

The impact of pronoun choices on consumer engagement actions: Exploring top global brands' social media communications

Abstract

To enhance the understanding of consumer engagement with brand content on social media, this research examines how pronoun choices affect different types of consumer engagement (e.g., likes, comments, shares) by simultaneously exploring five different pronoun types (first-person singular, first-person plural, second person, third-person singular, and third-person plural). Furthermore, this study explores how the effects of these linguistic (pronoun) choices vary across two brand classifications: characteristics (hedonic vs. utilitarian) and offerings (goods vs. services). The proposed multivariate Poisson regression model, analyzing 15,788 unique brand posts from Facebook over an eight-month period, reveals differences in engagement due to pronoun usage across brand classifications. These results offer a deeper understanding of how the way brands talk to consumers on social media platforms influences consumers' attitudes (likes), propensity to engage with the brand (comments), and willingness to share branded content with their social networks (shares) across different brand classifications.

Keywords: social media, linguistics, brand relationships, consumer engagement, self-presentation, pronouns

1 INTRODUCTION

Consider the following scenario: Jenny, a social media community manager for a top-100 global company, is crafting upcoming posts for the brand's social media page. In particular, she is considering two wording options for a post for the upcoming July 4th holiday: "Pat, the party expert, offers some of **her** great ideas" and "Pat, the party expert, offers **you** some great ideas." Could a simple choice about which pronoun type to use influence how consumers engage with the post? Which pronoun would work better for Jenny's brand? Specifically, should she consider different pronoun choices based on brand characteristics (hedonic vs. utilitarian) and brand offerings (goods vs. services)?

Despite investing a great deal of time and money in marketing their brands on social media platforms, companies continue to struggle to understand the types of content that will resonate with consumers and result in engagement that also might be amplified to broader networks of consumers. While some research has examined content characteristics (e.g., presence of images, videos, appeals, and brand names) that may increase overall engagement (e.g., de Vries, Gensler, & Leeftang, 2012; Lee, Hosanagar, & Nair, 2018; Stephen, Sciandra, & Inman, 2015), understanding of the factors that drive consumers to choose different engagement actions (e.g., like, comment, share) is lacking. Thus, this study aims to explore how pronoun usage (first, second, and third person) affects engagement-type choices, to give marketers guidance on how to increase one type of engagement action versus another. The analysis, which also includes additional message characteristics (e.g., presence of images, videos, links, hashtags), finds that these content elements affect different engagement-type choices (likes, comments, and shares). Although such engagement actions appear at higher levels of the marketing funnel, such as awareness and evaluation, they can affect lower funnel metrics, such

as purchase intentions (Swani, Milne, & Miller, 2019), sales (Kumar & Mirchandani, 2012; Saboo, Kumar, & Ramani, 2016), return on investment (Kumar, Bhaskaran, Mirchandani, & Shah, 2013), and firm performance (Kumar, 2015; Kumar & Pansari, 2016). This is not surprising, as more than 50% of Internet users in the United States indicate that they are likely to purchase products from brands they follow on social media (eMarketer, 2017b). Furthermore, social media posts can directly affect sales with the advent of buying options in various social media platforms. For example, more than 65% of consumers using social media report making purchases directly from a social media post (eMarketer, 2017a). As such, creating engaging brand content is critical to a brand's success on social media.

The purpose of this research is to investigate how the use of pronouns in social media posts influences consumer engagement activities. This research further aims to discern the effects of pronoun usage across brand characteristics (hedonic vs. utilitarian) and brand offerings (goods vs. services). This study draws on the communication media framework (Hall, 1973; Labrecque, Zanjani, & Milne, 2012; Swani & Milne, 2017) and existing studies that examine brand post popularity (de Vries et al., 2012; Lee et al., 2018; Stephen et al., 2015) and pronouns in brand consumer communications (Barcelos, Dantas, & Sénécal, 2018; Chang, Li, Yan, & Kumar, 2019; Cruz, Leonhardt, & Pezzuti, 2017; Packard, Moore, & McFerran, 2018; Sela, Wheeler, & Sarial-Abi, 2012). In contrast with previous research, however (e.g., de Vries et al., 2012; Swani & Milne, 2017; Swani, Milne, Brown, Assaf, & Donthu, 2017), this study goes beyond the message content (e.g., informational vs. entertaining content) to investigate how message linguistics affect a consumer's choice to interact with the brand. Specifically, how do pronouns (first, second, and third person) affect consumers' likelihood to engage with branded

posts on social media? This study posits that personal pronouns appearing in social media posts can elicit favorable responses from consumers.

Research on the effect of pronoun use in a social media context provides only a general emphasis on a single or a few pronoun types, limited behavioral measures with no comparisons across engagement actions, and no brand classifications (for key differences between the current research and prior research, see Table 1). For example, Cruz et al. (2017) explore the effect of second-person pronouns (presence vs. absence) on consumer involvement by examining the number of likes, comments, and shares for branded content on social media, but they do not examine four other pronoun types (first-person singular, first-person plural, third-person singular, and third-person plural). Moreover, they do not compare these effects across engagement-types (likes, comments, and shares) or compare brand characteristics (hedonic vs. utilitarian) and offerings (goods vs. services). The current research significantly differs from prior research in several ways: it (1) takes a holistic approach and investigates all types of pronouns rather than taking a piecemeal approach (for pronoun types and examples, see Appendix A), (2) investigates the impact of pronouns on actual behaviors (likes, comments, and shares), (3) further compares the pronoun effects across engagement types, (4) explores the impact of pronoun usage across characteristics (hedonic vs. utilitarian) and brand offerings (goods vs. services), and (5) uses eight months of Facebook data of top-100 global brands spanning across various industries to provide a high degree of generalizability. The study also includes several additional message elements (e.g., links, images, photos, hashtags) as control measures to explore their impact on engagement types (likes, comments, and shares), across brand characteristics (hedonic vs. utilitarian) and brand offerings (goods vs. services).

Insert Table 1 About Here

This research also recognizes that consumers' social media interactions at various levels are interrelated. Each action increases the reach of the message and therefore affects other actions. For example, a brand's message can be amplified when consumers share it with their networks, and users in these networks may continue to amplify the message by sharing it further. Thus, unlike prior research, this study employs a multivariate modeling approach to simultaneously capture the effects across three distinct consumer engagement levels: likes, comments, and shares. It provides further insights into when a certain engagement level might be elicited from consumers over the other levels. The modeling approach also includes key control variables absent from prior research on pronoun use in social media, such as number of Facebook followers and time elapsed since the brand post, which also affect the post's reach and engagement.

This research provides both theoretical and managerial contributions. First, the multivariate Poisson regression model reveals differences across engagement activities (likes, comments, and shares) for linguistic characteristics (pronoun usage, across five pronoun types). Second, the results reveal differences across different brand types (utilitarian vs. hedonic and goods vs. services). The results unravel new insights that extend prior research work, thus contributing to theory. For example, the use of first-person singular pronouns ("I") has a negative effect on the number of comments and shares, while the use of first-person plural pronouns ("we") has a positive effect on the number of comments and shares. The use of second-person pronouns ("you") has a higher positive effect on comments than likes and shares, while the use of third-person pronouns ("they") increases all three engagement actions. Furthermore, the use of only third-person singular pronouns ("he/she") increases engagement for utilitarian goods, while the use of all pronouns except first-person singular increases engagement actions for utilitarian

services. Third, the results are more generalizable given the study's focus on communications by Interbrand's (2015) Top-100 Global Brands on Facebook over an eight-month period between April and December 2015 and 15,788 unique brand posts. Fourth, practically, the findings reveal important, direct ways that brand managers can design their social media messages to facilitate different levels of consumer engagement. Specially, this research highlights the types of pronouns to use in their social media content to boost specific consumer engagement actions. Furthermore, the analysis includes additional message characteristics (e.g., presence of images, videos, links, and hashtags) and finds that these elements also affect different engagement-type choices (likes, comments, and shares). These results vary by brand type, which is of practical use for managers wishing to boost specific engagement actions.

2 CONCEPTUAL FRAMEWORK

2.1 Linguistics and communication

Language plays a critical role in social interactions, such that people use language cues to understand and develop impressions of others (Berry, Pennebaker, Mueller, & Hiller, 1997). Word choice (e.g., pronouns) can provide information about social processes, such as relationship quality, status levels, group dynamics, truthfulness or deception, and perceptions of others (Tausczik & Pennebaker, 2010). While marketing scholars illustrate that linguistics affect consumer behavior in several contexts (Humphreys & Wang, 2018), including assertive language in advertising (Konrod & Danziger, 2013; Konrod, Grinstein, & Wathieu, 2012), market legitimatization (Humphreys, 2010), online consumer reviews (Ludwig et al., 2013), and linguistic servicescapes (Touchstone, Koslow, Shamdasani, & D'Alessandro, 2017), we expand this inquiry to social media engagement.

To understand how written and verbal communications are processed, we draw on the encoding/decoding model of communication media (Hall, 1973; Labrecque et al., 2012; Swani & Milne, 2017). Though developed before the advent of social media, this model provides a framework to help marketers understand what drives consumers to engage with social media messages. The model describes the process by which the message creator encodes meaning into the message, which is then transmitted and decoded by the receiver (Duncan & Moriarty, 1998; Lasswell, 1948; Shannon & Weaver, 1949). In this model, the brand (message sender) encodes a desired meaning into the message through verbal, non-verbal, and written elements. In this way, the brand can carefully choose how to encode (i.e., use specific words) in a way that will be processed (decoded) by the target consumers (receivers). In the decoding process, consumers process the message to understand its meaning in terms of their relationship with the brand (the sender of the message) while also gauging whether to share the brand message and considering how doing so might influence their self-presentation in the eyes of others (Berger, 2014; Swani & Milne, 2017). For most messages, a conscious consideration is often lacking on how specific linguistic variables, such as pronouns, will be decoded; however, linguistic research provides abundant evidence that linguistic word choices affect the message decoding process (Fitzsimons & Kay, 2004; Luangrath, Peck, & Barger, 2017; Ludwig & De Ruyter, 2016). For example, Fitzsimons and Kay (2004) asked participants to write a short paragraph describing a friendship using either first-person plural pronouns or first-person singular and third-person pronouns. Participants rated the relationship quality of the people described in the first-person plural pronoun condition as being higher than that in the other condition.

In the realm of social media, consumers receiving brand content may choose to then share these messages with others in their unique networks (Swani & Milne, 2017). This sharing

process involves re-encoding the message, as the new sender (consumer) has added additional elements to the message, even if he or she has not changed the message directly. Specifically, through the act of sharing, the consumer's identity is now attached to the content of the brand's post (encoded). This sharing and curation of content gives the consumer (who has now become the sender) a mechanism for self-presentation to communicate a desired identity (Berger, 2014; Swani & Milne, 2017). As language can both reflect relationship perceptions and perpetuate self-perceptions (Williamson, 1978), we argue that pronoun choice in brand communications can increase consumer engagement through two mechanisms that drive social media usage: (1) one that helps facilitate relationship connections and (2) one as a means for self-presentation (Nadkarni & Hofmann, 2012).

