerkhof, P., & de Vries, M. (2015). Does a virtual like cause actual liking? How following a Brand's Facebook updates enhances brand evaluations and purchase intention. *Journal of Interactive Marketing, 32*, 26-36.
- Biber, D. (1986). Spoken and written textual dimensions in English: Resolving the contradictory findings. *Language, 62*(2), 384-414.
- Bowden, J. L. H. (2009). The process of customer engagement: A conceptual framework. *Journal of Marketing Theory and Practice, 17*(1), 63-74.
- Brodie, R. J., Hollebeek, L. D., Jurić, B., & Ilić, A. (2011). Customer engagement: Conceptual domain, fundamental propositions, and implications for research. *Journal of Service Research, 14*(3), 252-271.
- Brodie, R. J., Ilic, A., Juric, B., & Hollebeek, L. (2013). Consumer engagement in a virtual brand community: An exploratory analysis. *Journal of Business Research, 66*(1), 105-114.
- Buddy Media Inc. (2011). Strategies for effective Facebook wall posts: a statistical review. Retrieved from: <https://www.slideshare.net/chrisrawlinson/buddymedia-strategies-for-effective-facebook-wall-posts>
- Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality, data?. *Perspectives on Psychological Science, 6*(1), 3-5.
- Buller, D. B., Borland, R., & Burgoon, M. (1998). Impact of behavioral intention on effectiveness of message features evidence from the family sun safety project. *Human Communication Research, 24*(3), 433-453.

- Bunz, U., & Campbell, S. W. (2004). Politeness accommodation in electronic mail. *Communication Research Reports, 21*(1), 11-25.
- Burgers, C., Konijn, E. A., Steen, G. J., & Iepsma, M. A. (2015). Making ads less complex, yet more creative and persuasive: The effects of conventional metaphors and irony in print advertising. *International Journal of Advertising, 34*(3), 515-532.
- Burgoon, J. K. (1993). Interpersonal expectations, expectancy violations, and emotional communication. *Journal of Language and Social Psychology, 12*(1-2), 30-48.
- Burgoon, M. (1989). Messages and persuasive effects. In J. Bradac (Ed.), *Message effects in communication science* (pp. 129-164). Newbury Park, CA: Sage.
- Burgoon, M. (1990). Language and social influence. In H. Giles & P. Robinson (Eds.), *Handbook of language and social psychology* (pp. 51-72). London: Wiley.
- Burgoon, M. (1995). Language expectancy theory: Elaboration, explication, and extension. In C. R. Berger & M. Burgoon (Eds.), *Communication and social influence processes* (pp. 29–52). East Lansing, MI: Michigan State University Press.
- Burgoon, M., & Miller, G. R. (1985). An expectancy interpretation of language and persuasion. In H. Giles & R. Clair (Eds.) *The social and psychological contexts of language* (pp. 199–229). London: Lawrence Erlbaum Associates.
- Burgoon, M., Denning, P. V., & Roberts, L. (2002). Language expectancy theory. In J. P. Dillard & M. Pfau (Eds.), *The persuasion handbook: Developments in theory and practice* (pp. 117–137). Thousand Oaks, CA: Sage.
- Burgoon, M., Jones, S. B., & Stewart, D. (1975). Toward a message-centered theory of persuasion: Three empirical investigations of language intensity. *Human Communication Research, 1*, 240-256.

- Callow, K. (1998). *Man and Message. A Guide to Meaning-based Text Analysis*. Boston, MA: University Press of America.
- Carlson, J. R., & Zmud, R. W. (1999). Channel expansion theory and the experiential nature of media richness perceptions. *Academy of Management Journal*, 42(2), 153-170.
- Carnevale, M., Luna, D., & Lerman, D. (2017). Brand linguistics: A theory-driven framework for the study of language in branding. *International Journal of Research in Marketing*, 34(2), 572-591.
- Chang, H. H., Tsai, Y. C., Wong, K. H., Wang, J. W., & Cho, F. J. (2015). The effects of response strategies and severity of failure on consumer attribution with regard to negative word-of-mouth. *Decision Support Systems*, 71, 48-61.
- Chatterjee, P. (2012). The role of varying information quantity in ads on immediate and enduring cross-media synergies. *Journal of Marketing Communications*, 18(3), 217-240.
- Chen, K. J., Kim, J., & Lin, J. S. (2015). The effects of affective and cognitive elaborations from Facebook posts on consumer attitude formation. *Journal of Consumer Behaviour*, 14(3), 208-218.
- Chen, K. J., Lin, J. S., Choi, J. H., & Hahm, J. M. (2015). Would you be my friend? An examination of global marketers' brand personification strategies in social media. *Journal of Interactive Advertising*, 15(2), 97-110.
- Chen, S. C., Yen, D. C., & Hwang, M. I. (2012). Factors influencing the continuance intention to the usage of Web 2.0: An empirical study. *Computers in Human Behavior*, 28(3), 933-941.

- Chen, X., & Siu, K. W. M. (2017). Exploring user behaviour of emoticon use among Chinese youth. *Behaviour & Information Technology*, 36(6), 637-649.
- Chu, S. C., & Kim, Y. (2011). Determinants of consumer engagement in electronic word-of-mouth (eWOM) in social networking sites. *International Journal of Advertising*, 30(1), 47-75.
- Chung, J., & Tan, F. B. (2004). Antecedents of perceived playfulness: an exploratory study on user acceptance of general information-searching websites. *Information & Management*, 41(7), 869-881.
- Chung, S., Animesh, A., Han, K., & Pinsonneault, A. (2014). Firms' Social Media Efforts, Consumer Behavior, and Firm Performance: Evidence from Facebook. *Proceedings of the 35th International Conference on Information Systems*. Retrieved from: <http://aisel.aisnet.org/icis2014/proceedings/SocialMedia/14/>
- Clementson, D. E., Pascual-Ferrá, P., & Beatty, M. J. (2016). When does a presidential candidate seem presidential and trustworthy? Campaign messages through the lens of language expectancy theory. *Presidential Studies Quarterly*, 46(3), 592-617.
- Coleman, M., & Liao, T. L. (1975). A computer readability formula designed for machine scoring. *Journal of Applied Psychology*, 60(2), 283-284.
- Colicev, A., O'Connor, P., & Vinzi, V. E. (2016). Is investing in social media really worth it? How brand actions and user actions influence brand value. *Service Science*, 8(2), 152-168.
- Constantinides, E., & Fountain, S. J. (2008). Web 2.0: Conceptual foundations and marketing issues. *Journal of Direct, Data and Digital Marketing Practice*, 9(3), 231-244.

- Cooper, P. (2018). 41 Facebook Stats That Matter to Marketers in 2019. Retrieved from:
<https://blog.hootsuite.com/facebook-statistics/#business>
- Coursaris, C. K., van Osch, W., & Balogh, B. A. (2016a). Informing brand messaging strategies via social media analytics. *Online Information Review*, 40(1), 6-24.
- Coursaris, C. K., van Osch, W., & Balogh, B. A. (2016b). Do Facebook likes lead to shares or sales? Exploring the empirical links between social media content, brand equity, purchase intention, and engagement. *Proceedings of the 49th Hawaii International Conference on System Sciences*, 3546-3555.
- Cox, D. S., & Cox, A. D. (1988). What does familiarity breed? Complexity as a moderator of repetition effects in advertisement evaluation. *Journal of Consumer Research*, 15(1), 111-116.
- Creamer, M. (2012). Study: Only 1 percent of Facebook 'Fans' Engage with Brands. AdAge. Retrieved from: <http://adage.com/article/digital/study-1-facebook-fans-engage-brands/232351/>
- Crook, C. W., & Booth, R. (1997). Building rapport in electronic mail using accommodation theory. *SAM Advanced Management Journal*, 62(1), 4-13.
- Cruz, R. E., Leonhardt, J. M., & Pezzuti, T. (2017). Second Person Pronouns Enhance Consumer Involvement and Brand Attitude. *Journal of Interactive Marketing*, 39, 104-116.
- Crystal, D. (2006). *Language and the internet* (2nd ed.). Cambridge: Cambridge University Press.
- Crystal, D. (2011). *Internet linguistics: A student guide*. Milton Park, Abingdon; New York: Routledge.

- Culnan, M. J., McHugh, P. J., & Zubillaga, J. I. (2010). How large US companies can use Twitter and other social media to gain business value. *MIS Quarterly Executive*, 9(4), 243-259.
- Cvijikj, I. P., & Michahelles, F. (2013). Online engagement factors on Facebook brand pages. *Social Network Analysis and Mining*, 3(4), 843-861.
- Daft, R. L., & Lengel, R. H. (1984). Information richness: A new approach to managerial behavior and organization design. In B. Staw, & L. L. Cummings (Eds.), *Research in organizational behavior* (pp. 191-233). Greenwich, Connecticut: JAI Press.
- Daft, R. L., & Lengel, R. H. (1986). Organizational information requirements, media richness and structural design. *Management Science*, 32(5), 554-571.
- Danescu-Niculescu-Mizil, C., Gamon, M., & Dumais, S. (2011). Mark my words!: linguistic style accommodation in social media. *Proceedings of the 20th International Conference on World Wide Web*, 745-754.
- Danescu-Niculescu-Mizil, C., West, R., Jurafsky, D., Leskovec, J., & Potts, C. (2013). No country for old members: User lifecycle and linguistic change in online communities. *Proceedings of the 22nd International Conference on World Wide Web*, 307-318.
- Dang-Xuan, L., & Stieglitz, S. (2012). Impact and Diffusion of Sentiment in Political Communication-An Empirical Analysis of Political Weblogs. *Proceedings of the 6th International AAAI Conference on Weblogs and Social Media*, 427-430. Retrieved from: file:///C:/Users/dengq/Downloads/4652-21967-1-PB.pdf

- de Oliveira, M. J., Huertas, M. K. Z., & Lin, Z. (2016). Factors driving young users' engagement with Facebook: Evidence from Brazil. *Computers in Human Behavior, 54*, 54-61.
- de Vries, L., Gensler, S., & Leeflang, P. S. (2012). Popularity of brand posts on brand fan pages: an investigation of the effects of social media marketing. *Journal of Interactive Marketing, 26*(2), 83-91.
- de Vries, L., Gensler, S., & Leeflang, P. S. (2017). Effects of traditional advertising and social messages on brand-building metrics and customer acquisition. *Journal of Marketing, 81*(5), 1-15.
- Delin, J. (2005). Brand Tone of Voice: a linguistic analysis of brand positions. *Journal of Applied Linguistics, 2*(1), 1-44.
- Dellarocas, C. (2003). The digitization of word of mouth: Promise and challenges of online feedback mechanisms. *Management Science, 49*(10), 1407-1424.
- Derks, D., Bos, A. E., & Von Grumbkow, J. (2007). Emoticons and social interaction on the Internet: the importance of social context. *Computers in Human Behavior, 23*(1), 842-849.
- Derks, D., Bos, A. E., & Von Grumbkow, J. (2008). Emoticons and online message interpretation. *Social Science Computer Review, 26*(3), 379-388.
- Derks, D., Fischer, A. H., & Bos, A. E. (2008). The role of emotion in computer-mediated communication: A review. *Computers in Human Behavior, 24*(3), 766-785.

