HOW EMPLOYEES ENGAGE WITH B2B BRANDS ON SOCIAL MEDIA: WORD CHOICE AND VERBAL TONE

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1 TO WHOM CORRESPONDENCE SHOULD BE ADDRESSED
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ABSTRACT

Marketing scholars and practitioners are keenly interested in brand engagement in social media because brand engagement has strong links to brand equity. However, much of the marketing literature focuses on customer brand engagement and often in a consumer market setting. This paper advances this literature in two ways by (1) focusing on employees, not customers, as important stakeholders who frequently engage with brands on social media, and by (2) observing brand engagement in a business-to-business context. We develop a conceptual framework based on a theory of word choice and verbal tone to understand the content of engagement observations (i.e., reviews) that breaks into five content dimensions—activity, optimism, certainty, realism, commonality—and four calculated dimensions—insistence, embellishment, variety, and complexity. Then, we examine over 6,300 job reviews authored by employees of B2B firms to explore the differences in the way employees engage with both highly-ranked, and -rated brands versus low-ranked and -rated brands. We find that there are significant differences in nearly all the theoretical dimensions, yet the effect sizes are much larger between high versus low review ratings compared to high versus low B2B brand ranking. We close with some important managerial implications and future research directions.

Keywords: B2B brand engagement; employee-based brand equity; social media engagement; review content analysis; word choice and verbal tone
HOW EMPLOYEES ENGAGE WITH B2B BRANDS ON SOCIAL MEDIA: WORD CHOICE AND VERBAL TONE

INTRODUCTION

The notion of brand engagement, or the process of how customers and other stakeholders form emotional or rational attachments to brands, has recently garnered considerable attention in the marketing literature (e.g., Schivinski, Christodoulides and Dabrowski, 2016; Baldus et al. 2015; Brodie et al. 2011; Brodie et al. 2013; Graffigna and Gambetti 2015; Hollebeek et al. 2014). Brand engagement is important because it is a construct strongly related to brand equity, or in simple terms the value of the brand. As Keller (2012) sees it, from a consumer perspective, brand equity has to do with the consumer’s awareness of a brand’s features and associations (that is, the extent to which they engage with the brand), which in turn drives attribute perceptions.

The nature of brand engagement has also changed significantly in the recent past. This has largely been occasioned by the advent of social media. The best known social media include Facebook, Twitter, and YouTube. However, there are also more specialized social media platforms such as the travel and hospitality platform TripAdvisor, the picture sharing platform Instagram, and the ephemeral content sharing app, SnapChat. There are also social media platforms with more of a business-to-business (B2B) slant, including the peer-to-peer platform LinkedIn, and the job description and evaluation site Glassdoor. Not only do users of these platforms share personal information with each other, they also comment on, contribute to, and share opinions on the brands that engage them (Berthon et al. 2012; Kietzmann et al. 2011).

The literature is extensive on brand engagement and social media. However, while brand engagement is about a brand’s interaction with all stakeholders, two observations are clear on the
extant research in this regard: first, almost all the focus is on customers, rather than other stakeholders such as employees, suppliers, and investors; second, the research focuses almost entirely on consumers, the customers of business-to-consumer (B2C) firms, rather than on the industrial and organizational customers of B2B firms or their stakeholders despite the importance of and larger size of the B2B market. Only very recently have scholars begun to explore both customer (CE) and employee engagement (EE) and their effects on firm performance (Kumar and Pansari, 2016) in both the B2C and B2B arenas.

The research presented in this paper attempts to grow the literature in two ways, first by focusing on brand engagement in B2B firms rather than B2C, and second, by studying a stakeholder group other than customers, namely, employees. Moreover, it does this through the employee lens, rather than the lens of the firm; in other words, it explores how employees engage with firms rather than how firms engage with their employees. In this study, we explore the nature of employee engagement with B2B brands using data from Glassdoor. Specifically, we are interested in the following questions: (1) Is there a difference between employee engagement with the most and least prestigious B2B brands? (2) What is the nature of the engagement of employees who rate (in stars) a B2B brand highly versus the engagement of those who rate the B2B brand poorly? (3) Does the nature of this engagement differ significantly between highly and poorly rated brands?

We proceed as follows: First, we briefly review the extant literature on brand engagement on social media, with particular reference to the B2B context and employees as stakeholders. Then we outline the two main sources of data used in the research, namely, a published ranking of B2B brands on social media called Brandwatch (2015), and the employer review social medium Glassdoor. Unlike social media such as Facebook and LinkedIn, Glassdoor reviews of
employers by employees are anonymous, which means that reviews can be as positive or negative as the reviewer desires without fear of identification by an employer. Following this, we explain the theoretical framework used to guide the research, a theory of word choice and verbal tone, as well as the content analysis software used in the study, DICTION. Next we describe a large-sample study of employer brand reviews by employees in which we compare employee engagement with top ranked B2B brands against the lowest ranked B2B brands. The results are discussed, and conclusions drawn. Finally, we acknowledge the limitations of the study, draw a number of managerial and theoretical implications with regard to brand engagement by stakeholders other than customers in a B2B environment, and identify avenues for future research in this regard.