2.2 Brand relationships and self-presentation

Social scientists have established that language style can affect perceptions of the self and others (Fitzsimons & Kay, 2004). Importantly, these language effects are bi-directional, meaning that linguistic word choice (pronouns) can both reflect and transmit meaning that affects perceptions of both the speaker and receiver (Maass, Milesi, Zabbini, & Stahlberg, 1995; Maass, Salvi, Arcuri, & Semin, 1989). Research provides evidence of this causal relationship by demonstrating that the use of pronouns can alter perceptions of in-group versus out-group membership (Perdue, Dovidio, Gurtman, & Tyler, 1990). Specifically, priming social identity through the use of the pronouns "we" and "us" (in-group) activates a sense of social identity that can cause others to be perceived as more similar than those primed with the pronouns "they" and "them" (out-group). Linguistic word choices not only reflect the sender's perception of the relationship with the receiver but also can act to maintain relationship perceptions (Fitzsimons & Kay, 2004).

People shape and are shaped by their social interactions. Indeed, their self-concept guides how they participate in social environments and the strategies they use to shape and interpret their interactions with others (Markus & Wurf, 1987). Likewise, brands also carefully craft social media messages to elevate their self-presentations in the eyes of consumers. In both cases (consumers and brands), social media profile owners tend to present themselves in particular ways to reinforce their desired identity through carefully constructed profiles, the content they engage with, and the information they share (Labrecque, Markos, & Milne, 2011; Roma & Aloini, 2019). Specifically, users oftentimes make choices about the content they curate to communicate desired identities and avoid information that does not align with this identity or that might communicate undesired traits (Nadkarni & Hofmann, 2012).

2.3 Consumer engagement with social media (encoding)

In the past decade, marketing practitioner discourses and the broader academic marketing literature have increasingly used the term “engagement” (Brodie, Hollebeek, Juric, & Ilic, 2011). Engagement is relevant for social media based on platforms that are inherently relationship oriented and participatory. Engagement with other consumers and brands on social media can foster and sustain meaningful relationships, such as when sites offer functionality that allows consumers to engage with a brand by expressing their like for it or its messages, commenting on the brand’s messages, or sharing brand content with others throughout their networks. Although consumers can also add brands to their social media networks, these ties have little value to brands unless consumers interact with the brand communications; such interactions are essential for building and sustaining relationships.

We therefore define “consumer engagement” as consumers’ interactions with brand content on social media platforms. Our conceptualization draws on Brodie et al.’s (2011)

definition, which identifies specific interactive consumer experiences as core elements of engagement. The interactions we focus on are platform dependent—they are measurable actions built into the platform by the social media site. For example, Facebook offers users the ability to engage with content (Facebook posts) through the actions of liking, commenting, and sharing. These actions represent different levels of commitment and also vary in effort; likewise, the mechanisms driving engagement choices also vary.

2.3.1 Likes

Likes represent the lowest engagement action on Facebook. They represent an acknowledgment, but the meaning behind the action remains a mystery. A like action requires only a single click from users, which is virtually effortless, instantaneous, and reflexive (Swani et al., 2017).

Typical liking behavior first requires reviewing the original brand post and, if applicable, then clicking the like button. As a like is considered an action donating support, it is arguably driven more by brand relationships than self-presentation. Indeed, liking brand content is more about advocating for the brand itself rather than oneself.

2.3.2 Comments

Commenting differs from liking in that it requires several steps, including clicking the comment button, typing the appropriate response, and then posting the response. Typical commenting behavior also requires reading the original post and perhaps other previous comments associated with it to determine a valid response (Swani & Milne, 2017). In this sense, commenting behavior is arguably more reflective and requires more cognitive resources and effort than liking actions. Given its unique nature, it is also referred to as compositional word of mouth (WOM) (Swani et al., 2017). Because commenting establishes a two-way interaction between the sender and receiver, we posit that this engagement is heavily driven by the receiver's relationship with a

brand. Yet self-presentation is also a driver for commenting, as this behavior allows consumers to post their thoughts about a topic, thus providing an opportunity to display their credibility and knowledge by building on the brand's post.

2.3.3 Shares

Shares also represent a higher level (vs. likes) of engagement activity. Although they can be passive, similar to likes, shares tend to be reflective and require more cognitive resources, similar to comments. In particular, the sharing mechanism on Facebook allows users to spread content to their network with a click of a button. It allows a higher level of visibility of activities to others than that through likes and comments because the content shared appears on one's timeline (personal profile page on Facebook). Although Facebook's algorithm may make other engagement actions (likes and comments) available for friends to see within the newsfeed (including status updates, photos, videos, links, app activity, and likes from people, pages, and groups that a user follows on Facebook), a share is different as it is posted to a user's timeline, thus becoming a permanent record unless deleted by that user. In this way, when a user shares content on Facebook, he or she takes partial (or even full) ownership of the content (vs. likes and comments).

Furthermore, while some users simply share duplicated content, they can also add their own commentary with the shared content, though unlike with comments, consumers are not required to add their own remarks on the topic. The decision to share content is predominantly governed by individual psychological motivations (Swani, Milne, & Brown, 2013), which are primarily self- rather than other-serving and drive what people share (Berger, 2014). Content that elevates a desired identity likely will be talked about and shared more than content that could hinder this desired identity (Labrecque et al., 2011). Whether in a conscious or unconscious state,

people communicate and share content that supports their desired identity to manage the impressions others have of them (Berger, 2014). According to social exchange theory (Blau, 1964), consumers also engage in social interactions in the hope of obtaining social rewards, including status elevation and reputation building. While shares may be partially driven by brand relationships (e.g., sharing information to promote a brand), they are also highly driven by self-presentation, as this action allows for WOM and the building of their online persona through information sharing.

3. HYPOTHESES DEVELOPMENT

We posit that pronoun usage contained in a brand post affects users' propensity to engage with that brand post through likes, comments, and/or shares (Barcelos et al., 2018; Chang et al., 2019; Cruz et al., 2017). Specifically, the pronouns appearing in a brand post can increase consumer engagement with social media through two important ways: (1) by facilitating (brand) relationship connections and (2) by providing a means for self-presentation (Nadkarni & Hofmann, 2012). We argue that the use of certain linguistic characteristics stimulates the mechanics of brand relationship connections and self-presentation during the decoding process, leading viewers to engage with the brand post through various actions.

Goffman's (1959) symbolic interactionism theory describes processes that people undertake to communicate, create, and maintain social roles (relationships). According to this theory, social distance is an important characteristic of social roles that involve the sharing of knowledge between two individuals, between individuals within groups, between groups, or between individuals or groups and organizations. Word choice, specifically pronoun usage, establishes a "participation framework" (Goffman, 1981) that signals the relationship strength and role of individuals (Fahnestock, 2011; Goffman, 1981; Schlenker & Weigold, 1992). In the

case of dyadic communications, personal pronouns play a key role in identifying the communicator and recipient and their status with regard to each other (Packard et al., 2018).

Pronouns are useful linguistic elements that can help identify attentional focus, which in turn can reveal priorities, intentions, and processing (Tausczik & Pennebaker, 2010). Research has connected pronoun usage with personality dimensions (Pennebaker & King, 1999; Raskin & Shaw, 1988), with neuroticism being linked to more frequent use of first-person singular pronouns. This is consistent with the idea that excessive use of first-person pronouns reflects a high degree of self-involvement (Stirman & Pennebaker, 2001). Raskin and Shaw (1988) found parallel results in their research correlating neuroticism with the use of first-person pronouns.

Researchers have also examined the usage of first-, second-, and third-person pronouns for self-monitoring in impression management (Ickes, Reidhead, & Patterson, 1986). The results show that self-focused individuals tend to use more singular pronouns (I, me, my) while other-focused self-monitors use more second-person pronouns (you, your). Research has also found that people view others who frequently self-reference through first-person pronoun usage as less competent than those who use fewer first-person pronouns (Berry et al., 1997), and an analysis of pronoun usage on discussion boards found that lower-status individuals tend to use more first-person pronouns than higher-status individuals (Dino, Reysen, & Branscombe, 2009). Moreover, research has linked first-person singular pronouns (“I”) to a speaker's egotistical self-focus (Pennebaker, 2011) or self-interest (Ickes et al., 1986). Because consumer motivations to engage with social media content can be driven by self-presentation needs (Nadkarni & Hofmann, 2012), the use of first-person singular pronouns is likely to have a negative effect in a social media context (i.e., decrease the post’s engagement potential). That is, consumers may be less

likely to share content (branded or otherwise) that signals negative aspects of the self, such as egotism or neuroticism.

In addition to self-presentation, pronouns can act to perpetuate relationship perceptions. For example, Fitzsimons and Kay (2004) found that pronoun choice influences ratings of respondents' own relationships and ratings of others' relationships; specifically, respondents perceived interpersonal relationships as being of higher quality and closer when described using the first-person plural pronoun "we" rather than the first-person singular pronoun "I". Highly committed partners more frequently use the pronoun "we" when writing about their romantic relationships (Agnew, Van Lange, Rusbult, & Langston, 1998), and couples who use more first-person plural pronouns (e.g., we, us, our, ours) in conversations also report greater relationship satisfaction than couples who use a higher frequency of first-person singular (e.g., I, me, mine) (Sillars, Shellen, McIntosh, & Pomegranate, 1997). Sela et al. (2012) found that the use of the first-person plural pronoun "we," which signals closeness in the relationship, is preferred in consumer-brand relationships that are expected to be close (e.g., an established relationship with a brand). In summary, these findings suggest that the use of first-person plural pronouns turns focal attention to the relationship between the encoder and the decoded rather than solely to the message encoder. Thus:

- H1:** The greater the use of first-person singular pronouns ("I") in brand social media postings, the lower is the tendency for consumer engagement actions, such as (a) likes, (b) comments, and (c) shares, with the brand's post.
- H2:** The greater the use of first-person plural pronouns ("we") in brand social media postings, the higher is the tendency for consumer engagement actions, such as (a) likes, (b) comments, and (c) shares, with the brand's post.

While first-person singular pronoun usage can signal self-centeredness, second-person pronoun usage puts an emphasis on others. Second-person pronouns direct attention to the person

reading the message (Pennebaker, 2011), thus generating a sense of personalization. As such, second-person pronouns can enhance consumer involvement and brand attitude through their self-referencing ability (Cruz et al., 2017) and thus be a way for practitioners to increase connections with consumers (Hanc, 2016). Furthermore, because the second-person pronoun “you” directly addresses the reader, thereby creating the potential for dialogue, its use should result in increased levels of engagement, likely in a greater number of comments than shares and likes because comments allow the user to communicate directly with the sender. Thus:

H3: The greater the use of second-person pronouns (“you”) in brand social media postings, the higher is the tendency for consumer engagement actions, such as (a) likes, (b) comments, and (c) shares, with the brand’s post.