- Dessart, L., Veloutsou, C., & Morgan-Thomas, A. (2015). Consumer engagement in online brand communities: a social media perspective. *Journal of Product & Brand Management*, 24(1), 28-42.
- Dholakia, U. M., Bagozzi, R. P., & Pearo, L. K. (2004). A social influence model of consumer participation in network-and small-group-based virtual communities. *International Journal of Research in Marketing*, 21(3), 241-263.
- Dholakia, U. M., Blazevic, V., Wiertz, C., & Algesheimer, R. (2009). Communal service delivery: How customers benefit from participation in firm-hosted virtual P3 communities. *Journal of Service Research*, 12(2), 208-226.
- Dimitriu, R., & Guesalaga, R. (2017). Consumers' social media brand behaviors: uncovering underlying motivators and deriving meaningful consumer segments. *Psychology & Marketing*, 34(5), 580-592.
- Dimson, T. (2015). Emojineering part 1: Machine learning for emoji trends. *Instagram Engineering Blog*, 30. Retrieved from:
<https://engineering.instagram.com/emojineering-part-1-machine-learning-for-emoji-trendsmachine-learning-for-emoji-trends-7f5f9cb979ad>
- Djafarova, E. (2008). Why do advertisers use puns? A linguistic perspective. *Journal of Advertising Research*, 48(2), 267-275.
- Dolan, R., Conduit, J., Fahy, J., & Goodman, S. (2016). Social media engagement behaviour: a uses and gratifications perspective. *Journal of Strategic Marketing*, 24(3-4), 261-277.
- Downing, J. R. (2011). Linking communication competence with call center agents' sales effectiveness. *International Journal of Business Communication*, 48(4), 409-425.

- Dubay, W. H. (2004). *The principles of readability*. CA: Impact Information. California: Costa Mesa.
- Duggan, M., & Brenner, J. (2013). The demographics of social media users – 2012. Retrieved from: http://boletines.prisadigital.com/PIP_SocialMediaUsers.pdf
- Duncan, T., & Moriarty, S. E. (1998). A communication-based marketing model for managing relationships. *Journal of Marketing*, 62(2), 1-13.
- Edell, J. A., & Burke, M. C. (1987). The power of feelings in understanding advertising effects. *Journal of Consumer Research*, 14(3), 421-433.
- Edmondson, A. C., & McManus, S. E. (2007). Methodological fit in management field research. *Academy of Management Review*, 32(4), 1246-1264.
- Einwiller, S. A., & Steilen, S. (2015). Handling complaints on social network sites—An analysis of complaints and complaint responses on Facebook and Twitter pages of large US companies. *Public Relations Review*, 41(2), 195-204.
- Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook “friends:” Social capital and college students’ use of online social network sites. *Journal of Computer-Mediated Communication*, 12(4), 1143-1168.
- eMarketer. (2015). Retailers get bragging rights for Facebook interaction. Retrieved from <http://www.emarketer.com/Article/Retailers-Bragging-Rights-Facebook-Interaction/1012313>
- eMarketer. (2017). US Ad Spending: The eMarketer Forecast for 2017. Retrieved from: <https://www.emarketer.com/Report/US-Ad-Spending-eMarketer-Forecast-2017/2001998>

- Emojipedia.org (2017). 5 Billion emojis sent daily on Messenger. Retrieved from:
<https://blog.emojipedia.org/5-billion-emojis-sent-daily-on-messenger/>
- Eroglu, S. A., Machleit, K. A., & Davis, L. M. (2003). Empirical testing of a model of online store atmospherics and shopper responses. *Psychology & Marketing, 20*(2), 139-150.
- Evans, D. (2010). *Social media marketing: An hour a day*. Indianapolis, Ind: John Wiley & Sons.
- Evans, V. (2015). No, the rise of the emoji doesn't spell the end of language. *The Conversation*. Retrieved from: <https://theconversation.com/no-the-rise-of-the-emoji-doesnt-spell-the-end-of-language-42208>
- Fairclough, N. (1989). *Language and Power*. London: Pearson.
- Fairclough, N. (1994). Conversationalization of public discourse and the authority of the consumer. In R. Keat, N. Whiteley, & N. Abercrombie (Eds.), *The authority of the consumer* (pp. 235-249). London: Routledge.
- Fang, Y. H. (2017). Beyond the Usefulness of Branded Applications: Insights from Consumer–Brand Engagement and Self-construal Perspectives. *Psychology & Marketing, 34*(1), 40-58.
- Fernandez, A., Schillinger, D., Grumbach, K., Rosenthal, A., Stewart, A. L., Wang, F., & Pérez-Stable, E. J. (2004). Physician language ability and cultural competence. *Journal of General Internal Medicine, 19*(2), 167-174.
- Flesch, R. (1948). A new readability yardstick. *Journal of Applied Psychology, 32*(3), 221-233.

- Folse, J. A. G., Porter III, M., Godbole, M. B., & Reynolds, K. E. (2016). The effects of negatively valenced emotional expressions in online reviews on the reviewer, the review, and the product. *Psychology & Marketing, 33*(9), 747-760.
- Fortin, D. R., & Dholakia, R. R. (2005). Interactivity and vividness effects on social presence and involvement with a web-based advertisement. *Journal of Business Research, 58*(3), 387-396.
- Fournier, S. (1998). Consumers and their brands: Developing relationship theory in consumer research. *Journal of Consumer Research, 24*(4), 343-373.
- Fournier, S., & Avery, J. (2011). The uninvited brand. *Business Horizons, 54*(3), 193-207.
- Ganster, T., Eimler, S. C., & Krämer, N. C. (2012). Same same but different!? The differential influence of smilies and emoticons on person perception. *Cyberpsychology, Behavior, and Social Networking, 15*(4), 226-230.
- Gao, Q., Rau, P. L. P., & Salvendy, G. (2009). Perception of interactivity: Affects of four key variables in mobile advertising. *International Journal of Human-Computer Interaction, 25*(6), 479-505.
- Gasiorek, J. (2015). Perspective-taking, inferred motive, and perceived accommodation in nonaccommodative conversations. *Journal of Language and Social Psychology, 34*(5), 577-586.
- Gensler, S., Völckner, F., Liu-Thompkins, Y., & Wiertz, C. (2013). Managing brands in the social media environment. *Journal of Interactive Marketing, 27*(4), 242-256.

- Ghose, A., & Ipeirotis, P. G. (2011). Estimating the helpfulness and economic impact of product reviews: Mining text and reviewer characteristics. *IEEE Transactions on Knowledge and Data Engineering*, 23(10), 1498-1512.
- Giles, H. (2008). Communication accommodation theory. In L. A. Baxter & D. O. Braithewaite (Eds.), *Engaging theories in interpersonal communication: Multiple perspectives* (pp. 161–173). Thousand Oaks, CA: Sage.
- Giles, H., & Gasiorek, J. (2014). Parameters of nonaccommodation: Refining and elaborating communication accommodation theory. In J. P. Forgas, O. Vincze & J. László (Eds.), *Social cognition and communication* (pp. 155–172). New York: Psychology Press.
- Giles, H., & Sassoon, C. (1983). The effect of speaker's accent, social class background and message style on British listeners' social judgements. *Language & Communication*, 3(3), 305-313.
- Giles, H., Coupland, N., & Coupland, J. (1991). Accommodation theory: Communication, context and consequence. In H. Giles, J. Coupland & N. Coupland (Eds.), *Contexts of accommodation* (pp. 1–68). Cambridge, England: Cambridge University Press.
- Giles, H., Taylor, D. M., & Bourhis, R. (1973). Towards a theory of interpersonal accommodation through language: Some Canadian data. *Language in Society*, 2(2), 177-192.
- Gilliland, D. I., & Johnston, W. J. (1997). Toward a model of business-to-business marketing communications effects. *Industrial Marketing Management*, 26(1), 15-29.

- Golder, S., Wilkinson, D., & Huberman, B. S. (2007). Rhythms of social interaction: messaging within a massive online network. In: C. Steinfield, B. T. Pentland, M. Ackerman, & N. Contractor (Eds.), *Communities and Technologies* (pp. 41-66). London: Springer.
- Gomez-Rodriguez, M., Gummadi, K. P., & Schoelkopf, B. (2014). Quantifying Information Overload in Social Media and Its Impact on Social Contagions. *Proceedings of the 6th International AAI Conference on Weblogs and Social Media*, 170-179. Retrieved from: file:///C:/Users/dengq/Downloads/8108-37744-1-PB.pdf
- Graffigna, G., & Gambetti, R. C. (2015). Grounding consumer-brand engagement: a field-driven conceptualisation. *International Journal of Market Research*, 57(4), 605-630.
- Gretry, A., Horváth, C., Belei, N., & van Riel, A. C. (2017). “Don't pretend to be my friend!” When an informal brand communication style backfires on social media. *Journal of Business Research*, 74, 77-89.
- Gunning, R. (1969). The fog index after twenty years. *Journal of Business Communication*, 6(2), 3-13.
- Gutiérrez-Cillán, J., Camarero-Izquierdo, C., & San José-Cabezudo, R. (2017). How brand post content contributes to user's Facebook brand-page engagement. The experiential route of active participation. *BRQ Business Research Quarterly*, 20(4), 258-274.

- Haberstroh, S. (2010). College counselors' use of informal language online: Student perceptions of expertness, trustworthiness, and attractiveness. *Cyberpsychology, Behavior, and Social Networking*, 13(4), 455-459.
- Habibi, M. R., Laroche, M., & Richard, M. O. (2014). The roles of brand community and community engagement in building brand trust on social media. *Computers in Human Behavior*, 37, 152-161.
- Hancock, J. T., Gee, K., Ciaccio, K., & Lin, J. M. H. (2008). I'm sad you're sad: emotional contagion in CMC. *Proceedings of the 2008 ACM Conference on Computer Supported Cooperative Work*, 295-298.
- Hatfield, E., Cacioppo, J. T., & Rapson, R. L. (1992). Primitive emotional contagion. *Review of Personality and Social Psychology*, 14, 151-177.
- Hatfield, E., Cacioppo, J. T., & Rapson, R. L. (1993). *Emotional Contagion*. England, Cambridge: Cambridge University Press.
- Hayes, A. F. (2006). A primer on multilevel modeling. *Human Communication Research*, 32(4), 385-410.
- Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach (2nd ed.)*. New York, NY: Guilford Publications.
- Heath, C. (1996). Do people prefer to pass along good or bad news? Valence and relevance of news as predictors of transmission propensity. *Organizational Behavior and Human Decision Processes*, 68(2), 79-94.

- Hendriks, B., van Meurs, F., & van der Meij, E. (2015). Does a foreign accent sell? The effect of foreign accents in radio commercials for congruent and non-congruent products. *Multilingua*, 34(1), 119-130.
- Herring, S. C. (2007). A faceted classification scheme for computer-mediated discourse. *Language@ Internet*, 4(1), 1-37.
- Heylighen, F. (1999). Advantages and limitations of formal expression. *Foundations of Science*, 4(1), 25-56.
- Heylighen, F., & Dewaele, J. M. (2002). Variation in the contextuality of language: An empirical measure. *Foundations of Science*, 7(3), 293-340.
- Hiebert, P. (2016). Brands beware: Don't overdo it with the emojis. Retrieved from: <https://yougov.co.uk/news/2016/11/17/consumers-tired-of-emojis/>
- Higgins, E. T. (2002). How self-regulation creates distinct values: the case of promotion and prevention decision making. *Journal of Consumer Psychology*, 12(3), 177-191.
- Hirschman, E. C., & Holbrook, M. B. (1982). Hedonic consumption: emerging concepts, methods and propositions. *Journal of Marketing*, 46(3), 92-101.
- Hlee, S., Lee, J., Yang, S. B., & Koo, C. (2016). An empirical examination of online restaurant reviews (Yelp. com): Moderating roles of restaurant type and self-image disclosure. *Information and Communication Technologies in Tourism 2016*, 339-353.
- Hollebeek, L. D., & Chen, T. (2014). Exploring positively-versus negatively-valenced brand engagement: a conceptual model. *Journal of Product & Brand Management*, 23(1), 62-74.