STAKEHOLDER BRAND ENGAGEMENT IN SOCIAL MEDIA IN A B2B ENVIRONMENT

Passikoff (2013), writing in the popular business press, adequately expresses the problems of defining brand engagement. He argues that merely getting attention to, and even awareness of a brand does not mean engagement with that brand. Engagement with a brand, he contends, is emotional, and should be the brand manager’s ultimate objective. Stakeholders who are truly engaged with a brand will see it as better meeting the expectations they hold for the ideal offering in a particular offering category. This is important because real brand engagement will not only impact the stakeholder’s behavior, but ultimately, for the firm, the brand’s sales and profitability.

Although there is much literature on the topic, the field has not adopted a consistent definition of brand engagement. Thus, we start with a general definition of ‘engagement’, then
describe ‘stakeholder engagement’, and arrive at our own definition of ‘brand engagement’.

Kumar and Pansari (2016) define engagement as the “attitude, behavior, the level of connectedness among customers, between customers and employees, and of customers and employees within a firm” (p.498). They go on to argue that the more positive the attitude and behavior and the higher the level of connectedness, the higher the level of stakeholder engagement will be. Stakeholder engagement is important because there is much evidence that suggests that successful engagement strategies result in improved firm performance (c.f. Bhattacharya, Sen, and Korschun 2011). Thus, brand engagement has to do with how individuals as stakeholders (be they customers, employees, suppliers and so forth) engage or involve themselves with a brand. Other researchers have attempted to understand the brand engagement 'black box' in the minds of stakeholders. For example, Sprott, Czellar, and Spangenberg (2009) define brand engagement as “a generalized tendency to include brands as a part of the self-concept” of an individual (p.92), which clarifies the ‘connection' to a specific brand as (small) part the individual’s identity. Thus, more formally, we define brand engagement for the purposes of this study as the extent to which stakeholders involve or commit themselves emotionally to or with the known identity of an organization in terms of what products and services it offers, as well as the essence of what the organization stands for in terms of service and other emotional, non-tangible stakeholder concerns.

Most of the extant literature on brand engagement has focused on the engagement of consumers with the brands of B2C firms. Less attention has been given, first, to the engagement of customers of B2B firms with their brands. While there has been work on the implementation of social media strategies in B2B environments (Bernard and Bernard 2016; Michaelidou et al. 2011; Wang et al. 2016), there is scant literature on brand engagement, especially in social
media, in B2B marketing. Second, almost all of the focus of the research on brand engagement has been on consumers as customers, whereas Kumar and Pansari (2016) point out that other stakeholders, particularly employees, are critical to understand as well. There is little or no literature on the nature of employee brand engagement in B2B firms.

Employee engagement was defined by Kumar and Pansari (2014) as “a multidimensional construct which comprises of all the different facets of the attitudes and behaviors of employees towards the organization” (p.9). They also proposed that employee engagement consisted of the dimensions of employee satisfaction, employee identification, employee commitment, employee loyalty and employee performance. The work of King and Grace (2012) provides empirical evidence of the antecedents of employee brand commitment and subsequent brand behaviour as facets of employee brand engagement. These authors suggest that firms focus on “brand-oriented” employees and also attempt to identify, develop and nurture future brand champions among their employees as stakeholders. However, we contend that a successful understanding of employee brand engagement not only requires an understanding of employees who are positive toward their organizational brand, but also those that are negatively disposed towards it.

The evolution of social media and its role in marketing have been thoroughly explored by Lamberton and Stephen (2016) in a recent review article, with particular reference to social media’s capability to engage with consumers, rather than other stakeholders, or in a B2B environment. Using keyword counts from the premier general marketing journals, these scholars track the changes in academic perspectives that have occurred, in order to gain a macro-level view of the shifting importance of topics related to social media since 2000. Two of the three key themes that emerge from this research are first, the role of social media to facilitate individual expression, and second, social media as a source of market intelligence. Stated differently, the
implications of these two themes are that marketers should understand social media as a vehicle for brand engagement because stakeholders will use it to express themselves and their perspectives on brands, and secondly, that these expressions of self and brand engagement will be a valuable source of information for marketing decision makers. In the context of the research described in this study, this means that what employees say about their employing firms on social media such as Glassdoor needs to be understood by these organizations, and that this content becomes a valuable source of information for marketing decision makers, as well as an interesting and rich new source of data for marketing scholars.

The management literature has long asserted “that brands and human capital constitute some of the firm’s most important assets” (Wilden et al. 2010: 57). More recently, Vomberg, Homburg and Bornemann (2015) have argued that while there have been separate streams in the marketing- and human resources management literatures focusing on these two capitals as valuable assets, (e.g., Farjoun 1994; Mizik and Jacobson 2008), this state of affairs limits our understanding of their potential inter-dependencies and contingencies. There is a need to study both in concert, for each impacts the other: Strong brands influence employees in a positive manner, and by engaging with, or living the brand, employees enhance it in the eyes of other stakeholders, especially customers.

Specifically in the context of the research presented in this study, namely the use of the social media job evaluation site Glassdoor, Dineen and Allen (2016) contrast the large number of social media sources enabling comparisons for consumers (e.g., TripAdvisor) with those facilitating evaluations for job seekers. Social media is making comparisons attainable not only for customers as stakeholders, but for employees as well. These authors argue that rankings of “best-places-to-work” and similar sources of information (almost entirely user generated content)
are “a proliferating form of third party employment branding” (p.91). They also plead for a greater empirical and theoretical understanding of how these sources of employment branding impact key human capital outcomes. Their extensive research finds that high ratings by employees on social media such as Glassdoor are associated with lower staff turnover rates, as well as higher quality applicant pools for vacant positions.