The majority of marketing research on pronouns has focused on the use of second-person pronouns with little focus on third-person pronouns (see Table 1). Noting the lack of linguistics research on third-person narration in both advertising and the context of brand–consumer interactions on social media, Chang et al. (2019) explored this area and found that third- (vs. first-) person narration in WeChat ads can increase liking intentions for brands perceived to be competent. In that study, the authors proposed and found evidence of the effects of third-person narration on liking through self-enhancement. That is, this exposure triggers consumers to engage in self-enhancing behaviors that can help them create a better self-image. As self-presentation is a driving force of social media usage (Labrecque et al., 2011; Nadkarni & Hofmann, 2012), we propose the following:

H4: The greater the use of third-person singular pronouns (“he/she”) in brand social media postings, the higher is the tendency for consumer engagement actions, such as (a) likes, (b) comments, and (c) shares, with the brand’s post.

H5: The greater the use of third-person plural pronouns (“they”) in brand social media postings, the higher is the tendency for consumer engagement actions, such as (a) likes, (b) comments, and (c) shares, with the brand’s post.

4 EXPLORATION OF BRAND CHARACTERISTICS AND BRAND OFFERINGS

Prior research has established differences in consumers' perceptions of brands across brand characteristics (hedonic/utilitarian) and brand offerings (services/goods) in multiple settings, including social media (Barcelos et al., 2018; Swani & Milne, 2017), advertising (Kivetz & Zheng, 2017; Klein & Melnyk, 2016; Stafford et al., 2011), retail (Das, Mukherjee, & Smith, 2018), and product design (Chitturi, Raghunathan, & Mahajan, 2008; Homburg, Schwemmler, & Kuehnl, 2015). As such, we posit that these classifications may have an impact on the effects of pronouns in brand social media communications. Next, we briefly discuss these classifications and explore how the impacts of pronouns vary for these classifications in our analysis.

4.1 Hedonic versus utilitarian

Previous research has shown that consumers tend to categorize utilitarian experiences as more rational; that is, they view utilitarian products as primarily functional and often purchase them out of necessity. Conversely, hedonic experiences are quintessentially more emotional, and consumers typically purchase these types of products out of a desire for the intrinsic enjoyment they provide (Alba & Williams, 2013; Babin, Darden, & Griffin, 1994; Dhar & Wertenbroch, 2000; Khan, Dhar, & Wertenbroch, 2005). Research has also shown that consumers evaluate products and services differently on the basis of this dichotomy. Important characteristics for assessing utilitarian products include functionality, usefulness, and practicality, while important characteristics for assessing hedonic products are excitement, sensory elements, and enjoyability (Voss, Spangenberg, & Grohmann, 2003). In essence, consumers evaluate utilitarian products by what they can do and hedonic products by the way they make them feel (Botti & McGill, 2011; Dhar & Wertenbroch, 2000; Khan et al., 2005; Voss et al., 2003).

Research on consumer language finds that the consumption context (hedonic vs. utilitarian) can affect both language effectiveness (persuasiveness and choice) and consumers' language choices (language used when writing a review) (Konrod & Danziger, 2013). Specifically, reviews containing figurative language lead to more favorable attitudes in hedonic (vs. utilitarian) contexts, reading a review containing figurative language increases choice of hedonic over utilitarian options, and product type (hedonic vs. utilitarian) influences the language consumers use when writing reviews. Furthermore, research on brands' tone of voice on social media platforms finds that brands using a human tone of voice (which includes use of first-person pronouns) can increase purchase intentions in hedonic (vs. utilitarian) contexts (Barcelos et al., 2018).

4.2 Goods versus services

Brand offerings can primarily be classified as goods and services. Researchers have noted the unique characteristics of services over goods, characterizing services as more heterogeneous, intangible, perishable, and often inseparable (Keh & Pang, 2010; Zeithaml, Parasuraman, & Berry, 1985). Considering these distinct traits, services often come with higher involvement and risk, and consumers often tend to rely more heavily on WOM in their decision making for services than for goods (Bansal & Voyer, 2000; Swani & Milne, 2017). Although research has argued for the service-dominant logic for all products in the form of value creation and value co-creation by consumers (Grönroos & Gummerus, 2014; Vargo & Lusch, 2008), the subtle differences among goods and services necessitate different marketing strategies (Swani & Milne, 2017; Zeithaml et al., 1985) and marketing promotions (Mortimer, 2008; Stafford, 2005; Tripp, 1997). For example, service marketers pursue distinct branding and marketing communication strategies on Facebook (Swani & Milne, 2017; Swani et al., 2013; Swani et al., 2019).

Specifically, the use of product brand names, videos, and images is more popular for goods messages, while the use of corporate brand names is more popular for services messages (Swani & Milne, 2017). Furthermore, pronoun usage differs across goods and services. Tangible goods often use more first- and second-person pronouns than services on social media (Kwon & Sung, 2011). Building on this discussion, we explore the effect of the use of pronouns in branded social media posts on consumer engagement actions across brand characteristics (hedonic/utilitarian) and brand offerings (services/goods).

5. STUDY METHODOLOGY

For this study, we use the Linguistic Inquiry and Word Count (LIWC) software, which employs an empirically validated dictionary of nearly 4,500 words and word stems, broken down into 80 categories. The categories have been linked to psychological processing (e.g., self-concerns, social support, social interests, social status) in hundreds of studies (e.g., Pennebaker, Boyd, Jordan, & Blackburn, 2015; Tausczik & Pennebaker, 2010).

5.1 Data

Facebook is currently the most popular social media site in the world, with 2.38 billion monthly active users (Facebook, 2019). Research estimates that 97% of Interbrand's Top-100 Global Brands are active on Facebook, and 77% of brands attract at least one million followers (Guha, 2015). We examine the Facebook pages of 90 of the 100 brands to test our hypotheses (for the list of brands, see Appendix B). We tracked all message posts sent by these companies through their brand pages between April 15 and December 15, 2015, which resulted in 15,788 unique posts.

To classify each Facebook post in terms of pronoun usage and control variables, we created a linguistic profile for each brand post, using the LIWC software (Tausczik &

Pennebaker, 2010). The analysis with the LIWC takes each post and analyses it one target word at a time. Each time a match occurs with the LIWC dictionary, the appropriate category scale is incremented. For example, if the post contains the pronoun “I,” a match is noted for the first-person singular pronoun category. The output variables reflect the number of words found in the brand post that match the category divided by the total number of words in the brand post (i.e., density). Again, Appendix A provides pronoun types and examples.

To capture Facebook user engagement, we recorded the number of likes, comments, and shares for each brand message post and noted additional message characteristics related to vividness (images or videos) and interactivity (links and hashtags). Furthermore, we recorded the message age in days for each Facebook post, computed as the gap between the time the message was sent out and the time the message was archived. The message characteristics, vividness (images or videos) and interactivity (links and hashtags), message age, and the number of fans (i.e., audience size), recorded on April 14, 2015, functioned as control variables. Additional control variables generated from the LIWC software include word count, number of long words (words with 6 or more letters), positive emotions, and negative emotions. The means, percentages, and standard deviations of the key variables are in Table 2. The dependent measures exhibit high skewness (likes = 13.864; comments = 64.069; shares = 97.113). Observing high skewness on Facebook engagement actions is not usual (Swani & Milne, 2017).

Insert Table 2 About Here

5.2 Model

The counts of the three dependent measures of consumer engagement exhibit dependency (likes and comments: $r = .28$; likes and shares: $r = .41$; comments and shares: $r = .70$), so we chose to run a multivariate Poisson model with fanlikes as an exposure rate using Hierarchical Linear

Modeling (HLM) software (Raudenbush & Bryk, 2002). The exposure variable in a Poisson model can adjust the counts on the response variables, such that likes, comments, and shares for each brand post are adjusted by the respective brand page fanlikes (potential audience size). The parameters in the model are estimated simultaneously with maximum likelihood and EM Laplace estimations. The multivariate hypothesis testing procedure available in HLM software allows us to test for differences across the counts of likes, comments, and shares for each predictor variable (Raudenbush, Rowan, & Kang, 1991). A single coefficient can be estimated if the effect of a predictor does not differ significantly across the counts of likes, comments, and shares. The model then consists of two levels:

Level 1 Model:

$$\begin{aligned} E(COUNTS_{ij}|\pi_j) &= \lambda_{ij} \times FANLIKES_{ij} \\ \log[\lambda_{ij}] &= \eta_{ij} \\ \eta_{ij} &= \pi_{Lj} \times (DLIKES_{ij}) + \pi_{Cj} \times (DCOMMENT_{ij}) + \pi_{Sj} \times (DRESHARE_{ij}). \end{aligned}$$

Level 2 Model:

$$\begin{aligned} \pi_{Lj} &= \beta_{20} + \beta_{11} \times (I_j) + \beta_{12}(WE_j) + \beta_{13}(YOU_j) + \beta_{14}(HE/SHE_j) + \beta_{15}(THEY_j) + \\ &\beta_{16}(POSEMO_j) + \beta_{17}(NEGEMO_j) + \beta_{18}(IMAGE_j) + \beta_{19}(VIDEO_j) + \beta_{110}(LINKS_j) \\ &+ \beta_{111}(HASHTAG_j) + \beta_{112}(TIME_j) + \beta_{113}(WC_j) + \beta_{114}(SIXLTR_j) + u_{Lj}. \\ \pi_{Cj} &= \beta_{20} + \beta_{21}(I_j) + \beta_{22}(WE_j) + \beta_{23}(YOU_j) + \beta_{24}(HE/SHE_j) + \beta_{25}(THEY_j) + \\ &\beta_{26}(POSEMO_j) + \beta_{27}(NEGEMO_j) + \beta_{28}(IMAGE_j) + \beta_{29}(VIDEO_j) + \beta_{210}(LINKS_j) \\ &+ \beta_{211}(HASHTAG_j) + \beta_{212}(TIME_j) + \beta_{213}(WC_j) + \beta_{214}(SIXLTR_j) + u_{Cj}. \\ \pi_{Sj} &= \beta_{30} + \beta_{31}(I_j) + \beta_{32}(WE_j) + \beta_{33}(YOU_j) + \beta_{34}(HE/SHE_j) + \beta_{35}(THEY_j) + \\ &\beta_{36}(POSEMO_j) + \beta_{37}(NEGEMO_j) + \beta_{38}(IMAGE_j) + \beta_{39}(VIDEO_j) + \beta_{310}(LINKS_j) \\ &+ \beta_{311}(HASHTAG_j) + \beta_{312}(TIME_j) + \beta_{313}(WC_j) + \beta_{314}(SIXLTR_j) + u_{Sj}. \end{aligned}$$

In the level 1 model, $COUNTS_{ij}$ represents the number of likes, comments, and shares for message j on occasion i ; $DLIKES$ is an indicator that takes the value of 1 when the count is for message likes and 0 when it is for comments or shares; $DCOMMENTS$ is an indicator equal to 1 when the count refers to message comments and 0 when it refers to likes or shares; and

DSHARES takes a value of 1 when the count is for message shares and 0 when it is for likes or comments. The variable λ_{ij} is weighted by the exposure rate fanlikes and represents the event rate. The weighted event rate is equal to COUNTS_{ij} . In addition, the level 1 dependent variables π_{Lj} , π_{Cj} , and π_{Sj} become outcome variables at level 2. We assume that random errors (μ_{Lj} , μ_{Cj} , and μ_{Sj}) at level 2 are multivariate normally distributed, $\mu_j \sim N(0, T_j)$, where T_j represents variance–covariance for μ_j (Raudenbush & Bryk, 2002). At level 2, Time represents the transformed (square root) message age added as a control variable. In addition, positive (POSEMO) and negative (NEGEMO) emotions, use of images (IMAGE), videos (VIDEO), links (LINKS) and hashtags (HASHTAG), word count (WC), and long words (SIXLTR) serve as control measures. Table 3 provides the parameters of interest for testing H1–H5.