- Hollebeek, L. D., Glynn, M. S., & Brodie, R. J. (2014). Consumer brand engagement in social media: Conceptualization, scale development and validation. *Journal of Interactive Marketing, 28*(2), 149-165.
- Holmqvist, J., & Grönroos, C. (2012). How does language matter for services? Challenges and propositions for service research. *Journal of Service Research, 15*(4), 430-442.
- Holmqvist, J., & Van Vaerenbergh, Y. (2013). Perceived importance of native language use in service encounters. *The Service Industries Journal, 33*(15-16), 1659-1671.
- Hong, C., & Li, C. (2017). The Effect of “Anonymous Reviewer”: A Study of Anonymity, Affect Intensity, and Message Valence in the Cyberspace. *Journal of Language and Social Psychology, 36*(5), 504-524.
- Hsieh, S. H., & Tseng, T. H. (2017). Playfulness in mobile instant messaging: Examining the influence of emoticons and text messaging on social interaction. *Computers in Human Behavior, 69*, 405-414.
- Hsu, C. L., Chang, K. C., & Chen, M. C. (2012). The impact of website quality on customer satisfaction and purchase intention: perceived playfulness and perceived flow as mediators. *Information Systems and e-Business Management, 10*(4), 549-570.
- Hu, Y., Talamadupula, K., & Kambhampati, S. (2013). Dude, srsly?: The Surprisingly Formal Nature of Twitter's Language. *Proceedings of the 7th International AAAI Conference on Weblogs and Social Media*, 244-253. Retrieved from: <https://www.aaai.org/ocs/index.php/ICWSM/ICWSM13/paper/viewFile/6139/6363>

- Huang, A. H., Yen, D. C., & Zhang, X. (2008). Exploring the potential effects of emoticons. *Information & Management*, 45(7), 466-473.
- Huang, M. H. (2006). Flow, enduring, and situational involvement in the Web environment: A tripartite second-order examination. *Psychology & Marketing*, 23(5), 383-411.
- Huang, Y., Guo, D., Kasakoff, A., & Grieve, J. (2016). Understanding US regional linguistic variation with Twitter data analysis. *Computers, Environment and Urban Systems*, 59, 244-255.
- Hudson, S., Huang, L., Roth, M. S., & Madden, T. J. (2016). The influence of social media interactions on consumer-brand relationships: a three-country study of brand perceptions and marketing behaviors. *International Journal of Research in Marketing*, 33(1), 27-41.
- Huffaker, D. (2010). Dimensions of leadership and social influence in online communities. *Human Communication Research*, 36(4), 593-617.
- Huffaker, D. A., Swaab, R., & Diermeier, D. (2011). The language of coalition formation in online multiparty negotiations. *Journal of Language and Social Psychology*, 30(1), 66-81.
- Hughes, D. J., Rowe, M., Batey, M., & Lee, A. (2012). A tale of two sites: Twitter vs. Facebook and the personality predictors of social media usage. *Computers in Human Behavior*, 28(2), 561-569.
- Huhmann, B. A., & Albinsson, P. A. (2012). Does rhetoric impact advertising effectiveness with liking controlled?. *European Journal of Marketing*, 46(11/12), 1476-1500.

- Hutchinson, A. (2017). Consumer Expectations Rising on Social Customer Care [Report]. Retrieved from: <https://www.socialmediatoday.com/social-business/consumer-expectations-rising-social-customer-care-report>
- Hutter, K., Hautz, J., Dennhardt, S., & Füller, J. (2013). The impact of user interactions in social media on brand awareness and purchase intention: the case of MINI on Facebook. *Journal of Product & Brand Management*, 22(5/6), 342-351.
- Hwong, Y. L., Oliver, C., Van Kranendonk, M., Sammut, C., & Seroussi, Y. (2017). What makes you tick? The psychology of social media engagement in space science communication. *Computers in Human Behavior*, 68, 480-492.
- Ibrahim, N. F., Wang, X., & Bourne, H. (2017). Exploring the effect of user engagement in online brand communities: Evidence from Twitter. *Computers in Human Behavior*, 72, 321-338.
- Incelli, E. (2013). Managing discourse in intercultural business email interactions: a case study of a British and Italian business transaction. *Journal of Multilingual and Multicultural Development*, 34(6), 515-532.
- Ireland, M. E., Slatcher, R. B., Eastwick, P. W., Scissors, L. E., Finkel, E. J., & Pennebaker, J. W. (2011). Language style matching predicts relationship initiation and stability. *Psychological Science*, 22(1), 39-44.
- Irvine, J. T. (1979). Formality and informality in communicative events. *American Anthropologist*, 81(4), 773-790.
- Islam, J. U., & Rahman, Z. (2016a). The transpiring journey of customer engagement research in marketing: A systematic review of the past decade. *Management Decision*, 54(8), 2008-2034.

- Islam, J. U., & Rahman, Z. (2016b). Examining the effects of brand love and brand image on customer engagement: An empirical study of fashion apparel brands. *Journal of Global Fashion Marketing*, 7(1), 45-59.
- Islam, J. U., & Rahman, Z. (2016c). Linking customer engagement to trust and word-of-mouth on Facebook brand communities: An empirical study. *Journal of Internet Commerce*, 15(1), 40-58.
- Islam, J. U., Islam, J. U., Rahman, Z., & Rahman, Z. (2016). The transpiring journey of customer engagement research in marketing: a systematic review of the past decade. *Management Decision*, 54(8), 2008-2034.
- Istanbulluoglu, D. (2017). Complaint handling on social media: The impact of multiple response times on consumer satisfaction. *Computers in Human Behavior*, 74, 72-82.
- Jahn, B., & Kunz, W. (2012). How to transform consumers into fans of your brand. *Journal of Service Management*, 23(3), 344-361.
- Jakic, A., Wagner, M. O., & Meyer, A. (2017). The impact of language style accommodation during social media interactions on brand trust. *Journal of Service Management*, 28(3), 418-441.
- Janssen, J. H., Ijsselsteijn, W. A., & Westerink, J. H. (2014). How affective technologies can influence intimate interactions and improve social connectedness. *International Journal of Human-Computer Studies*, 72(1), 33-43.
- Jensen, M. B., & Jepsen, A. L. (2007). Low attention advertising processing in B2B markets. *Journal of Business & Industrial Marketing*, 22(5), 342-348.

- Jensen, M. L., Averbek, J. M., Zhang, Z., & Wright, K. B. (2013). Credibility of anonymous online product reviews: A language expectancy perspective. *Journal of Management Information Systems*, 30(1), 293-324.
- Jin, Y., & Huang, J. (2017). Why do consumers participate in brand microblogs?. *Electronic Commerce Research and Applications*, 24, 1-11.
- Jones, Q., Ravid, G., & Rafaeli, S. (2004). Information overload and the message dynamics of online interaction spaces: A theoretical model and empirical exploration. *Information Systems Research*, 15(2), 194-210.
- Joyce, E., & Kraut, R. E. (2006). Predicting continued participation in newsgroups. *Journal of Computer-Mediated Communication*, 11(3), 723-747.
- Kachersky, L., & Carnevale, M. (2015). Effects of pronoun brand name perspective and positioning on Brand attitude. *Journal of Product & Brand Management*, 24(2), 157-164.
- Kachersky, L., & Palermo, N. (2013). How personal pronouns influence brand name preference. *Journal of Brand Management*, 20(7), 558-570.
- Kacholia, V. (2013). News feed FYI: Showing more high quality content. Retrieved from: <https://www.facebook.com/business/news/News-Feed-FYI-Showing-More-High-Quality-Content>
- Kadir, Z. A., Idris, H., & Husain, S. S. S. (2012). Playfulness and creativity: A Look at language use online in Malaysia. *Procedia-Social and Behavioral Sciences*, 65, 404-409.
- Kang, Y., & Zhou, L. (2016). Longer is better? A case study of product review helpfulness prediction. *Proceedings of the 22nd Americas Conference on*

Information Systems. Retrieved from:

<https://aisel.aisnet.org/amcis2016/Intel/Presentations/1/>

- Katz, E. (1959). Mass communication research and the study of culture: An editorial note on a possible future for this journal. *Studies in Public Communication*, 2, 1-6.
- Katz, E., & Foulkes, D. (1962). On the use of the mass media as “escape”: Clarification of a concept. *Public Opinion Quarterly*, 26(3), 377-388.
- Katz, E., Blumler, J. G., & Gurevitch, M. (1973). Uses and gratifications research. *Public Opinion Quarterly*, 37(4), 509-523.
- Kaye, L. K., Wall, H. J., & Malone, S. A. (2016). “Turn that frown upside-down”: A contextual account of emoticon usage on different virtual platforms. *Computers in Human Behavior*, 60, 463-467.
- Kelleher, T. (2009). Conversational voice, communicated commitment, and public relations outcomes in interactive online communication. *Journal of Communication*, 59(1), 172-188.
- Kelleher, T., & Miller, B. M. (2006). Organizational blogs and the human voice: Relational strategies and relational outcomes. *Journal of Computer-Mediated Communication*, 11(2), 395-414.
- Kelly, R., & Watts, L. (2015). Characterising the inventive appropriation of emoji as relationally meaningful in mediated close personal relationships. In *Experiences of Technology Appropriation: Unanticipated Users, Usage, Circumstances, and Design*. Retrieved from: http://opus.bath.ac.uk/46780/1/emoji_relational_value.pdf

- Khan, I., Khan, I., Dongping, H., Dongping, H., Wahab, A., & Wahab, A. (2016). Does culture matter in effectiveness of social media marketing strategy? An investigation of brand fan pages. *Aslib Journal of Information Management*, 68(6), 694-715.
- Kim, A. J., & Johnson, K. K. (2016). Power of consumers using social media: Examining the influences of brand-related user-generated content on Facebook. *Computers in Human Behavior*, 58, 98-108.
- Kim, D. H., Spiller, L., & Hettche, M. (2015). Analyzing media types and content orientations in Facebook for global brands. *Journal of Research in Interactive Marketing*, 9(1), 4-30.
- King, R. A., Racherla, P., & Bush, V. D. (2014). What we know and don't know about online word-of-mouth: A review and synthesis of the literature. *Journal of Interactive Marketing*, 28(3), 167-183.
- Kissler, J., Herbert, C., Peyk, P., & Junghofer, M. (2007). Buzzwords: early cortical responses to emotional words during reading. *Psychological Science*, 18(6), 475-480.
- Korfiatis, N., García-Bariocanal, E., & Sánchez-Alonso, S. (2012). Evaluating content quality and helpfulness of online product reviews: The interplay of review helpfulness vs. review content. *Electronic Commerce Research and Applications*, 11(3), 205-217.
- Koslow, S., Shamdasani, P. N., & Touchstone, E. E. (1994). Exploring language effects in ethnic advertising: A sociolinguistic perspective. *Journal of Consumer Research*, 20(4), 575-585.

- Kozinets, R. V., Hemetsberger, A., & Schau, H. J. (2008). The wisdom of consumer crowds: Collective innovation in the age of networked marketing. *Journal of Macromarketing*, 28(4), 339-354.
- Kramer, A. D., Guillory, J. E., & Hancock, J. T. (2014). Experimental evidence of massive-scale emotional contagion through social networks. *Proceedings of the National Academy of Sciences*, 111(24), 8788-8790.
- Kronrod, A., Grinstein, A., & Wathieu, L. (2012a). Go green! Should environmental messages be so assertive?. *Journal of Marketing*, 76(1), 95-102.
- Kronrod, A., Grinstein, A., & Wathieu, L. (2012b). Enjoy! Hedonic consumption and compliance with assertive messages. *Journal of Consumer Research*, 39(1), 51-61.
- Kumar, A., Bezawada, R., Rishika, R., Janakiraman, R., & Kannan, P. K. (2016). From social to sale: The effects of firm-generated content in social media on customer behavior. *Journal of Marketing*, 80(1), 7-25.
- Kumar, V. (2015). Evolution of marketing as a discipline: What has happened and what to look out for. *Journal of Marketing*, 79(1), 1-9.
- Kumar, V., Aksoy, L., Donkers, B., Venkatesan, R., Wiesel, T., & Tillmanns, S. (2010). Undervalued or overvalued customers: capturing total customer engagement value. *Journal of Service Research*, 13(3), 297-310.
- Kurtzberg, T. R., Naquin, C. E., & Belkin, L. Y. (2009). Humor as a relationship-building tool in online negotiations. *International Journal of Conflict Management*, 20(4), 377-397.