**DATA SOURCES: BRANDWATCH AND GLASSDOOR**

In this research, we wished to examine both the rankings of B2B brands, as well as the ratings of these brands by employees as stakeholders. In order to overcome the possibility of common methods bias (Podsakoff et al. 2003) in this type of research, we used independent sources of data for the rankings and ratings.

B2B brands are relatively overlooked in the marketing literature, despite the fact that B2B markets in most developed countries are significantly larger than consumer markets. Recent research has emphasized the characteristics of good B2B brands. For example, Homburg et al. (2005) emphasize the importance of understanding the determinants of customer benefits such as product and service quality, and supplier trust and commitment in building successful B2B brands. Brown, Zablah, et al. (2011) suggests that brands serve as a risk-reduction heuristic for B2B customers, whereby the influence of brands on decision making increases as a function of risk, most notably perceived risk, as previously emphasized by Berthon, Hulbert and Pitt (1999).

Our source for the rankings of B2B brands was a report by Brandwatch (2015). “Brandwatch is one of the world’s leading social intelligence companies. Its social media listening and analytics technology platform gathers millions of online conversations every day and provides users with the tools to analyze them, empowering brands and agencies to make
smarter, data-driven business decisions”, (Brandwatch, 2015: 52). Data for the Brandwatch report was gathered by the firm using its social media monitoring platform Brandwatch Analytics. The report uses this platform to search for mentions of a B2B brand from over 90 million web sources such as news portals, social networks, blogs, and forums. Brandwatch then ranks the top 200 B2B brands according to their social media presence. The top 30 of the 200 B2B brands were chosen to represent the “best” or “Top ranked” B2B brands on social media, and the bottom 30 of the 200 brands were chosen to represent the “Bottom” B2B brands. It should be emphasized that the Brandwatch rankings focus on B2B brands on social media, and not on other aspects of brand performance.

Our source for the reviews of employees of B2B firms, as well as the ratings thereof was the social medium Glassdoor (www.glassdoor.com). According to its website (https://www.glassdoor.ca/about/index_input.htm) Glassdoor is an online social media website that holds a database of millions of company reviews by employees past and present, CEO approval ratings by employees and peers, salary reports, interview reviews and questions by both successful and unsuccessful applicants, benefits reviews, office photos and more. It is much more than merely a job advertisement website such as Monster.com, and its main purpose is not merely to recruit on behalf of client organizations. Its primary objective is rather to collect and share information about jobs and employers, among those who know companies best — the employees. Obviously, there are many thousands of jobs advertised on the website as well, and this is how the company generates revenues. However, the value to users is that they don't only get to see which employers are hiring, they are also able to read first hand from other employees what it would be like to work for a particular employer, what the interview would be like, how much they could earn, and what benefits they could expect to receive. Apart from the review, an
employee can also rate their employer using a five-star scale, where one star is worst and five stars is best. It therefore serves a very similar purpose to other specialized social media such as TripAdvisor. Just as a potential tourist could make travel decisions by reading hotel and restaurant reviews and accessing star ratings, potential job seekers can read employer reviews and access ratings of firms on Glassdoor. In simple terms, the review placed by an employee of their employing firm provides a realistic indication of how the employee engages with that firm’s brand. And finally, to reiterate, a benefit of Glassdoor for reviewers is that their reviews are anonymous, and cannot be traced back to them in order to punish them for negative reviews.

A Theory of Word Choice and Verbal Tone, and DICTION

Obviously, the content of the many thousands of employer brand reviews on a social medium such as Glassdoor represents a mass of data that needs some kind of theoretical framework to make sense of it in a parsimonious manner. We chose to use Hart’s theory of word choice and verbal tone.

The political scientist and communications scholar Roderick Hart (Hart 1984a; 1984b; 2001) developed his theory of document content by asking a fundamental question: If only five questions could be asked of a given passage, which five questions would provide the most robust understanding? His theory focuses on the subtle power of word choice and verbal tone and is in fact culled from other work in linguistic theory conducted by a number of social thinkers. Hart posits that the five most important themes in a piece of text or document can, if gleaned and analyzed, provide significant insight into the nature of that piece of text or document. Furthermore, Hart’s theory argues that an additional four fundamental variables can be calculated from any piece of text, namely, how insistent it is, how much variety it exhibits, to
what extent the text embellishes, and how simple or complex the text is. The five themes, or
dimensions, and the calculated variables are described and briefly discussed below.