Insert Table 3 About Here

6 RESULTS

We began with multivariate testing to determine the effect of each predictor on the number of likes, comments, and shares ($\beta_{1q}=\beta_{2q}$; $\beta_{1q}=\beta_{3q}$; $\beta_{2q}=\beta_{3q}$). Furthermore, to attain a meaningful interpretation, we further constrained the non-significant coefficients for the dependent measures even when the multivariate test suggested a difference. This process made the model parsimonious and provided statistical analysis to test differences across the three dependent measures. Table 4 contains the detailed results.

Insert Table 4 About Here

The multivariate tests indicate that, on average, messages engender a higher number of likes than comments and a higher number of shares than comments. Positive emotions have negative and significant effects on likes and shares ($\beta_{\text{Likes/Shares}} = -.006, p < .05$) but no significant effect on comments ($\beta_{\text{Comments}} = .002, p > .05$). The effect is greater for likes and

shares than comments. The effect of negative emotions on likes, comments, and shares is negative and significant ($\beta_{Likes/Comments/Shares} = -.015, p < .05$). The use of images exerts a positive, significant effect on comments ($\beta_{Comments} = .467, p < .01$) but no significant effect on likes ($\beta_{Likes} = -.014, p > .05$) and shares ($\beta_{Shares} = .092, p > .05$). The effect is greater for comments followed by shares and then likes. The presence of videos exerts a positive and significant effect on shares ($\beta_{Shares} = .467, p < .01$). However, this effect is negative and significant for likes ($\beta_{Likes} = -.468, p < .01$) and not significant for comments ($\beta_{Comments} = -.095, p > .05$). The effect is greater for shares, followed by comments and then likes. The effect of links is negative and significant on likes and shares ($\beta_{Likes} = -.280, p < .01$; $\beta_{Shares} = -.230, p < .01$) but has no significant effect on comments ($\beta_{Comments} = .058, p > .05$). The effect is greater for comments, followed by shares and then likes. In terms of hashtag use, we find positive influences on all three consumer engagement actions ($\beta_{Likes/Comments/Shares} = .199, p < .01$). Message age positively influences message likes ($\beta_{Likes} = .039, p < .01$), negatively influences comments ($\beta_{Comments} = -.014, p < .01$), and has no significant effect on shares ($\beta_{Shares} = -.003, p > .05$). The multivariate tests indicate that the effect of message age is greater for likes, followed by shares and then comments. Word count exerts a positive, significant influence on likes, comments, and shares ($\beta_{Likes/Comments} = .002, p < .05$; $\beta_{Shares} = .006, p < .01$), and the effect is greater for shares than for likes and comments. The use of long words has a positive, significant effect on all three consumer engagement actions ($\beta_{Likes/Comments/Shares} = .005, p < .01$).

First-person singular pronouns (“I”) do not have a significant effect on likes ($\beta_{Likes} = -.022, p > .05$) but have a negative and significant effect on comments ($\beta_{Comments} = -.179, p < .01$) and shares ($\beta_{Shares} = -.053, p < .01$). Thus, H1a is not supported, but H1b and H1c are

supported; the negative effect is greater for comments than shares, followed by likes. The use of first-person plural pronouns (“we”) has a positive and significant effect on comments ($\beta_{Comments} = .059, p < .01$) and shares ($\beta_{Shares} = .011, p < .05$) but not on likes ($\beta_{Likes} = 0.005, p > .05$). Thus, H2b and H2c are supported but H2a is not; the effect is greater for comments than for shares, followed by likes. The use of second-person pronouns (“you”) has a positive and significant effect on comments ($\beta_{Comments} = .021, p < .01$) but not on likes and shares ($\beta_{Likes/shares} = -.004, p > .05$). Thus, H3b is supported but H3a and H3c are not; the effect is greater for comments than for likes and shares. The use of third-person singular pronouns (“he/she”) has a positive and significant effect on comments ($\beta_{Comments} = .045, p < .01$) but not on likes and shares ($\beta_{Likes/shares} = .010, p > .05$). Thus, H4b is supported but H4a and H4c are not; the effect is greater for comments than likes and shares. Finally, we find support for all aspects of H5a–H5c. The coefficient for third-person plural pronouns (“they”) is positive and significant for likes, comments, and shares ($\beta_{Likes/Comments/Shares} = .031, p < .01$).

6.1 Robustness checks

The variances of the consumer engagement variables exceeded their means, such that the response variables displayed overdispersion. To rule out concerns with overdispersion, we ran a multivariate Poisson overdispersion model with fanlikes in 100,000s as an exposure rate to check the robustness of our findings. We estimated the parameters in the overdispersion model simultaneously using maximum likelihood and penalized quasi-likelihood (PQL) estimation, constraining them to match our main model. The overdispersion model is analogous to a negative binomial model (Peterson & Krivo, 2010). As the results in Table 5 indicate, the findings are similar. In particular, with the overdispersion model, we find support for H1b, H1c, H2b, H3b, H4b, H5a, H5b, and H5c. H2c was not supported.

Because the count of zeros in our dependent measures (likes = 1.2%; comments = 27%; shares = 11.6%) may affect our findings, we ran a multivariate zero-inflated negative binomial regression using Mplus. We also included additional brand and industry control measures, Interbrand brand rank, and industry classifications, dummy coded into six variables. As the results in Table 6 indicate, the findings are similar. We find support for H1b, H1c, H2b, H2c, H3b, H4b, H5a, H5b, and H5c.

Insert Tables 5 and 6 About Here

In Table 7, we summarize the findings of our main analysis. The results indicate that the use of first-person singular pronouns has a negative effect on comments and shares while the use of first-person plural pronouns has a positive effect on these actions. Consumers may view the use of first-person singular pronouns by brands as self-centered, leading them to feel disassociated with the brand and thus lowering engagement actions. However, the use of first-person plural pronouns may seem more inclusive, causing consumers to feel more associated with the brand and thus increasing engagement actions (Sela et al., 2012). Indeed, the use of first-person plural pronouns can signal a relationship with a brand, which may motivate consumers to share content.

Insert Table 7 about here

The use of second-person pronouns has a positive effect on comments. As second-person pronouns directly address the viewer of the post, they lead to a potential tendency to initiate a dialogue. Consumers use comments to initiate such dialogues rather than likes and shares.

The use of third-person singular pronouns has a positive effect on comments, whereas the use of third-person plural pronouns has a positive effect on likes, comments, and shares. Indeed, the use of third-person pronouns increases engagement primarily driven by self-enhancement

(Chang et al., 2019). We also find that the use of pronouns influences engagement actions (likes, comments, and shares) differently. Overall, we find that in most cases, the use of pronouns has a greater positive impact on comments than likes and shares. This implies that consumers prefer to signal and strengthen their brand relationships, in addition to self-presentation, through the use of compositional WOM such as comments, which directly open a dialogue between the brand (sender) and the consumer (receiver). It is important to note that viewers may process pronouns in a brand post subconsciously; however, when engaging with such content, viewers tend to use a more conscious-based action. This implies that on social media, viewers' encoding process is more conscious than their decoding process.

6.2 Brand type analysis

To discern the differences across brand characteristics (hedonic/utilitarian) and brand offerings (services/goods), we classified the brands and ran separate negative binomial models for each brand classification (e.g., hedonic goods and services, utilitarian goods and services). First, the 90 brands were classified as goods or services according to their Standard Industrial Classification codes. Second, trained judges classified brands primarily as hedonic, utilitarian, or both. The inter-coder reliability between the two judges was above the desired threshold of .80 ($PRL = .89$) (Rust & Cooil, 1994). Disagreements between the judges were resolved by the authors. All 90 brands were classified as either hedonic or utilitarian (none of the brands were classified as both). Overall, 19 (2,670 Facebook posts) were classified as hedonic goods brands, 30 (5,749 Facebook posts) as utilitarian goods brands, 23 (4,059 Facebook posts) as hedonic services brands, and 18 (3,310 Facebook posts) as utilitarian services brands.

We ran multivariate negative binomial regression models for each brand classification using Mplus statistical software. Table 8 provides the results, and Table 9 lists a summary of the

findings. Next, we report only significant results for key variables of interest and restrict our discussion only to pronouns.

Insert Tables 8 and 9 About Here

Use of the first-person singular pronouns (“I”) had significant and negative effects on engagement for hedonic goods brands ($\beta_{Comments} = -.254, p < .01$), hedonic services brands ($\beta_{Comments} = -.031, p < .05$), and utilitarian services brands ($\beta_{Likes} = -.060, p < .01$; $\beta_{Comments} = -.184, p < .01$; $\beta_{Shares} = -.188, p < .01$). First-person plural pronouns (“we”) had significant and positive effects on engagement for hedonic goods brands ($\beta_{Comments} = .063, p < .01$) and for utilitarian services brands ($\beta_{Likes} = .032, p < .01$; $\beta_{Comments} = .032, p < .01$; $\beta_{Shares} = .027, p < .01$). Notably, the use of first-person plural pronouns also had negative and significant effects on engagement for hedonic goods brands ($\beta_{Likes} = -.036, p < .01$; $\beta_{Shares} = -.034, p < .01$) and hedonic services brands ($\beta_{Likes} = -.040, p < .01$; $\beta_{Shares} = -.053, p < .01$).