- Kwok, L., & Yu, B. (2013). Spreading social media messages on Facebook: An analysis of restaurant business-to-consumer communications. *Cornell Hospitality Quarterly*, 54(1), 84-94.
- Kwon, E. S., & Sung, Y. (2011). Follow me! Global marketers' Twitter use. *Journal of Interactive Advertising*, 12(1), 4-16.
- Labrecque, L. I. (2014). Fostering consumer-brand relationships in social media environments: The role of parasocial interaction. *Journal of Interactive Marketing*, 28(2), 134-148.
- Lasswell, H. D. (1948). The structure and function of communication in society. *The Communication of Ideas*, 37, 215-228.
- LeBoeuf, R. A., & Simmons, J. P. (2010). Branding alters attitude functions and reduces the advantage of function-matching persuasive appeals. *Journal of Marketing Research*, 47(2), 348-360.
- Lee, C., & Kahle, L. (2016). The Linguistics of Social Media: Communication of Emotions and Values in Sport. *Sport Marketing Quarterly*, 25(4), 201-211.
- Lee, D., Hosanagar, K., & Nair, H. S. (2018). Advertising content and consumer engagement on social media: evidence from Facebook. *Management Science*. Advance online publication. Retrieved from:
<https://pubsonline.informs.org/doi/abs/10.1287/mnsc.2017.2902>
- Lei, S. S. I., Pratt, S., & Wang, D. (2017). Factors influencing customer engagement with branded content in the social network sites of integrated resorts. *Asia Pacific Journal of Tourism Research*, 22(3), 316-328.

- Lenoir, A. S. I., Puntoni, S., & van Osselaer, S. M. (2014). What Shall I Call Thee? the Impact of Brand Personality on Consumer Response to Formal and Informal Address. *Advances in Consumer Research*, 42, 136-140.
- Leung, L., & Wei, R. (2000). More than just talk on the move: Uses and gratifications of the cellular phone. *Journalism & Mass Communication Quarterly*, 77(2), 308-320.
- Lin, C. S., Wu, S., & Tsai, R. J. (2005). Integrating perceived playfulness into expectation-confirmation model for web portal context. *Information & Management*, 42(5), 683-693.
- Liu, Z., & Park, S. (2015). What makes a useful online review? Implication for travel product websites. *Tourism Management*, 47, 140-151.
- Lo, S. K. (2008). The nonverbal communication functions of emoticons in computer-mediated communication. *CyberPsychology & Behavior*, 11(5), 595-597.
- Lohtia, R., Donthu, N., & Hershberger, E. K. (2003). The impact of content and design elements on banner advertising click-through rates. *Journal of Advertising Research*, 43(4), 410-418.
- López, M., Sicilia, M., & Verlegh, P. W. (2017). "Click like if you like it": the effect of directional posts on social network sites. *Online Information Review*, 41(5), 672-690.
- Lowrey, T. M. (2006). The relation between script complexity and commercial memorability. *Journal of Advertising*, 35(3), 7-15.
- Luarn, P., Lin, Y. F., & Chiu, Y. P. (2015). Influence of Facebook brand-page posts on online engagement. *Online Information Review*, 39(4), 505-519.

- Ludwig, S., De Ruyter, K., Friedman, M., Brügger, E. C., Wetzels, M., & Pfann, G. (2013). More than words: The influence of affective content and linguistic style matches in online reviews on conversion rates. *Journal of Marketing*, 77(1), 87-103.
- Luminet IV, O., Bouts, P., Delie, F., Manstead, A. S., & Rimé, B. (2000). Social sharing of emotion following exposure to a negatively valenced situation. *Cognition & Emotion*, 14(5), 661-688.
- Luna, D., & Peracchio, L. A. (2005). Advertising to bilingual consumers: The impact of code-switching on persuasion. *Journal of Consumer Research*, 31(4), 760-765.
- Luna, D., Carnevale, M., & Lerman, D. (2013). Does brand spelling influence memory? The case of auditorily presented brand names. *Journal of Consumer Psychology*, 23(1), 36-48.
- Luor, T. T., Wu, L. L., Lu, H. P., & Tao, Y. H. (2010). The effect of emoticons in simplex and complex task-oriented communication: An empirical study of instant messaging. *Computers in Human Behavior*, 26(5), 889-895.
- Mallett, O., & Wapshott, R. (2014). Informality and Employment Relationships in Small Firms: Humour, Ambiguity and Straight-talking. *British Journal of Management*, 25(1), 118-132.
- Marengo, D., Giannotta, F., & Settanni, M. (2017). Assessing personality using emoji: An exploratory study. *Personality and Individual Differences*, 112, 74-78.
- Marketing Science Institute. (2018). Research Priorities 2018-2020. Cambridge, Massachusetts: Marketing Science Institute.

- Martin, K., & Todorov, I. (2010). How will digital platforms be harnessed in 2010, and how will they change the way people interact with brands? *Journal of Interactive Advertising, 10*(2), 61-66.
- Mc Laughlin, G. H. (1969). SMOG grading-a new readability formula. *Journal of Reading, 12*(8), 639-646.
- McAndrew, F. T., & Jeong, H. S. (2012). Who does what on Facebook? Age, sex, and relationship status as predictors of Facebook use. *Computers in Human Behavior, 28*(6), 2359-2365.
- McArthur, T. (2003). *Concise Oxford companion to the English language*. Oxford, UK: Oxford University Press.
- McKenna, K. Y., Green, A. S., & Gleason, M. E. (2002). Relationship formation on the Internet: What's the big attraction?. *Journal of Social Issues, 58*(1), 9-31.
- Meade, A. W., & Craig, S. B. (2012). Identifying careless responses in survey data. *Psychological Methods, 17*(3), 437.
- Mehrabian, A., & Russell, J. A. (1974). *An approach to environmental psychology*. Cambridge, MA: The MIT Press.
- Merz, M. A., He, Y., & Vargo, S. L. (2009). The evolving brand logic: a service-dominant logic perspective. *Journal of the Academy of Marketing Science, 37*(3), 328-344.
- Metoyer-Duran, C. (1993). The readability of published, accepted, and rejected papers appearing in College & Research Libraries. *College & Research Libraries, 54*(6), 517-526.

- Michael, L., & Otterbacher, J. (2014). Write Like I Write: Herding in the Language of Online Reviews. *Proceedings of the 8th International AAAI Conference on Weblogs and Social Media*, 356-365. Retrieved from: file:///C:/Users/dengq/Downloads/8046-37761-1-PB.pdf
- Mickens, D. (2012). 60% of Consumers Expect Brands to Respond on Social Media. Retrieved from: <https://www.clickz.com/60-of-consumers-say-they-expect-social-brand-response/44536/>
- Miller, M. D., & Burgoon, M. (1979). The relationship between violations of expectations and the induction of resistance to persuasion. *Human Communication Research*, 5(4), 301-313.
- Mohr, J., & Nevin, J. R. (1990). Communication strategies in marketing channels: A theoretical perspective. *Journal of Marketing*, 54(4), 36-51.
- Moon, J. W., & Kim, Y. G. (2001). Extending the TAM for a World-Wide-Web context. *Information & Management*, 38(4), 217-230.
- Morris, J. D. (2012). Theories of emotion and affect in marketing communications. In S. Rodgers & E. Thorson (Eds.), *Advertising Theory* (pp. 85-104). New York: Routledge.
- Morris, J. D., Woo, C., Geason, J. A., & Kim, J. (2002). The power of affect: Predicting intention. *Journal of Advertising Research*, 42(3), 7-17.
- Mosendz, P. (2014). Why the White House is using emoji. Retrieved from: <https://www.theatlantic.com/technology/archive/2014/10/why-the-white-house-is-using-emojis/381307/>

- Mosquera, A., & Moreda, P. (2012a). A qualitative analysis of informality levels in web 2.0 texts: The facebook case study. *Proceedings of the LREC workshop: @ NLP can u tag# user generated content*, 23-28.
- Mosquera, A., & Moreda, P. (2012b). Smile: An informality classification tool for helping to assess quality and credibility in web 2.0 texts. *Proceedings of the ICWSM workshop: Real-Time Analysis and Mining of Social Streams*, 2-7.
- Muir, K., Joinson, A., Cotterill, R., & Dewdney, N. (2016). Characterizing the linguistic chameleon: Personal and social correlates of linguistic style accommodation. *Human Communication Research*, 42(3), 462-484.
- Muir, K., Joinson, A., Cotterill, R., & Dewdney, N. (2017). Linguistic Style Accommodation Shapes Impression Formation and Rapport in Computer-Mediated Communication. *Journal of Language and Social Psychology*, 36(5), 525-548.
- Muntinga, D. G., Moorman, M., & Smit, E. G. (2011). Introducing COBRAs: Exploring motivations for brand-related social media use. *International Journal of Advertising*, 30(1), 13-46.
- Muresan, S., Gonzalez-Ibanez, R., Ghosh, D., & Wacholder, N. (2016). Identification of nonliteral language in social media: A case study on sarcasm. *Journal of the Association for Information Science and Technology*, 67(11), 2725-2737.
- Myers, G. (1994). *Words in Ads*. London: Edward Arnold.
- Nambisan, S., & Baron, R. A. (2007). Interactions in virtual customer environments: Implications for product support and customer relationship management. *Journal of Interactive Marketing*, 21(2), 42-62.

- Nguyen, D. P., Gravel, R., Trieschnigg, R. B., & Meder, T. (2013). "How old do you think I am?" A study of language and age in Twitter. *Proceedings of the 7th International AAAI Conference on Weblogs and Social Media*, 439-448. Retrieved from: file:///C:/Users/dengq/Downloads/5984-30392-1-PB.pdf
- Niederhoffer, K. G., & Pennebaker, J. W. (2002). Linguistic style matching in social interaction. *Journal of Language and Social Psychology*, 21(4), 337-360.
- Noriega, J., & Blair, E. (2008). Advertising to bilinguals: Does the language of advertising influence the nature of thoughts?. *Journal of Marketing*, 72(5), 69-83.
- Novak, P. K., Smailović, J., Sluban, B., & Mozetič, I. (2015). Sentiment of emojis. *PloS One*, 10(12), e0144296.
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 460-469.
- Otterbacher, J., Ang, C. S., Litvak, M., & Atkins, D. (2017). Show Me You Care: Trait Empathy, Linguistic Style, and Mimicry on Facebook. *ACM Transactions on Internet Technology*, 17(1), Article 6.
- Pace, R. W. (1962). Oral communication and sales effectiveness. *Journal of Applied Psychology*, 46(5), 321-324.
- Packard, G., Moore, S. G., & McFerran, B. (2014). How can "I" help "You"? the impact of personal pronoun use in customer-firm agent interactions. *Marketing Science Institute Research Report*, 14-110.
- Pansari, A., & Kumar, V. (2017). Customer engagement: the construct, antecedents, and consequences. *Journal of the Academy of Marketing Science*, 45(3), 294-311.