The first of the dimensions Hart argues provides deep insight into a piece of text is
Certainty. Certainty derives from Johnson’s (1946) work on general semantics, and involves
language and words that indicate resoluteness, inflexibility, completeness, and a tendency to
speak with authority (cf. Ober et al. 1999). The second major dimension of a piece of text
revolves around the notion of Optimism, based on the work of Barber (1992). Hart describes
optimism as language that endorses an individual, a group, a concept, or an event. The third
dimension, Activity has to do with language that is about movement, change, and the
implementation of ideas and the avoidance of inertia. Realism, the fourth dimension, has to do
with language that describes tangible, immediate, and recognizable issues. Finally, commonality,
Hart’s fifth dimension, is based on the work of Etzioni (1993) and Bellah et al. (1992), and has to
do with language that communicates communitarian concepts. Specifically, it entails language
that highlights the agreed-upon values of a group of individuals and rejects language that is
idiosyncratic in terms of engagement.

Then, Hart also incorporates four variables that he calls “calculated variables”, that can
be mathematically computed from a piece of text, into his theory. These are all grounded in
unique theoretical underpinnings and can be assigned scores based on any specific patterns in a
piece of text. The first calculated variable is insistence, which has to do with the use of repeated
words, and is a measure of the extent to which codes are restricted and semantic “contentedness”
is achieved. The assumption here is that where key terms are repeated, a preference for a limited,
ordered world is indicated. The second calculated variable is variety, based on Johnson’s (1946)
type-token ratio, which divides the number of different words in a passage by the total number of
words. Thus, a high score on variety would indicate that the speaker or a writer is avoiding overstatement and has a preference for precision. The third calculated variable is that of *embellishment*, which is computed by dividing the number of adjectives by the number of verbs, and is derived from Boder’s (1927) notion that a lot of modification in a document slows down the reader or the audience’s ability to interpret, because the text deemphasizes human and material action. The final calculated variable is that of *complexity*, which is measured by dividing the average number of characters per word in a given input file by the total number of words. Akin to well-known notions of readability in the communication literature, this is based on Flesch’s (1951) conception that convoluted phrasings make a text’s ideas abstract and its implications unclear for the audience.

Hart subsequently developed content analysis software called DICTION that permits researchers to analyze a piece of text according to the concepts in his theoretical framework. According to the DICTION website ([http://www.dictionsoftware.com](http://www.dictionsoftware.com)) DICTION is a computer-aided text analysis program for determining the tone of a verbal message. It searches a passage for five general “features” (the five dimensions of text according to Hart’s theory) as well as thirty-five sub-features (each of which contributes to the dimensions). It can process a variety of English language texts using a 10,000 word corpus, or master dictionary. Users can also create their own dictionaries and use these on DICTION if required. DICTION produces reports about the texts it processes and also writes the results to numeric files for later statistical analysis. Output options include raw totals, standardized scores, word counts and percentages, thereby providing the user with a variety of ways of understanding the text they have processed.

In simple terms, to do this, DICTION checks each word in a piece of text by referring to its master corpus, and if the word is to be found there, it scores it against the particular dimension
referred to above. Words that do not appear in the corpus are simply ignored from the
dimension’s perspective. However, they do form part of the computation of the calculated
variables discussed above. Finally, DICTION also counts the total number of words in a piece of
text, so that long texts can be compared with shorter texts for example, as well as the average
number of characters per word, so that text that uses long words can be identified and
highlighted.

DICTION has been used as a research tool in a wide range of disciplines within the social
sciences. In business and management research it has for example been used in accounting
(Barkemeyer et al. 2014; Brennan and Kirwan 2015); finance (e.g., Ferris 2012; Kearney and Liu
2014); entrepreneurship (e.g., Parhankangas and Ehrlich 2014; Williams Jr. et al. 2015); business
ethics (e.g., Yuthas et al. 2002); and, strategic management (e.g., Finkelstein 1997; Short and
Palmer 2007). In marketing specifically, it has, amongst others, been used by Aaker (1997) in
her work on brand personality; Yadav, Prabhu and Chandy (2007) to study the contents of CEO
letters to shareholders; and Zachary, McKenny, Short, Davis and Wu (2011) to explore the
nature of franchise branding from an organizational identity perspective.

The Study

The research conducted here was guided by the following research questions:

*How does the brand engagement (via social media) of employees of highly ranked B2B
employers differ from employees’ social media brand engagement with low ranked B2B
employers? And, how does the brand engagement (via social media) of employees of highly rated B2B
employers differ from employees’ social media brand engagement with low rated B2B
employers?*
We began the empirical study by identifying the top 30 ranked B2B employers, as well as the bottom 30 ranked B2B employers in the Brandwatch (2015) rankings study. In order to answer the above research question, we made four sets of comparisons: First, we compared word choice and verbal tone dimensions of the reviews of employees of highly ranked B2B firms with those of lowly ranked B2B firms. Second, we compared word choice and verbal tone dimensions of the reviews of employees of highly rated B2B firms with those of lowly rated B2B firms. Third, we compared word choice and verbal tone calculated variables of the reviews of employees of highly ranked B2B firms with those of lowly ranked B2B firms. Fourth, we compared word choice and verbal tone calculated variables of the reviews of employees of highly rated B2B firms with those of lowly rated B2B firms.