The use of second-person pronouns (“you”) had positive and significant effects on hedonic goods brands ($\beta_{Comments} = .065, p < .01$), hedonic services brands ($\beta_{Comments} = .026, p < .01$), and utilitarian services brands ($\beta_{Likes} = .030, p < .01$; $\beta_{Comments} = .038, p < .01$). Surprisingly, the use of second-person plural pronouns also had negative effects on engagement for utilitarian goods brands ($\beta_{Shares} = -.012, p < .05$) and hedonic services brands ($\beta_{Likes} = -.040, p < .01$; $\beta_{Shares} = -.032, p < .05$). The use of third-person singular pronouns (“he/she”) had positive effects on engagement for utilitarian goods brands ($\beta_{Comments} = .063, p < .01$) and utilitarian services brands ($\beta_{Likes} = .053, p < .01$). Conversely, use of third-person plural pronouns (“they”) had a positive effect on engagement for utilitarian services brands ($\beta_{Likes} = .043, p < .01$).

These results suggest differences across brand characteristics (hedonic/utilitarian) and brand offerings (services/goods). For example, use of second-person pronouns (“you”) puts focus on the consumer and is conversational in nature. These aspects create more personal and intimate conversations (Cruz et al., 2017; Hanc, 2016; Pennebaker, 2011). This aligns with the emotional and experiential expectations of hedonic (vs. utilitarian) brands and brands offering services (vs. goods). As Table 9 shows, services and hedonic brands benefit the most from the use of second-person pronouns (with the exception of likes and shares for hedonic services brands).

7 DISCUSSION

Marketers seek to use social media platforms to build relationships with customers and spread WOM. In support of these efforts, the current research extends prior literature (de Vries et al., 2012; Swani et al., 2017) by investigating how pronoun choices in brands’ social media messages affect consumer engagement. By analyzing Facebook posts of 90 of the top-100 brands, we affirm that the pronouns used in brand social media posts influence consumer engagement activities (likes, comments, and shares). With our multivariate Poisson regression analysis, we also acknowledge the interrelationships among consumer social media interactions at various levels. Each action increases the reach of the message and affects additional actions. We compared message characteristics simultaneously across all three levels of consumer engagement (likes, comments, and shares) and found significant differences (see Table 7).

Our brand classification enabled us to investigate the effects of pronouns on engagement across various brand characteristics (hedonic/utilitarian) and brand offerings (services/goods). With regard to the brand classifications, the findings show that use of first-person singular

pronouns (“I”) has a negative, significant impact on all three engagement actions for utilitarian services brands but not for utilitarian goods brands. Use of first-person plural pronouns (“we”) has a positive impact on all three engagement actions for utilitarian services brands but a negative impact on engagement actions (likes and shares) for hedonic goods and services brands. We also find that some message characteristics (used as control measures), such as the presence of vividness (images and videos) and interactivity (links and hashtags) vary across these brand classifications. These differences are notable when compared with the results from previous research. For example, Cruz et al. (2017) found a positive effect of second-person pronouns (“you”) on brand attitude. Both brands used in their studies were utilitarian services brands (financial services and cloud storage security services); our results echo their findings for utilitarian services brands. Moreover, our results show that second-person pronouns (“you”) have a positive effect on some consumer engagement measures (likes and comments) for utilitarian services brands but a negative effect on engagement (shares) for brands offering utilitarian goods and a negative effect of second-person pronouns on engagement (likes and shares) for hedonic services brands (brand categorizations not explored by Cruz et al., 2017).

Some of the results regarding our control variables are also of interest. For instance, for links we find a negative relationship for likes and shares. These results might reflect the nature of the links and Facebook's design. Users who click on a link in a Facebook post are directed to an external website, and after they leave, they may be less likely to return to Facebook to engage in further engagement actions. Arguably, clicking on a link represents engagement with the post content, but our engagement measures (likes, comments, and shares) do not allow us to measure activities that happen outside the social platform.

Some message characteristics (used as control measures), such as the presence of vividness (images and videos) and interactivity (links and hashtags), also vary across brand classifications. For example, utilitarian brands (both goods and services) appear to benefit more from hashtag use than hedonic brands across all engagement measures (see Table 8 and 9). In addition, the use of images appears to be most beneficial for utilitarian goods brands, while videos appear to affect all brand types except for brands offering hedonic goods. These findings offer an additional contribution beyond what has been explored in previous research.

Managerially, we offer practical guidelines across different brand categorizations for constructing messages that are more likely to result in desired consumer actions. For example, if a utilitarian services brand wants to increase the number of likes on a post, it should use third-person pronouns and hashtags. If the same type of brand (utilitarian services brand) wants to increase the number of comments on a post, it should instead use first-person plural (“we”), second person (“you”), images, and hashtags. Again, Table 9 provides a broader summary of the various guidelines from our findings. Brands can use these findings to construct a series of messages to drive multiple engagement types by using a mix of pronouns and control measures, such as images or videos in a single message.

To our knowledge, our investigation is the first to examine differences among social media engagement measures. Our analysis also provides evidence that pronoun choices drive different types of social media engagements with branded content. Moreover, we examine these differences in the context of different brand categorizations (hedonic vs. utilitarian, goods vs. services) across both pronouns and several control variables (e.g., images, videos, links, hashtags).

8 LIMITATIONS AND FURTHER RESEARCH

As with any empirical research, this research has several limitations that provide avenues for future research. First, we only considered one social media platform, Facebook, though brands connect with consumers across a wide variety of platforms, including Twitter, Pinterest, Instagram, and Snapchat. The design of the platform governs the types of content and the limitations on what can be posted. For example, Twitter restricts messages to 280 characters, and Instagram and Pinterest focus on images, with text secondary. Although our findings are likely to hold on other social media platforms and with other brands, researchers could apply linguistic analyses to brand messages on other platforms as an extension of our work and try to replicate this research with lesser-known brands to confirm the generalizability of the findings. In addition, approximately two months after our data collection, Facebook introduced five new responses, in addition to the like option: love, haha, wow, sad, and angry. The new additions add a level of sentimental understanding beyond likes, but they still provide minimal feedback to the brand. The effort a consumer expends to complete the action also is more similar to a single click.

Second, we had no information on the characteristics of the consumers who interacted with the brand posts. Consumer variables, such as gender, age, and involvement, might affect the propensity to engage with brands on social media. Culture and language also might be variables of interest. Some major brands, such as Coca-Cola, have multiple Facebook accounts that use different languages and messages to reach their global audiences. Future research could extend our study by using of experiments and testing our findings for specific brands and industries. The propensity to share content may also be affected by privacy concerns, especially in light of the recent Facebook Cambridge Analytica data scandal (Meredith, 2018). Future research might

explore whether and how privacy concerns have affected consumers' engagement with brands (and their networks of friends).

While the focus of our research is on the pronouns brands use to communicate on social media and not the actual content of the messages (what is being said), we do not rule out that message content may influence consumer engagement. For example, Stephen et al. (2015) show that how (linguistic style), more than what (content), brands communicate influences consumer engagement. Future research might explore these topics further, such as by coding the context around pronoun usage (e.g., "we" as a co-branding initiative ["We are pleased to announce our partnership with Apple"] vs. "we" as a consumer–brand relationship ["Together we can end hunger"]).

Third, with our focus on language, we could not analyze the content of non-textual elements (i.e., images, videos); rather, we re-coded them as binary. Although this content is beyond the scope of our research, it might be a promising avenue for further research. Finally, we note that the act of sharing means engaging with both a brand and a consumer's network and that shares with comments differ from simple re-sharing of branded content without additional commentary. Facebook's privacy settings prevented us from coding the data for shares without comment versus shares with comments, specifically of users who have set more restrictive privacy settings.

References

- Agnew, C., Van Lange, P., 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), 939-954.
- Alba, J. W., & Williams, E. F. (2013). Pleasure principles: A review of research on hedonic consumption. *Journal of Consumer Psychology*, 23(January), 2-18.
- Babin, B. J., Darden, W. R., & Griffin, M. (1994). Work and/or fun: Measuring hedonic and utilitarian shopping value. *Journal of Consumer Research*, 20(December), 644-656.
- Bansal, H. S., & Voyer, P. A. (2000). Word-of-mouth processes within a services purchase decision context. *Journal of Service Research*, 3(2), 166-177.
- Barcelos, H. R., Dantas, D. C., & S  n  cal, 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.
- Berger, J. (2014). Word of mouth and interpersonal communication: A review and directions for future research. *Journal of Consumer Psychology*, 24(4), 586-607.
- Berry, D. S., Pennebaker, J. W., Mueller, J. S., & Hiller, W. S. (1997). Linguistic bases of social perception. *Personality and Social Psychology Bulletin*, 23, 526-537.
- Blau, P. M. (1964) *Exchange & power in social life*. New Brunswick, NJ: Transaction Publishers.
- Botti, S., & McGill, A. L. (2011). The locus of choice: personal causality and satisfaction with hedonic and utilitarian decisions. *Journal of Consumer Research*, 37(6), 1065-1078.
- Brodie, R. J., Hollebeek, L. D., Juric, B., & Ilic, A. (2011). Customer engagement: Conceptual domain, fundamental propositions, and implications for research. *Journal of Service Research*, 14(3), 252-271.
- Chang, Y., Li, Y., Yan, J., & Kumar, V. (2019). Getting more likes: The impact of narrative person and brand image on customer-brand interactions. *Journal of the Academy of Marketing Science*, 47(6), 1027-1045.
- Chitturi, R., Raghunathan, R., & Mahajan, V. (2008). Delight by design: The role of hedonic versus utilitarian benefits. *Journal of Marketing*, 72(3), 48-63.
- 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.
- Das, G., Mukherjee, A., & Smith, R. J. (2018). The perfect fit: The moderating role of selling cues on hedonic and utilitarian product types. *Journal of Retailing*, 94(2), 203-216.
- de Vries, L., Gensler, S., & Leeﬂang, P. S. H. (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.
- Dhar, R., & Wertenbroch, K. 2000. Consumer choice between hedonic and utilitarian goods. *Journal of Marketing Research*, 37(1), 60-71.
- Dino, A., Reysen, S., & Branscombe, N. R. (2009). Online interactions between group members who differ in status. *Journal of Language and Social Psychology*, 28, 85-93.
- Duncan, T., & Moriarty, S. E. (1998). A communication-based marketing model for managing relationships. *Journal of Marketing*, 62(2), 1-13.
- eMarketer (2017a). Social commerce 2018: Its influence in the path to purchase. Retrieved June 10, 2019 from <https://www.emarketer.com/Report/Social-Commerce-2018-Its-Influence-Path-Purchase/2002175>.