- Paolacci, G., Chandler, J., & Ipeirotis, P. G. (2010). Running experiments on Amazon Mechanical Turk. *Judgment and Decision Making*, 5(5), 411-419.
- Pardes, A. (2018). The wired guide to emoji. Retrieved from:
<https://www.wired.com/story/guide-emoji/>
- Parhankangas, A., & Renko, M. (2017). Linguistic style and crowdfunding success among social and commercial entrepreneurs. *Journal of Business Venturing*, 32(2), 215-236.
- Paris, C., Thomas, P., & Wan, S. (2012). Differences in Language and Style Between Two Social Media Communities. *Proceedings of the 6th International AAAI Conference on Weblogs and Social Media*, 539-542. Retrieved from:
<https://www.aaai.org/ocs/index.php/ICWSM/ICWSM12/paper/viewFile/4626/5052>
- Park, J., Baek, Y. M., & Cha, M. (2012). Cross-cultural comparison of nonverbal cues in emoticons on twitter: Evidence from big data analysis. *Journal of Communication*, 64(2), 333-354.
- Park, H., & Cameron, G. T. (2014). Keeping it real: Exploring the roles of conversational human voice and source credibility in crisis communication via blogs. *Journalism & Mass Communication Quarterly*, 91(3), 487-507.
- Park, S., & Nicolau, J. L. (2015). Asymmetric effects of online consumer reviews. *Annals of Tourism Research*, 50, 67-83.
- Parsons, A. (2013). Using social media to reach consumers: A content analysis of official Facebook pages. *Academy of Marketing Studies Journal*, 17(2), 27-36.

- Peer, E., Vosgerau, J., & Acquisti, A. (2014). Reputation as a sufficient condition for data quality on Amazon Mechanical Turk. *Behavior Research Methods*, 46(4), 1023-1031.
- Pennebaker, J. W. (2011). *The Secret Life of Pronouns: What Our Words Say About Us*. New York: Bloomsbury Press.
- Percy, L. (2012). The role of emotion in processing advertising. In S. Rodgers & E. Thorson (Eds.), *Advertising Theory* (pp. 69-84). New York: Routledge.
- Pérez-Sabater, C., Turney, E., & Fleta, M. B. M. (2008). Orality and literacy, formality and informality in email communication. *Ibérica: Revista de la Asociación Europea de Lenguas para Fines Específicos (AELFE)*, 15, 71-88.
- Pérez-Sabater, C. (2013). The linguistics of social networking: A study of writing conventions on Facebook. *Linguistik Online*, 56(6), 81-93.
- Peters, K., Kashima, Y., & Clark, A. (2009). Talking about others: Emotionality and the dissemination of social information. *European Journal of Social Psychology*, 39(2), 207-222.
- Peterson, K., Hohensee, M., & Xia, F. (2011). Email formality in the workplace: A case study on the Enron corpus. *Proceedings of the Workshop on Languages in Social Media*, 86-95.
- Peterson, R. A., Cannito, M. P., & Brown, S. P. (1995). An exploratory investigation of voice characteristics and selling effectiveness. *Journal of Personal Selling & Sales Management*, 15(1), 1-15.

- Phelps, J. E., Lewis, R., Mobilio, L., Perry, D., & Raman, N. (2004). Viral marketing or electronic word-of-mouth advertising: Examining consumer responses and motivations to pass along email. *Journal of Advertising Research*, 44(4), 333-348.
- Pinto, M. B., & Yagnik, A. (2017). Fit for life: A content analysis of fitness tracker brands use of Facebook in social media marketing. *Journal of Brand Management*, 24(1), 49-67.
- Pollach, I. (2005). Corporate self-presentation on the WWW: Strategies for enhancing usability, credibility and utility. *Corporate Communications: An International Journal*, 10(4), 285-301.
- Puntoni, S., De Langhe, B., & Van Osselaer, S. M. (2008). Bilingualism and the emotional intensity of advertising language. *Journal of Consumer Research*, 35(6), 1012-1025.
- Puto, C. P. & Wells, W. D. (1984). Informational and transformational advertising: the differential effects of time. *Advances in Consumer Research*, 11, 638-643.
- Relling, M., Schnittka, O., Sattler, H., & Johnen, M. (2016). Each can help or hurt: Negative and positive word of mouth in social network brand communities. *International Journal of Research in Marketing*, 33(1), 42-58.
- Rennekamp, K. M., & Witz, P. D. (2017). Linguistic Formality and Perceived Engagement—Investors’ Reactions to Two Unique Characteristics of Social Media Disclosures. Retrieved from:
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2911006
- Reyes, A. (2015). Building intimacy through linguistic choices, text structure and voices in political discourse. *Language & Communication*, 43, 58-71.

- Rice, R. E., & Love, G. (1987). Electronic emotion: Socioemotional content in a computer-mediated communication network. *Communication Research, 14*(1), 85-108.
- Rieder, B. (2013). Studying Facebook via data extraction: the Netvizz application. *Proceedings of the 5th Annual ACM Web Science Conference*, 346-355.
- Rimé, B. (2009). Emotion elicits the social sharing of emotion: Theory and empirical review. *Emotion Review, 1*(1), 60-85.
- Rim, H., & Song, D. (2016). “How negative becomes less negative”: Understanding the effects of comment valence and response sidedness in social media. *Journal of Communication, 66*(3), 475-495.
- Riordan, M. A. (2017a). The communicative role of non-face emojis: Affect and disambiguation. *Computers in Human Behavior, 76*, 75-86.
- Riordan, M. A. (2017b). Emojis as tools for emotion work: Communicating affect in text messages. *Journal of Language and Social Psychology, 36*(5), 549-567.
- Riordan, M. A., Markman, K. M., & Stewart, C. O. (2013). Communication accommodation in instant messaging: An examination of temporal convergence. *Journal of Language and Social Psychology, 32*(1), 84-95.
- Rodrigues, D., Lopes, D., Prada, M., Thompson, D., & Garrido, M. V. (2017). A frown emoji can be worth a thousand words: Perceptions of emoji use in text messages exchanged between romantic partners. *Telematics and Informatics, 34*(8), 1532-1543.

- Ruekert, R. W., & Walker Jr, O. C. (1987). Marketing's interaction with other functional units: A conceptual framework and empirical evidence. *Journal of Marketing*, 51(1), 1-19.
- Russell, J. A., & Mehrabian, A. (1977). Evidence for a three-factor theory of emotions. *Journal of Research in Personality*, 11(3), 273-294.
- Sabate, F., Berbegal-Mirabent, J., Cañabate, A., & Lebherz, P. R. (2014). Factors influencing popularity of branded content in Facebook fan pages. *European Management Journal*, 32(6), 1001-1011.
- Sarbin, T. R., & Allen, V. L. (1968). Role theory. In G. Lindzey & E. Aronson (Eds.), *The handbook of social psychology* (pp. 488–567). Reading, MA: Addison Wesley.
- Schamari, J., & Schaefers, T. (2015). Leaving the home turf: How brands can use webcare on consumer-generated platforms to increase positive consumer engagement. *Journal of Interactive Marketing*, 30, 20-33.
- Schau, H. J., Dellande, S., & Gilly, M. C. (2007). The impact of code switching on service encounters. *Journal of Retailing*, 83(1), 65-78.
- Schindler, R. M., & Bickart, B. (2012). Perceived helpfulness of online consumer reviews: The role of message content and style. *Journal of Consumer Behaviour*, 11(3), 234-243.
- Schmitt, B. (2012). The consumer psychology of brands. *Journal of Consumer Psychology*, 22(1), 7-17.
- Schultz, C. D. (2017). Proposing to your fans: Which brand post characteristics drive consumer engagement activities on social media brand pages?. *Electronic Commerce Research and Applications*, 26, 23-34.

- Schultz, D. E., & Peltier, J. (2013). Social media's slippery slope: challenges, opportunities and future research directions. *Journal of Research in Interactive Marketing*, 7(2), 86-99.
- Schwartz, H. A., Eichstaedt, J. C., Kern, M. L., Dziurzynski, L., Ramones, S. M., Agrawal, M., ... & Ungar, L. H. (2013). Personality, gender, and age in the language of social media: The open-vocabulary approach. *PloS One*, 8(9), e73791.
- Scissors, L. E., Gill, A. J., & Gergle, D. (2008). Linguistic mimicry and trust in text-based CMC. *Proceedings of the 2008 ACM Conference on Computer Supported Cooperative Work*, 277-280.
- Scissors, L. E., Gill, A. J., Geraghty, K., & Gergle, D. (2009). In CMC we trust: The role of similarity. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 527-536.
- Scott, G. G., Sinclair, J., Short, E., & Bruce, G. (2014). It's not what you say, it's how you say it: language use on Facebook impacts employability but not attractiveness. *Cyberpsychology, Behavior, and Social Networking*, 17(8), 562-566.
- Searls, D., & Weinberger, D. (2000). Markets Are Conversations. In R. Levine, C. Locke, D. Searls, & D. Weinberger (Eds.), *The Cluetrain Manifesto: The End of Business as Usual* (pp. 75-114), New York: Perseus.
- Seider, B. H., Hirschberger, G., Nelson, K. L., & Levenson, R. W. (2009). We can work it out: age differences in relational pronouns, physiology, and behavior in marital conflict. *Psychology and Aging*, 24(3), 604-613.
- Seiter, C. (2015). The psychology of emojis. Retrieved from:
<https://thenextweb.com/insider/2015/06/23/the-psychology-of-emojis/>

- Sela, A., Wheeler, S. C., & Sarial-Abi, G. (2012). We are not the same as you and I: Causal effects of minor language variations on consumers' attitudes toward brands. *Journal of Consumer Research*, 39(3), 644-661.
- Senter, R. J., & Smith, E. A. (1967). Automated Readability Index. Ft. Belvoir: Defense Technical Information Center. Retrieved from:
<http://www.dtic.mil/docs/citations/AD0667273>
- Simmons, R. A., Gordon, P. C., & Chambless, D. L. (2005). Pronouns in marital interaction: What do “you” and “I” say about marital health?. *Psychological Science*, 16(12), 932-936.
- Singleton Jr., R. A. & Straits, B. C. (2010). *Approaches to social research (5th Ed.)*. Oxford: Oxford University Press.
- Skovholt, K., Grønning, A., & Kankaanranta, A. (2014). The communicative functions of emoticons in workplace e-mails: :-). *Journal of Computer-Mediated Communication*, 19(4), 780-797.
- Sledgianowski, D., & Kulviwat, S. (2009). Using social network sites: The effects of playfulness, critical mass and trust in a hedonic context. *Journal of Computer Information Systems*, 49(4), 74-83.
- Smith, K. (2004). I am me, but who are you and what are we?': The translation of personal pronouns and possessive determiners in advertising texts. *Multilingua*, 23(3), 283-304.
- Smith, S. M., & Petty, R. E. (1996). Message framing and persuasion: A message processing analysis. *Personality and Social Psychology Bulletin*, 22(3), 257-268.