At this stage an important point should be reiterated, and clarified once more: the “ranking” of a B2B employee firm refers to its ranking against other similar firms by an independent source; the “rating” of a B2B firm refers to the overall ratings afforded to it by employees in the format of number of stars awarded, where one star equates to a very low rating and five stars equates to a very high rating. Glassdoor was the source of both the reviews of-, and the ratings of the B2B firms that accompanied them. Targets were set for the following:

- To identify 100 five star reviews on Glassdoor from each of the 30 top ranked and each of the 30 bottom ranked B2B firms according to Brandwatch (2015). In other words, in total, 3,000 reviews of the top ranked B2B firms with five star ratings, and 3,000 reviews of the bottom B2B firms with five star ratings were sought.
- To identify 100 one star reviews on Glassdoor from each of the 30 top ranked and each of the 30 bottom ranked B2B firms according to Brandwatch (2015). In other words, 3,000
reviews of the top ranked B2B firms with one star ratings, and 3,000 reviews of the bottom B2B firms with one star ratings.

As it turned out, these targets could not be met entirely, as not all of the firms (both top-and bottom ranked) had 100 five star ratings and/or one star ratings. Therefore, as many as possible reviews were identified in each case: For top ranked firms, 2315 five star and 1983 one star reviews; for bottom ranked firms, 1013 five star and 1025 one star reviews were identified. Thus, while the targets were not met, the study still ended up with very large samples of reviews in all four instances. Each review was copied from Glassdoor and pasted into a separate text document. Then all of these documents were simultaneously processed and analyzed by the DICTION software.

The summary statistics are shown in table 1. While the data is analyzed in a statistically robust fashion below, an observation to be made from table 1 is that one star reviews appear to be much longer on average than five star reviews for both top- and bottom ranked companies. Furthermore, for further analysis we used Z-scores of the DICTION data because by converting all the data to the same standardized scale, comparisons can easily be made. In order to test H₁ and H₃, all the reviews (both one- and five star) of the top ranked firms first, and then for the bottom ranked firms, were combined. Similarly, in order to test H₂ and H₄ all the five star reviews first, and then all the one star reviews (for both top- and bottom ranked firms), were combined.

**Table 1: Descriptive DICTION Statistics: Total Words, Calculated Variables and Dimensions**
The firm ranking analyses indicate employees’ reviews on Glassdoor differ significantly for all the content dimensions with the exception of commonality, as shown in table 2. Employees in top ranked firms were significantly more optimistic ($p < 0.001; d = 0.105$) about their employers than those in bottom ranked firms. In contrast, employees of top ranked firms expressed significantly lower levels of activity, certainty, and realism (all at $p < 0.001$) than employees in firms ranked in the bottom 30. There were no significant differences with regard to the dimension of commonality ($p = 0.090$). In simple terms, while employees in top ranked firms are more optimistic, they talk less about movement, change and the implementation of ideas. Furthermore, they are less resolute and more flexible, and also talk less about tangible and immediate issues.

### Table 2. Content Dimensions Variable by Firm Ranking

<table>
<thead>
<tr>
<th>Dimension Variable*</th>
<th>Top Ranked Firms</th>
<th>Bottom Ranked Firms</th>
<th>Independent Samples t-Test**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Mean</td>
<td>S.Dev.</td>
</tr>
<tr>
<td>Activity</td>
<td>4298</td>
<td>-0.030</td>
<td>1.037</td>
</tr>
<tr>
<td>Optimism</td>
<td>0.033</td>
<td>1.026</td>
<td>0.070</td>
</tr>
<tr>
<td>Certainty</td>
<td>-0.049</td>
<td>1.016</td>
<td>0.103</td>
</tr>
<tr>
<td>Realism</td>
<td>-0.042</td>
<td>1.018</td>
<td>0.088</td>
</tr>
<tr>
<td>Commonality</td>
<td>0.014</td>
<td>1.058</td>
<td>-0.029</td>
</tr>
</tbody>
</table>

*All variables have been standardized

**Equal variances not assumed as Levene’s Test is significant in all cases at the $p <0.01$ level

Five star reviews are compared to one star reviews with regard to the five content dimensions in table 3. All five content analysis dimensions differ significantly ($p < 0.001$) depending on the ratings accorded the firms. Reviews that rated B2B brands with five stars—the
highest rating—were unsurprisingly far more optimistic ($d = 0.930$) and exhibited more commonality ($d = 0.152$) than one star reviews. Yet, like the firm ranking analyses, activity, certainty, and realism were significantly lower in five star reviews than in one star reviews. Five star ratings talk significantly more about the connection between the individual and the community.

**Table 3. Content Dimension Variables by Review Rating**

<table>
<thead>
<tr>
<th>Dimension Variable*</th>
<th>5 Star Rating</th>
<th></th>
<th>1 Star Rating</th>
<th></th>
<th>Independent Samples t-Test**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Mean</td>
<td>S.Dev.</td>
<td>n</td>
<td>Mean</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>S.Dev.</td>
</tr>
<tr>
<td>Activity</td>
<td>3328</td>
<td>-0.179</td>
<td>1.185</td>
<td>3008</td>
<td>0.198</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.692</td>
</tr>
<tr>
<td>Optimism</td>
<td>0.398</td>
<td>1.007</td>
<td></td>
<td>-0.441</td>
<td>0.784</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>37.198</td>
</tr>
<tr>
<td>Certainty</td>
<td>-0.195</td>
<td>1.062</td>
<td></td>
<td>0.216</td>
<td>0.878</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-16.844</td>
</tr>
<tr>
<td>Realism</td>
<td>-0.090</td>
<td>1.099</td>
<td></td>
<td>0.099</td>
<td>0.867</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-7.650</td>
</tr>
<tr>
<td>Commonality</td>
<td>0.071</td>
<td>1.145</td>
<td></td>
<td>-0.079</td>
<td>0.802</td>
</tr>
<tr>
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<td></td>
<td>6.123</td>
</tr>
</tbody>
</table>