- eMarketer (2017b). US internet users who are likely to purchase a product from a brand they follow on social media. Retrieved June 10, 2019 from <https://www.emarketer.com/Chart/US-Internet-Users-Who-Likely-Purchase-Product-Brand-They-Follow-on-Social-Media-by-Generation-Jan-2017-of-respondents-each-group/204779>.
- Facebook (2019). Stats. Retrieved June 13, 2019 from <http://newsroom.fb.com/company-info/>.
- Fahnestock, J. (2011). *Rhetorical style: The uses of language in persuasion*. New York: Oxford University Press.
- Fitzsimons, G. M., & Kay, A. C. (2004). Language and interpersonal cognition: Causal effects of variations in pronoun usage on perceptions of closeness. *Personality and Social Psychology Bulletin*, 30(5), 547-557.
- Goffman, E. (1959). *The presentation of self in everyday life*. New York: Anchor Books.
- Goffman, E. (1981). *Forms of talk*. Philadelphia: University of Pennsylvania Press.
- Grönroos, C., & Gummerus, J. (2014). The service revolution and its marketing implications: service logic vs service-dominant logic. *Managing Service Quality*, 24(3), 206-229.
- Guha, I. (2015). How do the world's top 100 brands use Facebook? Retrieved October 12, 2018 from <http://dazeinfo.com/2015/01/03/world-top-100-brands-facebook-usage-q3-2014/>.
- Hall, S. (1973). *Encoding and decoding in the television discourse*. Birmingham: Centre for Cultural Studies, University of Birmingham.
- Hanc, J. (2016). Asking for money? Compliment the donor, not your organization. *The New York Times*. Retrieved June 18, 2019 from <http://www.nytimes.com/2016/11/06/giving/asking-for-money-compliment-the-donor-not-your-organization.html>.
- Homburg, C., Schwemmler, M., & Kuehnl, C. (2015). New product design: Concept, measurement, and consequences. *Journal of Marketing*, 79(3), 41-56.
- Humphreys, A. (2010). Megamarketing: The creation of markets as a social process. *Journal of Marketing*, 74(2), 1-19.
- Humphreys, A., & Wang, R. (2018). Automated text analysis for consumer research. *Journal of Consumer Research*, 44(6), 1274-1306.
- Ickes, W., Reidhead, S., & Patterson, M. (1986). Machiavellianism and self-monitoring: As different as "me" and "you." *Social Cognition*, 4(1), 58-74.
- Interbrand (2015). The Best 100 Brands. Retrieved October 31, 2015 from <http://interbrand.com/best-brands/best-global-brands/2015/>.
- Keh, H. T., & Pang, J. (2010). Customer reactions to service separation. *Journal of Marketing*, 74(2), 55-70.
- Khan, U., Dhar, R., & Wertenbroch, K. 2005. A Behavioral decision theory perspective on hedonic and utilitarian choice. In S. Raneshwar & D. G. Mick (Eds.), *Inside consumption: Consumer motives, goals and desires* (pp. 144-165). New York: Routledge.
- Kivetz, R., & Zheng, Y. (2017). The effects of promotions on hedonic versus utilitarian purchases. *Journal of Consumer Psychology*, 27(1), 59-68.
- Klein, K., & Melnyk, V. (2016). Speaking to the mind or the heart: Effects of matching hedonic versus utilitarian arguments and products. *Marketing Letters*, 27(1), 131-142.
- Konrod, A., & Danziger, S. (2013). "Wii will rock you!" The use and effect of figurative language in consumer reviews of hedonic and utilitarian consumption. *Journal of Consumer Research*, 40(4), 726-739.
- Konrod, A., Grinstein, A., & Wathieu, L. (2012). Enjoy! Hedonic consumption and compliance with assertive messages. *Journal of Consumer Research*, 39(1), 51-61.

- 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., Bhaskaran, V., Mirchandani, R., & Shah, M. (2013). Practice prize winner—creating a measurable social media marketing strategy: Increasing the value and ROI of intangibles and tangibles for hokey pokey. *Marketing Science*, 32(2), 194-212.
- Kumar, V., & Mirchandani, R. (2012). Increasing the ROI of social media marketing. *MIT Sloan Management Review*, 54(1), 55-61.
- Kumar, V., & Pansari, A. (2016). Competitive advantage through engagement. *Journal of Marketing Research*, 53(4), 497-514.
- Kwon, E. S., & Sung, Y. (2011). Follow me! Global marketers' Twitter use. *Journal of Interactive Advertising*, 12(1), 4-16.
- Labrecque, L. I., Markos, E. C., & Milne, G. R. (2011). Online personal branding: Processes, challenges, and implications. *Journal of Interactive Marketing*, 25(1), 37-50.
- Labrecque, L. I., Zanjani, S. H. A., & Milne, G. R., (2012). Authenticity in online communications: examining antecedents and consequences. In A. G. Close (Ed.), *Online consumer behavior: Theory and research in social media, advertising, and e-tail*. (pp.133-156). New York, NY: Routledge.
- Lasswell, H. D. (1948). The structure and function of communication in society. *The Communication of Ideas*, 37, 215-228.
- Lee, D., Hosanagar, K., & Nair, H. (2018). Advertising content and consumer engagement on social media: Evidence from Facebook, 64(11), 4967-5460.
- Luangrath, A. W., Peck, J., & Barger, V. A. (2017). Textual paralanguage and its implications for brand communications. *Journal of Consumer Psychology*, 27(1), 98-107.
- Ludwig, S., & De Ruyter, K. (2016). Decoding social media speak: developing a speech act theory research agenda. *Journal of Consumer Marketing*, 33(2), 124-134.
- Ludwig, S., De Ruyter, K., Friedman, M., Brüggem, 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.
- Maass, A., Milesi, A., Zabbini, S., & Stahlberg, D. (1995). Linguistic intergroup bias: Differential expectancies or in-group protection. *Journal of Personality and Social Psychology*, 68(1), 116-126.
- Maass, A., Salvi, D., Arcuri, L., & Semin, G. R. (1989). Language use in intergroup contexts: The linguistic intergroup bias. *Journal of Personality and Social Psychology*, 57(6), 981-993.
- Markus, H. R., & Wurf, E. (1987). The dynamic self-concept: A social psychological perspective. *Annual Review of Psychology*, 38, 299-337.
- Meredith, S. (2018). Facebook-Cambridge Analytica: A timeline of the data hijacking scandal. Retrieved November 13, 2018 from <https://www.cnbc.com/2018/04/10/facebook-cambridge-analytica-a-timeline-of-the-data-hijacking-scandal.html>.
- Mortimer, K. (2008). Identifying the components of effective service advertisements. *Journal of Services Marketing*, 22(2), 104-113.
- Nadkarni, A., & Hofmann, S. G. (2012). Why do people use Facebook?. *Personality and Individual Differences*, 52(3), 243–249. doi:10.1016/j.paid.2011.11.007

- Packard, G., Moore, S. G., & McFerran, B. (2018). (I'm) happy to help (you): The impact of personal pronoun use in customer-firm interactions. *Journal of Marketing Research*, 55(4), 541-555.
- Pennebaker, J. W. (2011). *The secret life of pronouns: What our words say about us*. New York: Bloomsbury Press.
- Pennebaker, J. W., Boyd, R. L., Jordan, K., & Blackburn, K. (2015). *The development and psychometric properties of LIWC2015*. Austin, TX: University of Texas at Austin.
- Pennebaker, J. W., & King, L. A. (1999). Linguistic styles: Language use as an individual difference. *Journal of Personality and Social Psychology*, 77(6), 1296-1312.
- Perdue, C.W., Dovidio, J. F., Gurtman, M. B., & Tyler, R. B. (1990). Us and them: Social categorization and the process of intergroup bias. *Journal of Personality and Social Psychology*, 59(3), 475-486.
- Peterson, R. D., & Krivo, L. J. (2010). *Divergent social worlds: Neighborhood crime and the racial-spatial divide*. New York: Russell Sage Foundation.
- Raskin, R., & Shaw, R. (1988). Narcissism and the use of personal pronouns. *Journal of Personality*, 56(2), 393-404.
- Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods*. Thousand Oaks, CA: Sage.
- Raudenbush, S. W., Rowan, B., & Kang, S. J. (1991). A multilevel, multivariate model for studying school climate with estimation via the EM algorithm and application to US high-school data. *Journal of Educational and Behavioral Statistics*, 16(4), 295-330.
- Roma, P., & Aloini, D. (2019). How does brand-related user-generated content differ across social media? Evidence reloaded. *Journal of Business Research*, 96, 322-339.
- Rust, R. T., & Cooil, B. (1994). Reliability measures for qualitative data: Theory and implications. *Journal of Marketing Research*, 31(1), 1-14.
- Saboo, A. R., Kumar, V., & Ramani, G. (2016). Evaluating the impact of social media activities on human brand sales. *International Journal of Research in Marketing*, 33(3), 524-541.
- Schlenker, B. R., & Weigold, M. F. (1992). Interpersonal processes involving impression regulation and management. *Annual Review of Psychology*, 43(1), 133-168.
- 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.
- Shannon, C. E., & Weaver, W. (1949). *The mathematical theory of communication*. Urbana: University of Illinois Press.
- Sillars, A., Wesley S., McIntosh, A., & Pomegranate, M. (1997). Relational characteristics of language: Elaboration and differentiation in marital conversations. *Western Journal of Communication*, 61(4), 403-422.
- Stafford, M. R. (2005). International services advertising (ISA): Defining the domain and reviewing the literature. *Journal of Advertising*, 34(1), 65-86.
- Stafford, M. B. R., Reilly, T., Grove, S. J., Carlson, L., Bhandari, R., & Copeland, J. (2011). The evolution of services advertising in a services-driven national economy: An analysis of progress and missed opportunities. *Journal of Advertising Research*, 51(1), 136-152.
- Stephen, A. T., Sciandra, M., & Inman, J. (2015). Is it what you say or how you say it? How content characteristics affect consumer engagement with brands on Facebook. Working paper, University of Oxford.

- Stirman, S. W., & Pennebaker, J. W. (2001). Word use in the poetry of suicidal and nonsuicidal poets. *Psychosomatic Medicine*, 63(4), 517-522.
- 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., Milne, G. R., & Brown, B. P. (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.
- Swani, K., Milne, G. R., Brown, B. P., Assaf, G. A., & 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. R., & Miller, E. G. (2019). Social media services branding: The use of corporate brand names. *Journal of Business Research*. DOI: 10.1016/j.jbusres.2019.04.033.
- 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.
- Touchstone, E. E., Koslow, S., Shamdasani, P. N., & D'Alessandro, S. (2017). The linguistic servicescape: Speaking their language may not be enough. *Journal of Business Research*, 72, 147-157.
- Tripp, C. (1997). Services advertising: An overview and summary of research, 1980-1995. *Journal of Advertising*, 26(4), 21-38.
- Vargo, S. L., & Lusch, R. F. (2008). Service-dominant logic: continuing the evolution. *Journal of the Academy of Marketing Science*, 36(1), 1-10.
- Voss, K. E., Spangenberg, E., & Grohmann, B. (2003). Measuring the hedonic and utilitarian dimensions of consumer attitude. *Journal of Marketing Research*, 40(3), 310-20.
- Williamson, J. (1978). *Decoding advertisements: Advertising, ideology and symbolic expression*, London: Boyars.
- Zeithaml, V. A., Parasuraman, A., & Berry, L. L. (1985). Problems and strategies in services marketing. *Journal of Marketing*, 49(2), 33-46.