- So, K. K. F., King, C., Sparks, B. A., & Wang, Y. (2016). The role of customer engagement in building consumer loyalty to tourism brands. *Journal of Travel Research, 55*(1), 64-78.
- Soliz, J., & Giles, H. (2014). Relational and identity processes in communication: A contextual and meta-analytical review of Communication Accommodation Theory. *Annals of the International Communication Association, 38*(1), 107-144.
- Sparks, B. A., & Browning, V. (2011). The impact of online reviews on hotel booking intentions and perception of trust. *Tourism Management, 32*(6), 1310-1323.
- Sparks, B. A., So, K. K. F., & Bradley, G. L. (2016). Responding to negative online reviews: The effects of hotel responses on customer inferences of trust and concern. *Tourism Management, 53*, 74-85.
- Spredfast. (2016). The smart social report: Volume four. Retrieved from:
<https://www.spredfast.com/social-media-white-paper/smart-social-report-volume-four>
- Stafford, M. R., & Day, E. (1995). Retail services advertising: the effects of appeal, medium, and service. *Journal of Advertising, 24*(1), 57-71.
- Statista (2017). Social media usage worldwide. Retrieved from:
<https://www.statista.com/study/12393/social-networks-statista-dossier/>
- Statista (2018a). Number of monthly active Facebook users worldwide as of 4th quarter 2018 (in millions). Retrieved from:
<https://www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide/>

- Statista (2018b). Number of daily active Facebook users worldwide as of 4th quarter 2018 (in millions). Retrieved from:
<https://www.statista.com/statistics/346167/facebook-global-dau/>
- Statista (2018c). Social network advertising spending in the United States from 2015 to 2018 (in billion U.S. dollars). Retrieved from:
<https://www.statista.com/statistics/736971/social-media-ad-spend-usa/>
- Steinmann, S., Mau, G., & Schramm-Klein, H. (2015). Brand communication success in online consumption communities: An experimental analysis of the effects of communication style and brand pictorial representation. *Psychology & Marketing, 32*(3), 356-371.
- Sternberg, R. J. (1986). A triangular theory of love. *Psychological Review, 93*(2), 119-135.
- Stieglitz, S., & Dang-Xuan, L. (2012). Impact and diffusion of sentiment in public communication on Facebook. *Proceedings of 20th European Conference on Information Systems*, Paper 98.
- Stieglitz, S., & Dang-Xuan, L. (2013). Emotions and information diffusion in social media—sentiment of microblogs and sharing behavior. *Journal of Management Information Systems, 29*(4), 217-248.
- Subramaniam, V., & Razak, N. A. (2014). Examining Language Usage and Patterns in Online Conversation: Communication Gap among Generation Y and Baby Boomers. *Procedia-Social and Behavioral Sciences, 118*, 468-474.

- Swaab, R. I., Maddux, W. W., & Sinaceur, M. (2011). Early words that work: When and how virtual linguistic mimicry facilitates negotiation outcomes. *Journal of Experimental Social Psychology, 47*(3), 616-621.
- Swani, K., & Milne, G. R. (2017). Evaluating Facebook brand content popularity for service versus goods offerings. *Journal of Business Research, 79*, 123-133.
- Swani, K., Brown, B. P., & Milne, G. R. (2014). Should tweets differ for B2B and B2C? An analysis of Fortune 500 companies' Twitter communications. *Industrial Marketing Management, 43*(5), 873-881.
- Swani, K., Milne, G. R., Brown, B. P., Assaf, A. G., & Donthu, N. (2017). What messages to post? Evaluating the popularity of social media communications in business versus consumer markets. *Industrial Marketing Management, 62*, 77-87.
- Swani, K., Milne, G., & P. Brown, B. (2013). Spreading the word through likes on Facebook: Evaluating the message strategy effectiveness of Fortune 500 companies. *Journal of Research in Interactive Marketing, 7*(4), 269-294.
- Takahashi, K., Oishi, T., & Shimada, M. (2017). Is 😊 Smiling? Cross-Cultural Study on Recognition of Emoticon's Emotion. *Journal of Cross-Cultural Psychology, 48*(10), 1578-1586.
- Tausczik, Y. R., & Pennebaker, J. W. (2010). The psychological meaning of words: LIWC and computerized text analysis methods. *Journal of Language and Social Psychology, 29*(1), 24-54.
- Temnikova, I., Vieweg, S., & Castillo, C. (2015). The case for readability of crisis communications in social media. *Proceedings of the 24th International Conference on World Wide Web*, 1245-1250.

- Thelwall, M. (2009). MySpace comments. *Online Information Review*, 33(1), 58-76.
- Thelwall, M., Buckley, K., & Paltoglou, G. (2012). Sentiment strength detection for the social web. *Journal of the Association for Information Science and Technology*, 63(1), 163-173.
- Thelwall, M., Buckley, K., Paltoglou, G., Cai, D., & Kappas, A. (2010). Sentiment strength detection in short informal text. *Journal of the Association for Information Science and Technology*, 61(12), 2544-2558.
- Thompson, D., & Filik, R. (2016). Sarcasm in written communication: Emoticons are efficient markers of intention. *Journal of Computer-Mediated Communication*, 21(2), 105-120.
- Tossell, C. C., Kortum, P., Shepard, C., Barg-Walkow, L. H., Rahmati, A., & Zhong, L. (2012). A longitudinal study of emoticon use in text messaging from smartphones. *Computers in Human Behavior*, 28(2), 659-663.
- Tuten, T. L. & Solomon, M. (2013). *Social Media Marketing*. Upper Saddle River, NJ: Pearson Education.
- Unicode.org (2019). Emoji counts, v12.0. Retrieved from:
<https://unicode.org/emoji/charts-12.0/emoji-counts.html>
- Vakratsas, D., & Ambler, T. (1999). How advertising works: what do we really know?. *Journal of Marketing*, 63(1), 26-43.
- Van Dolen, W. M., Dabholkar, P. A., & De Ruyter, K. (2007). Satisfaction with online commercial group chat: the influence of perceived technology attributes, chat group characteristics, and advisor communication style. *Journal of Retailing*, 83(3), 339-358.

- Van Doorn, J., Lemon, K. N., Mittal, V., Nass, S., Pick, D., Pirner, P., & Verhoef, P. C. (2010). Customer engagement behavior: Theoretical foundations and research directions. *Journal of Service Research, 13*(3), 253-266.
- Van Noort, G., & Willemsen, L. M. (2012). Online damage control: The effects of proactive versus reactive webcare interventions in consumer-generated and brand-generated platforms. *Journal of Interactive Marketing, 26*(3), 131-140.
- Van Vaerenbergh, Y., & Holmqvist, J. (2013). Speak my language if you want my money: Service language's influence on consumer tipping behavior. *European Journal of Marketing, 47*(8), 1276-1292.
- Van Vaerenbergh, Y., & Holmqvist, J. (2014). Examining the relationship between language divergence and word-of-mouth intentions. *Journal of Business Research, 67*(8), 1601-1608.
- Vasalou, A., Joinson, A., Bänziger, T., Goldie, P., & Pitt, J. (2008). Avatars in social media: Balancing accuracy, playfulness and embodied messages. *International Journal of Human-Computer Studies, 66*(11), 801-811.
- Venturi, G., Bellandi, T., Dell'Orletta, F., & Montemagni, S. (2015). NLP-Based Readability Assessment of Health-Related Texts: A Case Study on Italian Informed Consent Forms. *Proceedings of the Sixth International Workshop on Health Text Mining and Information Analysis, 131-141.*
- Wagner, T. F., Baccarella, C. V., & Voigt, K. I. (2017). Framing social media communication: Investigating the effects of brand post appeals on user interaction. *European Management Journal, 35*(5), 606-616.

- Waldeck, J., Kearney, P., & Plax, T. (2001). Teacher e-mail message strategies and students' willingness to communicate online. *Journal of Applied Communication Research, 29*(1), 54-70.
- Wall, H. J., Kaye, L. K., & Malone, S. A. (2016). An exploration of psychological factors on emoticon usage and implications for judgement accuracy. *Computers in Human Behavior, 62*, 70-78.
- Wallace, E., Buil, I., & de Chernatony, L. (2014). Consumer engagement with self-expressive brands: brand love and WOM outcomes. *Journal of Product & Brand Management, 23*(1), 33-42.
- Wallace, E., Buil, I., de Chernatony, L., & Hogan, M. (2014). Who “likes” you... and why? A typology of Facebook fans. *Journal of Advertising Research, 54*(1), 92-109.
- Walther, J. B. (2012). Interaction through technological lenses: Computer-mediated communication and language. *Journal of Language and Social Psychology, 31*(4), 397-414.
- Walther, J. B., & D’Addario, K. P. (2001). The impacts of emoticons on message interpretation in computer-mediated communication. *Social Science Computer Review, 19*(3), 324-347.
- Wang, H. C., & Fussell, S. (2010). Groups in groups: Conversational similarity in online multicultural multiparty brainstorming. *Proceedings of the 2010 ACM Conference on Computer Supported Cooperative Work*, 351-360.
- Wang, W., Zhao, Y., Qiu, L., & Zhu, Y. (2014). Effects of emoticons on the acceptance of negative feedback in computer-mediated communication. *Journal of the Association for Information Systems, 15*(8), 454-483.

- Wang, Y., Reitter, D., & Yen, J. (2014). Linguistic adaptation in conversation threads: Analyzing alignment in online health communities. *Proceedings of the 2014 ACL Workshop on Cognitive Modeling and Computational Linguistics*, 55-62.
- Welbers, K., & de Nooy, W. (2014). Stylistic accommodation on an internet forum as bonding: Do posters adapt to the style of their peers?. *American Behavioral Scientist*, 58(10), 1361-1375.
- Wen, J., & Song, B. (2017). Corporate Ethical Branding on YouTube: CSR Communication Strategies and Brand Anthropomorphism. *Journal of Interactive Advertising*, 17(1), 1-13.
- Wiebenga, J. H., & Fennis, B. M. (2012). Me, myself, and Ikea: Qualifying the role of implicit egotism in brand judgment. *Advances in Consumer Research*, 40, 733-734.
- Williams, K. C., & Spiro, R. L. (1985). Communication style in the salesperson-customer dyad. *Journal of Marketing Research*, 22(4), 434-442.
- Williams, M., & Buttle, F. (2014). Managing negative word-of-mouth: an exploratory study. *Journal of Marketing Management*, 30(13-14), 1423-1447.
- Willoughby, J. F., & Liu, S. (2018). Do pictures help tell the story? An experimental test of narrative and emojis in a health text message intervention. *Computers in Human Behavior*, 79, 75-82.
- Wilson, H., Guinan, P., Parise, S., & Weinberg, B. (2011). What's your social media strategy? A new study shows four ways companies are using technology to form connections. *Harvard Business Review*, 89(7-8), 23-25.
- Wimmer, R. D., & Dominick, J. R. (1994). *Mass media research: An introduction*. Belmont, CA: Wadsworth.

- Wolf, A. (2000). Emotional expression online: Gender differences in emoticon use. *CyberPsychology & Behavior*, 3(5), 827-833.
- Wolny, W. (2016). Emotion analysis of twitter data that use emoticons and emoji ideograms. *Proceedings of the 3rd International Conference on Information Systems Development*, Paper 5.
- Wu, L., Shen, H., Fan, A., & Mattila, A. S. (2017). The impact of language style on consumers' reactions to online reviews. *Tourism Management*, 59, 590-596.
- Xia, L. (2013). Effects of companies' responses to consumer criticism in social media. *International Journal of Electronic Commerce*, 17(4), 73-100.
- Yilmaz, G. (2016). What you do and how you speak matter: Behavioral and linguistic determinants of performance in virtual teams. *Journal of Language and Social Psychology*, 35(1), 76-97.
- Yu, J. (2014). We look for social, not promotion: Brand post strategy, consumer emotions, and engagement-a case study of the Facebook brand pages. *Journal on Media & Communications*, 1(2), 28-37.
- Yuasa, M., Saito, K., & Mukawa, N. (2011). Brain activity when reading sentences and emoticons: an fMRI study of verbal and nonverbal communication. *Electronics and Communications in Japan*, 94(5), 17-24.
- Zaichkowsky, J. L. (1985). Measuring the involvement construct. *Journal of Consumer Research*, 12(3), 341-352.
- Zakaluk, B. L., & Samuels, S. J. (1988). *Readability: Its Past, Present, and Future*. Newark, DE: International Reading Association.