*All variables have been standardized

**Equal variances not assumed as Levene’s Test is significant in all cases at the p <0.001 level

** Calculated Variables

When analyzing the reviews by firm ranking, all calculated content variables’ means are significantly different as shown in table 4. Top ranked firms’ reviews are less insistent than bottom ranked firms’ reviews ($p = 0.047; d = 0.053$). Furthermore, top ranked firms’ reviews contained more embellishment ($p = 0.001; d = 0.091$), variety ($p < 0.001; d = 0.170$), and were more complex ($p < 0.001; d = 0.156$) than bottom ranked firms’ reviews. To summarize these findings more simply, the review for a top ranked firm would rely less on repeated words and phrases, would use a greater ratio of adjectives to verbs, uses a greater variety of words, and is more complex.

**Table 4. Calculated Content Variable by Firm Ranking**
As in the firm ranking analysis above, all the calculated variables’ means were significantly different between five star and one star rated reviews, as can be seen in table 5. Five star reviews exhibited significantly lower insistence than one star reviews \((p < 0.001; d = 0.427)\); more embellishment \((p < 0.001; d = 0.395)\); greater variety \((p < 0.001; d = 0.724)\), and were more complex \((p < 0.001; d = 0.344)\). In simpler terms then, employees writing five star reviews rely less on repeated words and phrases, use a greater ratio of adjectives to verbs, use a greater variety of words, and their reviews are more complex.

### Table 5. Calculated Content Variables by Star Rating

<table>
<thead>
<tr>
<th>Calculated Variable</th>
<th>5 Star Rating</th>
<th>1 Star Rating</th>
<th>Independent Samples t-Test**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n Mean S.Dev.</td>
<td>n Mean S.Dev.</td>
<td>t df p (2-tailed) Cohen’s d</td>
</tr>
<tr>
<td>Insistence</td>
<td>3328 -0.200 0.779</td>
<td>3008 0.221 1.158</td>
<td>-16.789 5186 &lt; 0.001 0.427</td>
</tr>
<tr>
<td>Embellishment</td>
<td>0.182 1.189</td>
<td>-0.201 0.682</td>
<td>15.899 5401 &lt; 0.001 0.395</td>
</tr>
<tr>
<td>Variety</td>
<td>0.324 0.871</td>
<td>-0.359 1.011</td>
<td>28.658 5968 &lt; 0.001 0.724</td>
</tr>
<tr>
<td>Complexity</td>
<td>0.160 1.097</td>
<td>-0.177 0.846</td>
<td>13.778 6183 &lt; 0.001 0.344</td>
</tr>
</tbody>
</table>

*All variables have been standardized

**Equal variances not assumed as Levene’s Test is significant in all cases at the \(p <0.001\) level

DISCUSSION

If, as alluded to earlier, (brand) engagement is about emotional involvement and commitment, then Hart’s five dimensions of word choice and verbal tone offer good theoretically sound constructs to objectively capture a large part of employees’ online brand engagement.
*Optimism* has to do with language that is positive about a particular individual (such as a boss or a supervisor), a group (such as the team that an employee works in), a concept (such as a new idea, or a new product or a new strategic initiative the employee might be working on), or an event (such as an exciting new product launch) (Hart, 1984a; 1984b; 2001). DICTION measures optimism as a composite of praise, satisfaction and inspiration as expressed in the text, and then subtracts from that content that implies blame, hardship and denial. Thus it would seem that employees of highly ranked and rated B2B firms are more positive about their employer brand, and talk significantly more *optimistically* about these brands than do those of low ranked brands. This is important, because optimism is about the future, and employees of highly ranked brands see both a future for the company/brand, and themselves as stakeholders. In addition, employee optimism has been shown as a key factor in sales performance and customer satisfaction (Lussier and Hartmann, 2017).

The reviews of the employees of low ranked and low rated firms express significantly greater activity, certainty, and realism. *Activity* (c.f. Osgood, Suci, and Tannenbaum, 1957) has to do with language that is about movement, change, and the implementation of ideas and the avoidance of inertia. DICTION measures the degree of activity in a text by summing the subcomponents of aggression (hostile or violent behavior or attitudes towards others), accomplishment (achieving this un- or successfully), communication (the way information is exchanged) and motion. Then it subtracts the following subcomponents to obtain a final score for activity: cognitive terms, passivity (acceptance of what happens, without active response or resistance), and the calculated variable of embellishment. It would therefore seem that the reviews that rate employing firms low contain language that is more aggressive, talks more about accomplishment or more likely lack thereof, about communication or the absence thereof, and
about motion. It also uses few cognitive terms, and is more accepting of what happens and embellishes less. In view of recent research (for example, Yang and Caughlin 2017; Liu et al., 2015) that emphasizes the negative effect of employee aggression in the workplace the findings presented here would seem to have important ramifications for employee brand engagement.