Table 1 Summary of key research on pronoun usage in marketing communications

Article	Pronouns investigated	Distinction between singular & plural pronouns	Outcome variables	Comparison of likes, comments, and shares	Brand classification on analysis	Social media platform	Sample	Key findings
Sela et al., 2012	First-person plural: We Second person: You (“you and the brand”)	No	Attitudes	NA	No	NA	Experiments - advertisements	Use of we vs. you and the brand name is more favorable to brands among customers expecting a close relationship with brands. The effect is reversed when customers expect the relationship to be distant.
Cruz et al., 2017	Second person: You, Yours	Yes, second person pronouns: (e.g., You, Yours)	Sum of number of likes, comments, and shares; involvement; brand attitude	No	No	Facebook	10 brands; 4,124 total posts; from June 30, 2013, to June 30, 2014	The presence (vs. absence) of second-person pronouns in online brand messaging enhances involvement and brand attitude for consumers lower, but not higher, in collectivism.
Barcelos et al., 2018	First person: I, We	No	Hotel reservation intention, intention to go to a restaurant, & wine brand choice	NA	No	Facebook	Experiment - fictitious brand page	Use of a human voice (I and We), instead of the more traditional corporate voice can increase a consumer's hedonic value on social media and also purchase intentions

Packard et al., 2018	First person: I, We Second person: You	Yes, First Person	Purchases; Satisfaction; purchase intention	NA	No	NA	Experiments - email & in-store sales encounters	Using “I” rather than “we” pronouns increases customers’ perceptions that the agent acts on their behalf.
Chang et al., 2019	First person: I, Us, My Third person: He, Them, His	No	Liking Intention	NA	No	WeChat	Experiments - WeChat in-feed social ads	First-person narration alongside warm images gains more likes because it boosts the user’s motivation of social belonging, while third-person narration accompanied by competent images earns more likes by stimulating the motivation of self-enhancement.
This research	First person (e.g., I, me, mine, we, us, our) Second person (e.g., you, your, thou) Third person (e.g., she, her, him, they, their)	Yes	Number of likes, comments, and shares	Yes	Goods vs. services; Hedonic vs. Utilitarian	Facebook	90 top global brands; 15,788 posts; from April 15, 2015, to December 15, 2015	Use of pronouns, especially first-person singular pronouns, increases the number of comments. Use of first-person plural and second-person pronouns gains more comments than likes and shares. The impact of pronouns on consumer engagement varies across different brand classifications.

Note. LIWC software has a list of dictionary words to identify pronouns; 24 words for first-person singular pronouns, 12 for first-person plural pronouns, 30 for second-person pronouns, 17 for third-person singular pronouns, and 11 for third-person plural pronouns. NA= not applicable (research not on a specific social media platform).

Table 2 Descriptive statistics

	M (%)	SD	Min.	Max.
<i>Dependent Variables</i>				
Likes	5221.66	24197.10	0	850703
Comments	25.96	582.40	0	51679
Shares	587.74	13882.69	0	1554498
<i>Independent Variables</i>				
First person "I"	0.23	1.28	0	33
First person "we"	1.75	3.24	0	33
Second person "you"	2.14	4.05	0	50
Third person "he/she"	0.33	1.46	0	33
Third person "they"	0.32	1.34	0	33
<i>Control Variables</i>				
Positive emotions	4.33	5.78	0	100
Negative emotions	0.52	2.22	0	100
Images	71.40%	NA	NA	NA
Videos	20.70%	NA	NA	NA
Links	34.40%	NA	NA	NA
Hashtags	39.80%	NA	NA	NA
Word count	24.13	14.15	0	225
Words six letters or more	25.20	12.78	0	100
Fanlikes	9326459.21	14770448.03	10962	161603259
Message age (days)	129.31	88.89	0	1129.13

Note. Most of these variables indicate the number of words found in the brand post that match the category, divided by the number of words in the brand post. Likes, comments, shares, and fanlikes are counts. Images, videos, links, and hashtags are percentages. Message age reflects the time (in days) since the message was first posted and the date of the data collection. The average number of post likes was much higher than either post comments or post shares, though it is not unusual to find large variability in these engagement variables (de Vries et al., 2012; Stephen et al., 2015).

Table 3 Parameters of interest for testing H1–H5

H1	β_{11} (likes), β_{21} (comments), and β_{31} (shares) capture the relationship between the use of first-person singular pronoun (I) and consumer engagement actions.
H2	β_{12} (likes), β_{22} (comments), and β_{32} (shares) capture the relationship between the use of first-person plural pronoun (We) and consumer engagement actions.
H3	β_{13} (likes), β_{23} (comments), and β_{33} (shares) capture the relationship between the use of second-person pronoun (You) and consumer engagement actions.
H4	β_{14} (likes), β_{24} (comments), and β_{34} (shares) capture the relationship between the use of third-person singular pronoun (He/she) and consumer engagement actions.
H5	β_{15} (likes), β_{25} (comments), and β_{35} (shares) capture the relationship between the use of third-person pronoun (They) and consumer engagement actions.

Table 4 Multivariate Poisson model results

	Likes		Comments		Shares		Multivariate tests			Constrained value	
	Coefficient	T-value	Coefficient	T-value	Coefficient	T-value	Likes vs. Comments	Comments vs. Shares	Likes vs. Shares	Coefficient [†]	T-value
Intercept	-9.082	-119.347	-14.342	-139.393	-11.608	-133.219	$\chi^2_{(1)} = 2443.84, p < 0.01$	$\chi^2_{(1)} = 660.75, p < 0.01$	$\chi^2_{(1)} = 3040.04, p < 0.01$	NA	NA
"I"	-0.022	-1.937	-0.179	-13.347	-0.053	-4.338	$\chi^2_{(1)} = 134.72, p < 0.01$	$\chi^2_{(1)} = 73.66, p < 0.01$	$\chi^2_{(1)} = 20.96, p < 0.01$	NA	NA
"We"	0.005	1.120	0.059	9.711	<i>0.011</i>	<i>2.115</i>	$\chi^2_{(1)} = 77.43, p < 0.01$	$\chi^2_{(1)} = 60.30, p < 0.01$	$\chi^2_{(1)} = 5.64, p < 0.05$	NA	NA
"You"	-0.004	-1.067	0.021	4.321	-0.005	-1.059	$\chi^2_{(1)} = 29.62, p < 0.01$	$\chi^2_{(1)} = 28.75, p < 0.01$	$\chi^2_{(1)} = 0.11, p > 0.05$	-0.004 (LS)	-1.144
"He/she"	0.011	1.201	0.045	3.776	-0.001	-0.047	$\chi^2_{(1)} = 5.52, p < 0.05$	$\chi^2_{(1)} = 9.85, p < 0.01$	$\chi^2_{(1)} = 3.25, p > 0.05$	0.010 (LS)	1.145
"They"	<i>0.029</i>	<i>2.457</i>	0.036	2.398	0.045	3.296	$\chi^2_{(1)} = 0.24, p > 0.05$	$\chi^2_{(1)} = 0.28, p > 0.05$	$\chi^2_{(1)} = 5.65, p < 0.05$	0.031 (LCS)	2.920
+ Emotions	-0.006	-2.504	0.002	0.726	-0.006	-2.030	$\chi^2_{(1)} = 4.93, p < 0.05$	$\chi^2_{(1)} = 4.66, p < 0.05$	$\chi^2_{(1)} = 0.01, p > 0.05$	-0.006 (LS)	-2.452
- Emotions	-0.014	-2.124	-0.016	-1.659	-0.012	-1.555	$\chi^2_{(1)} = 0.05, p > 0.05$	$\chi^2_{(1)} = 0.25, p > 0.05$	$\chi^2_{(1)} = 0.23, p > 0.05$	-0.015 (LCS)	-2.210
Images	-0.014	-0.294	0.467	7.414	0.092	1.716	$\chi^2_{(1)} = 55.83, p < 0.01$	$\chi^2_{(1)} = 34.63, p < 0.01$	$\chi^2_{(1)} = 14.94, p < 0.01$	NA	NA
Videos	-0.468	-8.699	-0.095	-1.351	0.467	7.726	$\chi^2_{(1)} = 28.46, p < 0.01$	$\chi^2_{(1)} = 62.15, p < 0.01$	$\chi^2_{(1)} = 943.11, p < 0.01$	NA	NA
Links	-0.280	-8.057	0.058	1.308	-0.230	-5.780	$\chi^2_{(1)} = 50.82, p < 0.01$	$\chi^2_{(1)} = 33.56, p < 0.01$	$\chi^2_{(1)} = 7.12, p < 0.01$	NA	NA
Hashtags	0.173	5.237	0.240	5.671	0.169	4.415	$\chi^2_{(1)} = 0.82, p > 0.05$	$\chi^2_{(1)} = 1.10, p > 0.05$	$\chi^2_{(1)} = 0.19, p > 0.05$	0.199 (LCS)	6.841
Message age	0.039	11.494	-0.014	-3.102	-0.003	-0.846	$\chi^2_{(1)} = 114.959, p < 0.01$	$\chi^2_{(1)} = 4.71, p < 0.05$	$\chi^2_{(1)} = 397.81, p < 0.01$	NA	NA
Word count	0.002	1.505	0.001	0.701	0.006	4.488	$\chi^2_{(1)} = 0.20, p > 0.05$	$\chi^2_{(1)} = 10.25, p < 0.01$	$\chi^2_{(1)} = 39.06, p < 0.01$	<i>0.002 (LC)</i>	2.358
Long words	0.005	4.168	0.002	1.444	0.005	3.296	$\chi^2_{(1)} = 1.86, p > 0.05$	$\chi^2_{(1)} = 1.27, p > 0.05$	$\chi^2_{(1)} = 0.22, p > 0.05$	0.005 (LCS)	4.122

Note. A single constrained value and its statistical test are reported in those cases for which the multivariate test was not significant. Bold coefficients are significant at the 0.01 level, bold and italicized coefficients are significant at the 0.05 level. †The constrained value for respective engagement actions, likes (L), comments (C), and shares (S), is denoted in parentheses.