Appendix 1. Dataset Description: Essay One

Brand	Number of Posts	Number of Followers	Industry
3M	177	4,368,787	Diversified
Accenture	88	514,510	Business Services
Adidas	6	32,416,547	Apparel
Adobe	134	1,127,933	Technology
Allianz	114	1,195,143	Financial Services
Amazon	314	27,567,984	Technology
American Express	38	7,393,456	Financial Services
AT&T	215	6,236,160	Telecom
Audi	84	10,947,697	Automotive
Bank of America	282	2,766,276	Financial Services
BASF	112	417,355	Diversified
BMW	331	19,832,326	Automotive
Boeing	71	1,115,848	Aerospace
Budweiser	9	14,623,165	Alcohol
Burberry	22	16,952,641	Luxury
Canon	210	1,550,893	Technology
Cartier	96	4,299,198	Luxury
Caterpillar	2	8,318	Heavy Equipment
Chanel	84	20,515,842	Luxury
Chase	127	3,756,757	Financial Services
Chevrolet	68	20,249,461	Automotive
Cisco	395	916,009	Technology
Citi	65	1,150,056	Financial Services
Coach	130	6,883,973	Luxury

Coca-Cola	5	107,101,026	Beverages
Colgate	2	2,764,124	Consumer Packaged Goods
Corona	9	14,550,150	Alcohol
Costco	325	1,632,881	Retail
CVS	93	2,195,200	Retail
Danone	57	284,994	Consumer Packaged Goods
DHL	141	515,750	Transportation
Dior	155	15,998,187	Luxury
Disney	334	50,086,032	Leisure
Ebay	285	10,093,991	Technology
Facebook	4	206,387,193	Technology
FedEx	108	2,217,915	Transportation
Ferrari	400	16,160,047	Automotive
Ford	13	8,459,506	Automotive
Frito-Lay	55	2,106,836	Consumer Packaged Goods
GE	74	2,073,272	Diversified
Gillette	172	2,053,765	Consumer Packaged Goods
Goldman Sachs	199	175,339	Financial Services
Google	95	25,308,008	Technology
Gucci	372	16,439,058	Luxury
H&M	298	33,808,291	Retail
Harley Davidson	384	7,311,899	Automotive
Hermès	2	2,936,151	Luxury
Hershey	9	9,797,315	Consumer Packaged Goods
Hewlett Packard Enterprise	284	274,689	Technology

Home Depot	53	4,311,875	Retail
Honda	4	4,636,323	Automotive
HP	88	4,146,847	Technology
HSBC	73	2,088,758	Financial Services
Huawei	84	48,980,671	Technology
Hyundai	172	4,553,839	Automotive
IBM	114	967,806	Technology
IKEA	112	25,632,039	Retail
Intel	111	38,867,587	Technology
J.P. Morgan	115	11,289	Financial Services
Jack Daniel's	75	16,368,199	Alcohol
John Deere	221	3,353,380	Heavy Equipment
Johnnie Walker	29	14,454,249	Alcohol
Johnson Johnson	170	766,413	Consumer Packaged Goods
KFC	50	49,104,375	Restaurants
KIA Motors	267	4,128,563	Automotive
Kraft	334	1,538,493	Consumer Packaged Goods
Lancome	147	9,615,237	Consumer Packaged Goods
Land Rover	127	15,602,160	Automotive
LEGO	251	12,631,316	Leisure
Lenovo	207	6,640,712	Technology
Lexus	260	3,943,579	Automotive
L'Oréal	136	33,943,742	Consumer Packaged Goods
Louis Vuitton	82	20,450,768	Luxury
Lowe's	106	4,307,979	Retail
Mastercard	42	15,951,196	Financial Services

McDonald's	161	75,571,219	Restaurants
Mercedes-Benz	266	20,570,926	Automotive
Microsoft	177	12,419,635	Technology
MINI	64	11,921,330	Automotive
Moët & Chandon	132	2,409,560	Alcohol
Morgan Stanley	410	61,012	Financial Services
Nescafe	1	37,002,186	Beverages
Nestle	73	10,810,812	Consumer Packaged Goods
Netflix	132	42,236,306	Technology
NIKE	19	29,501,035	Apparel
Nissan	148	19,864,512	Automotive
Nivea	21	21,391,054	Consumer Packaged Goods
Oracle	152	1,845,453	Technology
Pampers	3	17,857,140	Consumer Packaged Goods
Panasonic	135	177,407	Technology
Paypal	12	5,738,306	Financial Services
Pepsi	5	37,511,354	Beverages
Philips	81	9,280,131	Diversified
Porsche	153	11,333,107	Automotive
PRADA	95	6,293,396	Luxury
Red Bull	51	47,736,776	Beverages
Rolex	51	6,420,813	Luxury
salesforce	159	681,631	Technology
Samsung	69	73,645,096	Technology
Santander	100	123,274	Financial Services
SAP	135	959,192	Technology

Shell	75	7,601,663	Oil & Gas
Siemens	153	482,978	Diversified
Smirnoff	46	14,314,827	Alcohol
Sony	250	7,645,058	Technology
Starbucks	42	35,732,332	Restaurants
Subway	53	24,239,882	Restaurants
Target	93	23,022,169	Retail
Tesla	19	2,479,179	Automotive
Tiffany & Co	194	9,630,510	Luxury
T-Mobile	214	5,501,159	Telecom
Toyota	224	3,610,133	Automotive
UPS	199	1,766,608	Transportation
Verizon	110	7,107,213	Telecom
Visa	7	22,295,901	Financial Services
Volkswagen	43	32,190,940	Automotive
Walgreens	95	4,242,170	Retail
Walmart	144	32,250,245	Retail
Wells Fargo	67	1,032,128	Financial Services
Zara	184	26,074,191	Retail
Total	15,496		

Appendix 2a. Stimuli of Experiment 1 in Essay Two

Positive & Formal

Paradise Resort 15 hrs · 🌐

#ParadiseResort is stunning from every angle.



8 Comments

Like Comment Share

Oldest ▾

John Miller Loved my visit in July and rooms are really inexpensive in summertime! Go PARADISE!!!
Like · Reply · 11h

Paradise Resort We're thrilled to hear that you were enjoying your stay, John! 😊
Like · Reply · 8h

Dora Wang Wow!!! Looks so pretty!!!
Like · Reply · 11h

Paradise Resort Thanks, Dora! 🙏
Like · Reply · 8h

Martin Warner We loved this resort. Very low key and the beach was lovely. Would love to go back!
Like · Reply · 10h

Paradise Resort Thanks, Martin! We'd love to welcome you back! 😊
Like · Reply · 8h

Andrew Ji My kind of place. Going soon to sit in the sun. ☀️
Like · Reply · 10h

Paradise Resort We love having you stay with us and look forward to seeing you soon!!!
Like · Reply · 8h

Jessica Park Ended our trip here with a bang! Stunning hotel and lovely stuff! Loved the location.
Like · Reply · 9h

Paradise Resort Awesome!!! We hope you are enjoying it. 😊
Like · Reply · 8h

Emily Payne it is truly paradise, there is no other way to say!!!
Like · Reply · 9h

Paradise Resort We totally AGREE, Emily! 😊
Like · Reply · 8h

Scott Rumann Visited in 2017. Loved the island! Loved the helpful ladies in the executive lounge. Hope to return!
Like · Reply · 9h

Paradise Resort Thanks, Scott! Looking forward to welcoming you back next time. 😊
Like · Reply · 8h

Nancy Wood We have stayed here and loved it! 🙌👍😊
Like · Reply · 8h

Paradise Resort We LOVE to hear that, Nancy! 😊
Like · Reply · 8h

Positive & Informal

Paradise Resort 15 hrs · 🌐

#ParadiseResort is stunning from every angle.



8 Comments

Like Comment Share

John Miller Did NOT like my visit in July and rooms are really expensive in summertime!!
Like · Reply · 11h

Paradise Resort Dear John, we appreciate your stay with us. We sincerely apologize for your displeasure. Please feel free to contact us at comments@paradiseresort.com for any assistance you need. Regards, Ingrid
Like · Reply · 8h

Dora Wang #ParadiseResort never replied to my complaint!
Like · Reply · 11h

Paradise Resort Hello Ms. Wang, we sincerely apologize for this situation. Please send us a private message for further communications. Thank you. Rissa
Like · Reply · 8h

Martin Warner Too bad you did not make this customer smile. Very disappointed.
Like · Reply · 10h

Paradise Resort Dear Mr. Warner, we are very sorry to read that your experience was not as pleasant as it should have been. Please feel free to contact us at comments@paradiseresort.com for additional assistance. Thank you. Ingrid
Like · Reply · 8h

Andrew J I got a cold call from a marketing center using your name in its spiel. I am on the DO NOT CALL LIST. They should NOT have called me.
Like · Reply · 10h

Paradise Resort Dear Mr. J, we sincerely apologize for your troubles. We have received your private messages and will respond promptly. We appreciate your patience.
Like · Reply · 8h

Jessica Park Worst experience ever at the resort. I want my money back! Not worth the \$665 I paid for a junior suite! Please refund my money!
Like · Reply · 9h

Paradise Resort Dear Ms. Park, we are very sorry for your displeasure. We have received your private message and will respond promptly. Thank you for your patience.
Like · Reply · 8h

Emily Payne The customer service I got from one of your call centre managers was the worst thing I've seen in a long time. A gold member who will never spend another cent at any of your properties.
Like · Reply · 9h

Paradise Resort Dear Emily— Our sincere apologies for the troubles you have experienced. Please send us a private message with your Paradise membership ID, email address and further information regarding your experience so we can further assist. We appreciate your understanding.
Like · Reply · 8h

Scott Rumann According to the customer service it didn't matter I was a good member it was slam bam and thank you
Like · Reply · 9h

Paradise Resort Dear Scott, we appreciate you taking time to provide valuable feedback to us. Kindly be advised that the detailed information is required so that we can better assist you. We look forward to hearing from you. Thank you-DP
Like · Reply · 8h

Nancy Wood ParadiseResort club just scammed a soon to be ex-Diamond member.
Like · Reply · 8h

Paradise Resort Dear Nancy, please accept our sincere apology for your dissatisfaction. Please kindly private message us with your details so we may assist. Thank you. Rissa
Like · Reply · 8h

Negative & Formal

Paradise Resort 15 hrs · 🌐

#ParadiseResort is stunning from every angle.



8 Comments

Like Comment Share

Oldest ▾

John Miller Did NOT like my visit in July and rooms are really expensive in summertime!!!
Like · Reply · 11h

Paradise Resort Thanks for staying with us. SO SORRY for your displeasure. .John! Please feel free to reach us at comments@paradiseresort.com for any assistance you need. Thanks. Ingrid
Like · Reply · 8h

Dora Wang #Paradiseresort never replied to my complaint!
Like · Reply · 11h

Paradise Resort Hi Dora, sorry for this situation! Please PM us for further communications. Thanks! Rissa
Like · Reply · 8h

Martin Warner Too bad you did not make this customer smile. Very disappointed.
Like · Reply · 10h

Paradise Resort Hi Martin, SO SORRY for your unpleasant experience!!! Please feel free to reach us at comments@paradiseresort.com for additional assistance. Thanks! Ingrid
Like · Reply · 8h

Andrew Ji I got a cold call from a marketing center using your name in its spiel. I am on the DO NOT CALL LIST. They should NOT have called me.
Like · Reply · 10h

Paradise Resort Hello Andrew! SORRY for your troubles!!! We've received your PM and will respond promptly. Thanks for your patience!
Like · Reply · 8h

Jessica Park Worst experience ever at the resort. I want my money back! Not worth the \$665 I paid for a junior suite! Please refund my money!
Like · Reply · 9h

Paradise Resort SO SORRY for your displeasure. .Jessical We've received your PM and will respond promptly. Thanks for your patience!
Like · Reply · 8h

Emily Payne The customer service I got from one of your call centre managers was the worst thing I've seen in a long time. A gold member who will never spend another cent at any of your properties.
Like · Reply · 9h

Paradise Resort Hi, Emily. SORRY for the troubles experienced!!! Please PM us with your Paradise membership ID, email address and further information regarding your experience so we can further assist. Thanks!
Like · Reply · 8h

Scott Rumann According to the customer service it didn't matter I was a good member it was slam bam and thank you
Like · Reply · 9h

Paradise Resort Hi Scott! Thanks for your comment. Please provide us with more details so that we can help. Thanks! DP
Like · Reply · 8h

Nancy Wood ParadiseResort club just scammed a soon to be ex-Diamond member.
Like · Reply · 8h

Paradise Resort Hello Nancy, sooo SORRY for your dissatisfaction. We love to help! Please PM us with your details for further assistance. Thanks! Rissa
Like · Reply · 8h

Negative & Informal

Appendix 2b. Stimuli of Experiment 2 in Essay Two

Link Mobile 11 hrs

Meet the new #LinkT20. Design with advanced mobile technology to offer a revolutionary professional photography experience.