The reviews of the employees of low rated firms express significantly greater *Certainty*. DICTION calculates certainty by summing the scores on the subcomponents of tenacity (being determined and persistent), leveling (making sure of position or rank), collectives (using collective pronouns such as we, us and so forth), and the calculated variable of insistence (repeating words). Then it subtracts from that score the sum of the subcomponents of the numerical terms used in a piece of text, the ambivalence (having mixed feelings or contradictory ideas), self-reference, and the calculated variable of variety (using a lot of different words).

Employees of lowly rated and ranked firms express far more certainty: They use language that does not mix words, emphasizes where people in the organization fit, and use the same words repeatedly. The language also uses fewer numerical terms, and is more decisive. It tends to refer less to the speaker or creator of the text, and is in a way less personal, and uses fewer different words to express itself. The latter can also be viewed as synonymous with a lack of engagement (Saks and Gruman, 2014).

The reviews of the employees of low ranked and rated firms express significantly greater *Realism*. Their language describes more tangible, immediate, and recognizable issues. DICTION calculates realism by summing the subcomponents of familiarity (close acquaintance with or knowledge of something), spatial awareness (the ability to perceive distance or relationships), temporal awareness (relating to worldly rather than spiritual issues), a concern with the present, human interest, and concreteness. It then subtracts from this words that express the
subcomponent of past concern, and also the calculated variable of complexity. It would therefore seem that the reviews that rate employing firms low contain language that is about familiar things, knows where it stands, is more worldly than spiritual or philosophical, is concerned with human interest, the present, and is concrete rather than ephemeral. Furthermore, this language is unconcerned with the past, and is simple, or easy for a reader or audience to understand. This resonates with recent research on the meaningfulness, or lack thereof, of work, by Chadi et al. (2017).

Employees of low- and high ranked firms did not differ in terms of Commonality, which indicates that there is “community” in both cases. Text that uses language that highlights the agreed-upon values of a group of individuals is generally regarded as communal, or expressing commonality. DICTION calculates commonality by summing the sub-components of centrality (the quality of being in the middle of somewhere or something, not taking sides), cooperation and rapport (a close and harmonious relationship in which the people or groups concerned understand each other's feelings or ideas and communicate well). Then it subtracts the sum of the subcomponents of diversity (the emphasizing and valuing of differences), exclusion and liberation from this to arrive at a final score for commonality. However, managers should probably understand that the nature of this community might differ – in the case of high ranked firms this community might be positive, and it might be negative in the case of low ranked firms. This is borne out buy the fact that commonality did differ between low- and highly rated firms.

While Hart’s (1984a, 1984b, 2001) theory of word choice and verbal tone has received much attention in the business and management literatures in general, as alluded to in the literature review, in marketing this has not been the case. This paper highlights the significance of a strong theoretical framework in understanding the contents of text in the marketing arena. At
a time when much of the attention of marketing scholars and practitioners is focused on the “big data” generated by individual textual contributions in social media, Hart’s framework provides a solid theoretical foundation for the exploration of this data. When confronted with masses of textual data, researchers need a strong conceptual framework to proceed in their analyses. Hart’s primary question, “if only five questions could be asked about a piece of text, what would they be?”, provides a robust platform from which to proceed. We would contend that marketing scholars in a wide range of fields of academic endeavor could effectively ground their work within this theoretical milieu. In the following section, we discuss the managerial implications of the findings.

MANAGERIAL IMPLICATIONS

A number of managerial implications flow from the findings of this research. The choice of the top- and bottom ranked B2B employers for this study was industry-overarching. Since different industries display different characteristics, employees likely evaluate them differently. For example, highly skilled and loyal employees in the IT industry, are likely to differ from those in B2B settings with higher labor churn and seasonal labor fluctuations. As Lamberton and Stephen (2016) suggested, social media provide a rich foundation of managerial insight, apart from being a source of data for academic investigations. Therefore, B2B managers would be advised to conduct their own analyses of Glassdoor content, first for their own B2B employer brands, then for those of their competitors, and perhaps even broader, to encompass suppliers and B2B customers.

Most B2B firms are, by definition, not at the extremes of brand rankings. They fall somewhere in between the highest and lowest ranked brands on the spectrum in terms of brand
engagement. The use of Glassdoor data allows managers to compare the nature of their brand engagement to others’, for example their closest competitors’ or a firm against which they want to benchmark (Garvin et al., 2008). Firms can use this kind of analysis to develop strategies that will enable them to increase their level of employee brand engagement over time compared to other relevant firms.

A final and fundamental implication for managers, as already stated in the introduction, is that brand engagement in a B2B environment is not only about customers, but also about other stakeholders, especially employees. This is borne out by the results of this study, which show that there are differences in employee brand engagement between top and bottom ranked B2B firms, and even more so, between employees who rate firms high and those who rate them low. As various authors have asserted (Dabirian et al. 2016; Vomberg et al. 2015; Wilden et al. 2010), brands and human capital are more important and interlinked than most managers acknowledge. The management of these two assets therefore requires more than occasional attention, rather, they should become part of regular organizational brand strategy.