Table 5 Multivariate Poisson overdispersion model results

	Likes		Comments		Shares		Constrained value	
	Coefficient	T-value	Coefficient	T-value	Coefficient	T-value	Coefficient [†]	T-value
Intercept	2.420	31.545	-2.794	-28.972	-0.131	-1.452		
"I"	-0.022	-1.903	-0.166	-10.960	-0.056	-4.071	NA	NA
"We"	0.005	1.170	0.054	9.288	0.009	1.661	NA	NA
You	-0.004	-0.964	0.020	4.233	-0.005	-1.131	-0.004 (LS)	-1.059
"He/she"	0.012	1.172	0.028	2.241	-0.001	-0.046	0.010 (LS)	1.175
"They"	0.028	2.559	0.037	2.583	0.045	3.419	0.029 (LCS)	2.949
+ Emotions	-0.006	-2.407	0.004	1.105	-0.007	-2.209	-0.006 (LS)	-2.303
- Emotions	-0.014	-2.145	-0.015	-1.731	-0.012	-1.513	-0.015 (LCS)	-2.253
Images	-0.011	-0.225	0.475	7.845	0.112	1.997	NA	NA
Videos	-0.460	-8.657	-0.135	-2.026	0.488	7.831	NA	NA
Links	-0.277	-8.328	0.106	2.469	-0.226	-5.754	NA	NA
Hashtags	0.175	5.437	0.256	6.246	0.169	4.467	0.204 (LCS)	7.197
Message age	0.039	10.784	-0.016	-3.450	-0.004	-1.061	NA	NA
Word count	0.002	1.453	0.002	1.601	0.005	4.037	0.002 (LC)	1.881
Long words	0.005	4.116	0.003	1.613	0.005	3.393	0.005 (LCS)	3.882

Note. †The constrained value for respective engagement actions, likes (L), comments (C), and shares (S), is denoted in parentheses Bold coefficients are significant at the 0.01 level, bold and italicized coefficients are significant at the 0.05 level.

Table 6 Multivariate zero-inflated negative binomial model results

	Likes		Comments		Shares		Constrained	
	Coefficient	T-value	Coefficient	T-value	Coefficient	T-value	Coefficient [†]	T-value
Intercept	-9.237	-107.067	-13.053	-117.598	-11.62	-112.796	NA	NA
"I"	-0.008	-0.698	-0.081	-5.203	-0.044	-3.282	NA	NA
"We"	0.008	1.922	0.045	8.329	0.017	3.468	NA	NA
"You"	0.005	1.327	0.039	7.734	0.006	1.400	0.005 (LS)	1.155
"He/she"	0.021	2.002	0.049	3.006	0.013	1.105	0.019 (LS)	1.863
"They"	0.032	2.963	0.039	3.123	0.050	4.092	0.034 (LCS)	3.539
+ Emotions	0.001	0.022	0.015	4.483	0.002	0.678	0.001 (LS)	0.166
- Emotions	-0.015	-1.816	-0.014	-1.849	-0.012	-1.302	-0.015 (LCS)	-2.123
Images	0.061	1.323	0.392	6.752	0.148	2.687	NA	NA
Videos	-0.253	-4.902	0.156	2.401	0.719	11.447	NA	NA
Links	-0.153	-4.909	0.038	0.909	-0.052	-1.408	NA	NA
Hashtags	0.182	6.118	0.194	4.909	0.202	5.802	0.183 (LCS)	6.576
Message age	0.039	10.716	0.006	1.221	-0.001	-0.285	NA	NA
Word count	-0.002	-2.031	0.004	2.321	0.002	1.374	-0.001 (LC)	-0.181
Long words	0.006	4.659	0.001	0.601	0.005	3.933	0.004 (LCS)	3.553
Brand rank	0.013	26.757	0.008	11.575	0.013	23.38	0.013 (LS)	26.74

Note. The results for six industry dummy are not reported. Bold coefficients are significant at the 0.01 level, bold and italicized coefficients are significant at the 0.05 level.

[†]The constrained value for respective engagement actions, likes (L), comments (C), and shares (S), is denoted in parentheses.

Table 7 Summary of hypotheses & findings

Hypothesis	Independent Variable	Findings	Engagement Actions[†]
H1	First-person singular “I”	H1b, H1c. Significant, negative effects on comments and shares but not on likes.	Likes > shares > comments
H2	First-person plural “we”	H2b, H2c. Significant, positive effect on comments and shares but not on likes.	Comments > shares > likes
H3	Second person “you”	H3b. Significant, positive effect on comments but not on likes and shares.	Comments > likes, shares
H4	Third-person singular “he/she”	H4b. Significant, positive effect on comments but not on likes and shares.	Comments > likes, shares
H5	Third-person plural “they”	H5a, H5b, H5c. Significant, positive effect on likes, comments, and shares.	No difference

[†]The differences in effects among the consumer engagement actions, likes, comments, and shares, are reported.

Table 8 Results by brand classification

	Hedonic goods brands			Utilitarian goods brands			Hedonic services brands			Utilitarian services brands		
	Likes	Comments	Shares	Likes	Comments	Shares	Likes	Comments	Shares	Likes	Comments	Shares
Intercept	-7.478	-12.68	-9.629	-9.31	-12.505	-11.735	-9.230	-13.568	-11.500	-8.500	-11.813	-10.34
"I"	-0.011	-0.254	-0.044	0.003	0.016	0.012	0.004	-0.031	-0.005	-0.060	-0.184	-0.188
"We"	-0.036	0.063	-0.034	-0.005	0.005	0.004	-0.040	-0.011	-0.053	0.032	0.032	0.027
"You"	-0.003	0.065	0.007	-0.01	0.003	-0.012	-0.040	0.026	-0.032	0.030	0.038	0.009
"He/she"	-0.041	-0.054	-0.063	0.015	0.063	0.008	0.015	0.050	0.005	0.053	0.019	0.041
"They"	-0.038	0.033	-0.014	0.005	0.01	0.011	0.029	0.006	0.036	0.043	-0.047	0.041
+ Emotions	-0.014	0.012	-0.008	-0.010	0.001	-0.006	-0.010	-0.008	-0.004	0.014	0.032	0.004
- Emotions	-0.001	-0.023	0.006	0.006	-0.006	0.005	-0.020	-0.036	-0.017	-0.040	0.019	-0.037
Images	-0.115	0.417	-0.147	0.491	0.412	0.764	-0.610	-0.372	-0.677	-0.030	0.269	-0.118
Videos	-0.757	-0.587	-0.036	0.131	0.144	1.191	-0.760	-0.298	0.296	-0.310	0.083	0.412
Links	0.042	0.072	-0.121	-0.080	-0.171	-0.058	-0.890	-0.221	-0.766	-0.190	-0.103	-0.158
Hashtags	-0.321	-0.176	-0.405	0.235	0.144	0.242	-0.160	-0.252	-0.240	0.380	0.445	0.482
Message age	0.017	0.008	-0.026	0.046	0.022	0.021	0.050	-0.007	-0.010	-0.010	-0.041	-0.048
Word count	-0.011	-0.020	-0.009	-0.010	-0.003	-0.002	-0.010	0.001	-0.002	0.005	0.011	0.007
Long words	-0.004	-0.003	-0.005	0.006	0.003	0.006	0.015	0.013	0.015	-0.002	-0.008	-0.002

Note. A multivariate negative binomial model was run for each of the brand classification. Regression coefficients are reported. Bold coefficients are significant at the 0.01 level, bold and italicized coefficients are significant at the 0.05 level.

Table 9 Summary of findings by brand classification

Brand classification		Likes	Comments	Shares
Goods	Hedonic	We (-)	I (-)	We (-)
		Videos (-)	We (+)	Hashtags (-)
		Hashtags (-)	You (+)	
			Images (+)	
			Videos (-)	
			Hashtags (-)	
	Utilitarian		He/she (+)	You (-)
		Images (+)	Images (+)	Images (+)
		Hashtags (+)	Hashtags (+)	Videos (+)
			Links (-)	Hashtags (+)
Services	Hedonic	We (-)	I (-)	We (-)
		You (-)	You (+)	You (-)
		Images (-)	Images (-)	Images (-)
		Videos (-)	Videos (-)	Videos (+)
		Hashtags (-)	Hashtags (-)	Hashtags (-)
		Links (-)	Links (-)	Links (-)
	Utilitarian	I (-)	I (-)	I (-)
		We (+)	We (+)	We (+)
		You (+)	You (+)	Videos (+)
		He/she (+)	Images (+)	Hashtags (+)
		They (+)	Hashtags (+)	Links (-)
		Videos (-)		
		Hashtags (+)		
		Links (-)		

Notation:

(+) Brand managers should consider including these elements to increase associated engagement action.

(-) Brand managers should avoid these elements, as they may decrease associated engagement action.

Appendix A Pronouns examples

Pronoun	Singular (1)	Plural (2 or more)
First Person (speaking about oneself)	I, me, mine	we, us, our
Second Person (speaking to the reader or listener)	you, your, thou	you, your, thou
Third Person (speaking about someone or something else)	she, he, her, hers, him, his, it	they, them, their

Appendix B Brands and rankings^{†‡}

Brand name	Rank	Brand name	Rank	Brand name	Rank	Brand name	Rank
Google	2	Budweiser	34	Panasonic Corporation	64	Heineken	95
Coca-Cola	3	Kellogg's	34	Shell	65	Pizza Hut	96
IBM	5	JPMorgan Chase & Co	35	3M	66	HUGO BOSS	97
Microsoft	5	Canon	37	Discovery	67	Nokia	98
GE	6	NESCAFÉ	38	KFC	68	Gap	99
Samsung USA	7	Ford Motor Company	39	Prada	70	Nintendo	100
Toyota USA	8	Hyundai	40	Tiffany & Co.	71		
McDonald's	9	Gucci	41	Sprite	72		
Mercedes-Benz	10	Philips	42	Burberry	73		
BMW USA	11	L'Oréal Paris	43	Kia Motors America	74		
Intel	12	Accenture	44	Santander Consumer USA	75		
Disney	13	Audi USA	45	Starbucks	76		
Cisco	14	Hermès	46	Adobe	77		
Amazon.com	15	Citibank US	48	Johnson & Johnson	78		
Oracle	16	Siemens	49	John Deere	79		
Gillette	18	Colgate	50	DHL	81		
Louis Vuitton	19	Danone	51	Chevrolet	82		
Honda	20	Sony	52	Ralph Lauren	83		
H&M	21	AXA US	53	Duracell	84		
Nike	22	Nestlé	54	Jack Daniel's Whiskey	85		
Pepsi	24	Allianz	55	Johnnie Walker	86		
SAP	25	Nissan	56	Harley-Davidson	87		
IKEA USA	26	Thomson Reuters	57	Kleenex	89		
UPS	27	Cartier	58	Smirnoff	90		
eBay	28	Adidas	59	Land Rover	91		
Facebook	29	Porsche	60	FedEx	92		
Pampers	30	Caterpillar	61	Corona	93		
Volkswagen	31	Xerox	62	Huawei Mobile USA	94		

[†]Interbrand Rank 2014.

[‡]The following 10 brands were not included because of a lack of Facebook presence, excessive number of brand posts per day, and/or consumers' individual comments with complaints unrelated to those of the brand post content: Apple (#1), HP (#17), HSBC (#33), American Express (#23), Zara (#36), Goldman Sachs (#37), Morgan Stanley (#63), Visa (#69), MTV (#80), and Mastercard (#88).