8 Comments

Like Comment Share

Oldest

Dora Wang Loveeeeeeeeeee 🥰
Like · Reply · 11h

Link Mobile We appreciate your preference and wish you have a great day
Like · Reply · 8h

John Miller Looks like this Link would be fun to use!
Like · Reply · 11h

Link Mobile You are right, John.
Like · Reply · 8h

Martin Warner When is this device coming out in North America
Like · Reply · 10h

Link Mobile The release date is to be determined. Please stay attentive to the official reveal.
Like · Reply · 8h

Andrew Jj I would never buy another Link phone again!
Like · Reply · 10h

Link Mobile Dear Andrew, thank you for contacting us. We apologize for your bad experience. Please send us a private message so that we can provide you the assistance. We remain at your service and will gladly do our best to help you. We wish you have a wonderful day.
Like · Reply · 8h

Jessica Park My Link Mobile has the very best camera I've used. LOVING it
Like · Reply · 9h

Link Mobile We appreciate your comments.
Like · Reply · 8h

Emily Payne Deal Link, I don't have you yet, but I ❤️❤️❤️❤️ you!!!
Like · Reply · 9h

Link Mobile Thank you. It will be our pleasure to have you join our family.
Like · Reply · 8h

Scott Rumann Will the phone be available at Freedom Mobile?
Like · Reply · 9h

Link Mobile To receive that information we highly suggest you to check with the carriers of your preference to receive more accurate information.
Like · Reply · 8h

Nancy Wood I have two T10 but I must have T20!
Like · Reply · 8h

Link Mobile Thank you for your preference with the T10. We hope you enjoy using the T20 even more.
Like · Reply · 7h

Positive & Formal

Link Mobile 11 hrs · 🌐

Meet the new #LinkT20. Design with advanced mobile technology to offer a revolutionary professional photography experience.



8 Comments

Like Comment Share

Oldest ▾

Dora Wang Loveeeeeeeeeee 🥰
Like · Reply · 11h

Link Mobile AWESOME Dora, thanks for your preference, have a great one!!!
Like · Reply · 8h

John Miller Looks like this Link would be fun to use!
Like · Reply · 11h

Link Mobile We totally AGREE, John!!! 🥰
Like · Reply · 8h

Martin Warner When is this device coming out in North America
Like · Reply · 10h

Link Mobile We don't have a release date yet Martin, please stay tuned to our official networks! 🥰
Like · Reply · 8h

Andrew Ji I would never buy another Link phone again!
Like · Reply · 10h

Link Mobile Hi Andrew, thanks for reaching us. We're sorry for your bad experience! Please PM us so that we can help you today. We're here to serve you and it will be our pleasure to do so. Have a lovely day! 😊
Like · Reply · 8h

Jessica Park My Link Mobile has the very best camera I've used. LOVING it
Like · Reply · 9h

Link Mobile THANKS very much for your great comments Jessica!!! 🥰
Like · Reply · 8h

Emily Payne Deal Link, I don't have you yet, but I ❤️❤️❤️❤️ you!!!!
Like · Reply · 9h

Link Mobile AWESOME!!! We hope you can join our family soon with this incredible device. 🥰
Like · Reply · 8h

Scott Rumann Will the phone be available at Freedom Mobile?
Like · Reply · 9h

Link Mobile Hi Scott, please check with the carrier for more accurate information. 🥰
Like · Reply · 8h

Nancy Wood I have two T10 but I must have T20!
Like · Reply · 8h

Link Mobile AMAZING!!! We are thrilled to hear that you are loving the T10. You are going to love the T20 even more 🥰
Like · Reply · 7h

Positive & Informal

Link Mobile 11 hrs

Meet the new #LinkT20. Design with advanced mobile technology to offer a revolutionary professional photography experience.



8 Comments

Like Comment Share

Oldest ▼

Dora Wang Like · Reply · 11h

Link Mobile Dear Dora, how can we assist you today? We remain at your service and will gladly do our best to help you. Like · Reply · 8h

John Miller I would avoid buying another Link phone again. The worst service. Like · Reply · 10h

Link Mobile Dear John, thank you for contacting us. We apologize for your bad experience. Please send us a private message so that we can provide you the assistance. We remain at your service and will gladly do our best to help you. Like · Reply · 8h

Martin Warner When is this device coming out in North America? Like · Reply · 10h

Link Mobile The release date is to be determined. Please stay attentive to the official reveal. Like · Reply · 8h

Andrew Ji I bought the T10 and so love it! I'm using Note 8 now, but T10 is just awesome! Like · Reply · 10h

Link Mobile Dear Andrew, we appreciate your great comments. We wish you have a wonderful day. Like · Reply · 8h

Jessica Park Why did my Link MAX 6P say battery low at 20% then restart... and have no cell data ever again... forcing me to get a Samsung?? Like · Reply · 9h

Link Mobile Dear Jessica, we appreciate your support. We sincerely apologize for your bad experience. Please send us a private message so that we can assist you in this situation. Like · Reply · 8h

Emily Payne I have a cheap Link smartphone. That phone is terrible... I have ads popping up all the time and my phone always freezes. Like · Reply · 9h

Link Mobile Dear Emily, we apologize for your bad experience. Please send us a private message and we can try to assist you with the issues you are experiencing. Thank you. Like · Reply · 8h

Scott Rumann Will the phone be available at Freedom Mobile? Like · Reply · 9h

Link Mobile To receive that information we highly suggest you to check with the carriers of your preference to receive more accurate information. Like · Reply · 8h

Nancy Wood Well I hope its not as bad as MAX 6P. I sent it 3 times for repair in the last 3 months. And the last time I sent it they said its not under warranty anymore. I only had problems with this company. Just stay away from them. Like · Reply · 8h

Link Mobile Dear Nancy, we sincerely apologize for your troubles. We have received your private messages and will respond promptly. We appreciate your patience. Like · Reply · 7h

Negative & Formal

Link Mobile 11 hrs

Meet the new #LinkT20. Design with advanced mobile technology to offer a revolutionary professional photography experience.



8 Comments

Like Comment Share

Oldest

Dora Wang Like · Reply · 11h

Link Mobile Hello Dora, how can we help you today? It will be a pleasure to help you! 😊

Like · Reply · 8h

John Miller I would avoid buying another Link phone again. The worst service.

Like · Reply · 10h

Link Mobile Hi John, thanks for reaching us. SORRY for your bad experience! Please PM us so that we can assist you today. We're here to serve you and it will be our pleasure to do so.

Like · Reply · 8h

Martin Warner When is this device coming out in North America

Like · Reply · 10h

Link Mobile We don't have a release date yet Martin, please stay tuned to our official networks! 😊

Like · Reply · 8h

Andrew Ji I bought the T10 and so love it! I'm using Note 8 now, but T10 is just awesome!

Like · Reply · 10h

Link Mobile THANKS for your great comments, Andrew! Have a great day!

Like · Reply · 8h

Jessica Park Why did my Link MAX 6P say battery low at 20% then restart... and have no cell data ever again.... forcing me to get a Samsung??

Like · Reply · 9h

Link Mobile Hi Jessica, thanks for your support. We're soooo SORRY for your bad experience!!! Please PM us so that we can help you in this situation.

Like · Reply · 8h

Emily Payne I have a cheap Link smartphone. That phone is terrible... I have ads popping up all the time and my phone always freezes.

Like · Reply · 9h

Link Mobile Hi Emily, SORRY for your bad experience!!! Please PM us so that we can try to help you with the issues you are experiencing. Thanks!

Like · Reply · 8h

Scott Rumann Will the phone be available at Freedom Mobile?

Like · Reply · 9h

Link Mobile Hi Scott, please check with the carrier for more accurate information. 😊

Like · Reply · 8h

Nancy Wood Well I hope its not as bad as MAX 6P. I sent it 3 times for repair in the last 3 months. And the last time I sent it they said its not under warranty anymore. I only had problems with this company. Just stay away from them

Like · Reply · 8h

Link Mobile Hi Nancy, SORRY for your troubles!!! We've received your PM and will respond promptly. Thanks for your patience!

Like · Reply · 7h

Negative & Informal

Appendix 3a. Dataset Description: Essay Three

Brand	Industry	Number of Posts
3M	Diversified	31
Accenture	Business Services	53
Adobe	Technology	46
Allianz	Financial Services	17
Amazon	Retail	12
American Express	Financial Services	5
Audi	Automotive	26
AXA	Financial Services	5
BMW	Automotive	96
Budweiser	Alcohol	7
Burberry	Luxury	23
Canon	Electronics	50
Cartier	Luxury	18
Caterpillar	Diversified	37
Chanel	Luxury	63
Cisco	Technology	140
Citi	Financial Services	16
Colgate	FMCG	4
Corona	Alcohol	24
Danone	FMCG	8
DHL	Logistics	33
Dior	Luxury	55
Discovery	Media	390
Disney	Media	149

ebay	Retail	119
Facebook	Technology	2
FedEx	Logistics	23
Ferrari	Automotive	105
Ford	Automotive	6
Gillette	FMCG	21
Goldman Sachs	Financial Services	74
Google	Technology	15
Gucci	Luxury	214
H&M	Apparel	154
Harley-Davidson	Automotive	104
Heineken	Alcohol	6
Hennessy	Alcohol	33
Hermes	Luxury	13
HewlettPackard Enterprise	Technology	46
Honda	Automotive	2
HP	Technology	8
HSBC	Financial Services	34
Huawei	Technology	10
Hyundai	Automotive	21
IKEA	Retail	46
Jack Daniels	Alcohol	22
jnj	FMCG	56
John Deere	Diversified	73
Johnnie Walker	Alcohol	6
JP Morgan	Financial Services	82

Kellogg	FMCG	2
KFC	Restaurants	13
KIA	Automotive	22
Land Rover	Automotive	62
LEGO	FMCG	108
Loreal	FMCG	22
LouisVuitton	Luxury	37
Mastercard	Financial Services	11
McDonalds	Restaurants	15
MercedesBenz	Automotive	192
Microsoft	Technology	1
MINI	Automotive	16
Morgan Stanley	Financial Services	129
Nescafe	Beverages	1
nestle	FMCG	3
Netflix	Media	71
Nintendo	Electronics	48
Nissan	Automotive	84
Oracle	Technology	59
Panasonic	Electronics	68
PayPal	Financial Services	13
Pepsi	Beverages	1
Philips	Electronics	14
Porsche	Automotive	62
Prada	Luxury	196
Salesforce	Business Services	22

Samsung	Technology	21
Santander	Financial Services	40
SAP	Technology	63
Shell	Energy	3
Siemens	Diversified	82
Sony	Electronics	85
Spotify	Media	58
Starbucks	Restaurants	9
Subaru	Automotive	73
Tiffany	Luxury	34
Toyota	Automotive	49
UPS	Logistics	48
VW	Automotive	17
Zara	Apparel	92
Total		4549

Appendix 3c. Stimuli of Experiment 2 in Essay Three

Post without Emojis



Post with Emojis