**LIMITATIONS AND AVENUES FOR FUTURE RESEARCH**

This study has a number of limitations. First, we collected our data from Glassdoor only. With 30 million subscribers from 190 countries and 10 million company reviews of more than 500 thousand firms, Glassdoor is undeniably the most popular social medium for employer reviews. However, there are certainly other social media platforms where employees share and access data related to B2B brand employers, including RateMyEmployer or Kununu. Second, there are other, more general social media platforms like Facebook, Twitter and LinkedIn, which we did not include, where employees engage with their employer brands. Third, Brandwatch is
only one source of B2B brand rankings, and it should be borne in mind that these rankings are conducted for commercial purposes, rather than for the purposes of academic research. It is possible that we might have obtained different results had we used another source of B2B brand rankings. Fourth, while Hart’s theory of word choice and verbal tone, and the DICTION software, which is based on it, offers a solid conceptual framework and means for analyzing text, it constrains the researcher to analyzing those dimensions and variables only. Fifth, when using large samples such as those in this study, there is the possibility of a Type I error (false-positive), in that tests that are shown as significant might actually be trivial. We attempted to overcome this by reporting effects sizes, Cohen’s d, but further research would be warranted to confirm these results. Lastly, like most research that relies on voluntary contributions by respondents, there is almost certainly a response bias present in this data that is difficult to account for. Because people who write reviews tend to fall into extremes, love or hate, and we have only looked at extremes (one and five star reviews), we have not accounted for the whole spectrum of reviews that are present on Glassdoor.

Several avenues for future research arise from this work. First, this work is at a cross roads between qualitative and quantitative research. On the one hand, the data is qualitative. The research method was unobtrusive, did not involve directly interviewing respondents using pre-designed questionnaires, and allowed respondents to answer in their own words. On the other hand, we have quantified qualitative data by applying a theoretical framework implemented through software that assigns numbers to words. Thus, while we know what people are saying, we do not know more about why they are saying it. There would be much to learn from depth interviews or focus groups that dig deeper into the motivations for B2B employees’ engagement with these brands. Second, while we used DICTION’s predefined master-corpus in order to
operationalize Hart’s theory of word choice and verbal tone, DICTION has the facility for the user to employ their own dictionaries instead. For example, Aaker’s (1997) brand personality dimensions were converted into dictionaries in order to study the brand personalities of nations as expressed on their tourism websites (Pitt et al. 2007). The same dictionaries could in fact be applied to the text used here to examine employee brand engagement in a B2B environment, whilst still using the DICTION method to see whether this would provide additional or different insights. Other content analysis software, such as Leximancer or IBM’s Watson could also be applied to analyze employee reviews of B2B brands. Finally, the nature of the numerical output from DICTION lends itself well to analysis that permits positioning of objects and characteristics in multidimensional space. For example, the top ranked and bottom ranked firms could be used as columns, and the content dimensions or calculated variables could be used as rows, as input to a correspondence analysis procedure (Bendixen 1995; Greenacre 2007; Hoffman and Franke 1986). This would permit these to be displayed graphically so that further conclusions and inferences could be drawn.

CONCLUSION

How stakeholders such as customers and employees engage with a brand is a complex issue. For researchers studying this phenomenon, the domain is made complicated by the need to define issues such as breadth (are we talking about a single brand, a category of brands, or a corporate brand?) and depth (do we want deep understanding into how an individual- or a small group of stakeholders engage-, or do we want a broader overview of how a large number of stakeholders engage with a brand?). The study presented here attempts to provide insights with regard to stakeholder brand engagement at the corporate level, and gives a broad overview of
how a large number of stakeholders do this. Unlike most studies of brand engagement, the work presented here focuses on the engagement of stakeholders other than customers, and it does this in a B2B environment, rather than in B2C as is typically the case in most marketing studies. Moreover, it does so from the perspective of a strong theoretical framework, namely Hart’s theory of word choice and verbal tone, to study how B2B employees engage with their employer brands in social media.

It finds that there are significant differences between how the employees of top ranked B2B brands and how those of bottom ranked B2B brands engage with these in social media, and these findings are also established between top- and bottom rated employers. A finding that is interesting to speculate on, and one that might be worth investigating in the future is that employees of top ranked brands, as well as those who rate their brands highly, write reviews that are less optimal from a stylistic, linguistic perspective, when the findings regarding the calculated variables are considered. Their reviews tend to break some of the rules for what linguistics scholars such as Flesch (1951) and Boder (1927) would consider a well-written piece of text: They write reviews that are less insistent (or less “to the point”), and embellish more, and their reviews also tend to be more complex, or simply, more difficult to read.

As Lamberton and Stephen (2016) have stated, social media facilitate, first, individual expression by allowing an organization’s stakeholders to generate their own content and broadcast this to audiences that might range from just a few friends or family members, to the thousands of employees and potential employees of a large organization. Much of this content will be about the branded offerings they either love or hate or are indifferent to. Second, social media have become a major source of market intelligence for marketing practitioners as well as marketing scholars. The user generated content on social media about brands and how
stakeholders engage with them provides a data source that can sometimes be better than-, sometimes easier to obtain than-, and sometimes merely different to, the standard sources of data and research methods that managers have used, and academics exploited, in the past. Armed with powerful software to process this data, practitioners and scholars can shed new light on how stakeholders engage with brands.
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Johnson, W. 1946. "People in Quandaries; the Semantics of Personal Adjustment".


