Social media brand engagement practices: Examining the role of consumer brand

knowledge, social pressure, social relatedness, and brand trust

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Abstract

Purpose – The purpose of this paper is to deepen our understanding on social media brand engagement (SMBE) practices by exploring the impact of consumer brand knowledge, perceived social pressure, perceived social relatedness and the role of brand trust.

Methodology – A model is proposed to suggest the influence of consumer level antecedents and moderators of social media brand engagement. Following a survey design approach, data collected from 687 respondents on Facebook are examined through structural equation modelling using AMOS 23.0.

Findings **–** The findings reveal significant relationship between the examined antecedents (brand knowledge, perceived social pressure, and brand trust) and SMBE. Examination of the moderation role of perceived social relatedness (PSR) revealed significant interaction effects on the relationship between brand knowledge and SMBE, as well as perceived social pressure and SMBE. The findings also suggest a lack of interaction effect of PSR on the relationship between brand trust and SMBE.

Research limitations/implications – This research provides empirical evidence in support of understanding social media brand engagement practices by testing theoretically grounded hypotheses. The study focused on technologically savvy respondents and only Facebook users in Ghana, which could limit the generalisation of the findings reported.

Practical implications **–** This study illustrates a need for managers to integrate multi-communication channels to enhance brand interactions and engagements. Firms must also adopt strategies that would enhance the sharing of interesting information about their brands on their social media platforms to attract others through customer networks.

Originality –The conceptualization of SMBE in this study zooms out our understanding of online social media brand engagement by examining pertinent variables that drive or moderate consumer participation in SMBE activities. The integration of these variables brings out new empirical understanding and extends our knowledge on social media brand engagement.

Keywords: Social Media, Structural Equation Modelling, Human-Computer Interaction, Information Seeking Behaviour, Consumer Behaviour, Interactive media

Introduction

Social media plays a cardinal role in the consumer's life (Akman and Mishra, 2017; Prado-Gascó *et al.*, 2017) while serving as a conduit for brand connection and engagement (Dimitriu and Guesalaga, 2017; Osei-Frimpong and McLean, 2018). For instance, Solem and Pedersen (2016) note that social media channels provide a novel communication platform to encourage customers' participation in both social exchanges and brand engagement practices. In addition, given that there are over a billion Facebook users across the globe (Anderson *et al.*, 2016; Karikari *et al.*, 2017), more than 15 million businesses or brands have registered on Facebook globally (Koetsier, 2013) in an attempt to interact and engage with customers in the wider community. In effect, businesses are encouraged to have a social media strategy as part of their marketing efforts to engage with customers (Ashley and Tuten, 2015; Potdar *et al.*, 2018).

Consequently, the emergence of the Internet and social media has presented better interactive tools to strengthen brand engagement and relationships with customers independent of location (Felix *et al.*, 2017; Sashi, 2012). While it has become a norm for some consumers to engage with brands on social media (Dimitriu and Guesalaga, 2017), it is quite challenging to gauge their interest in such engagement practices (Dholakia, 2006; Osei-Frimpong, 2019). Hence, given the psychosocial factors (Bandura, 2001) that influence consumers' engagement behaviours, it is paramount for practitioners and scholars to gain deeper insights into some pertinent variables (including brand knowledge, social pressure, social relatedness, brand trust) that drive consumer participation in online brand engagement (Kang *et al.*, 2016; Karikari *et al.*, 2017). Also, given that this area of research is now emerging, which calls for a need to deepen our theoretical understanding of social media brand engagement behaviours (Dolan *et al.*, 2019), understanding the role of these pertinent factors in social media brand engagement practices is critically important. Relatedly, while Kang *et al.* (2016) provide interesting insights

into our understanding of online customer engagement practices, there is a need to examine other pertinent variables including; brand knowledge (Kang *et al.*, 2016), perceived social pressure (Karikari *et al.*, 2017), brand trust (van Doorn *et al.*, 2010), and perceived social relatedness (Sweeney *et al.*, 2014), and their inherent effects on consumer participation in social media brand engagement (SMBE) practices. Consequently, the selection of these pertinent variables in SMBE activities is considered critical taking into account their relevance in explaining the individual's behaviours and beliefs toward their participation. van Doorn *et al.* (2010) note that individual participant's predispositions toward a brand are likely precursors of their engagement behaviours. To this end, this study draws on the assumptions of social cognitive theory to lend support to examining the role of these factors in social media brand engagement practices.

Social cognitive theory (SCT) explains how human cognitive processes affect outcomes of interest (Bagozzi and Lee, 2002) and how people acquire and maintain certain behavioural patterns (Bandura, 1991). This theory has featured prominently in information systems (IS) literature (Chiu *et al.*, 2006), suggesting its relevance to understanding the consumers' participation in SMBE practices. Further, Bandura (2001, p. 266) alludes to a need to understand the psychosocial factors influencing behaviours in an era of social mass media, given that "our development, adoption, and change are embedded in social systems". The general assumption is that personal factors (e.g., perceived abilities such as brand knowledge, brand beliefs such as brand trust, etc.) coupled with behavioural patterns and environmental or social factors (e.g., perceived social pressure, perceived social relatedness, etc.) could drive an individual to engage in certain behaviours (Boateng *et al.*, 2016; Chiu *et al.*, 2006; Lee and Ma, 2012) such as SMBE participation.

In particular, Kang *et al.* (2016) emphasise a need to consider examining the effects of brand

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knowledge in online consumer engagement practices. For instance, a consumer having prior brand knowledge may be driven to seek further information (Brucks, 1985) by engaging in such practices. Further, while social pressure influence consumer participation in social media use (Karikari *et al.*, 2017), it is not known whether or not this could influence their participation in social media brand engagement activities. The general argument is that not all social media users follow brands on such platforms. In particular, while brand trust could be considered as an antecedent to consumer engagement (Brodie *et al.*, 2011; van Doorn *et al.*, 2010), trust has also been considered as an outcome of SMBE (Hollebeek, 2011). This study considers brand trust as part of beliefs consumers share or hold regarding brands, and hence, aligns with van Doorn *et al.* (2010) classification of trust as an antecedent of customer engagement behaviours. In addition, few studies have explored social media brand engagement practices (Dessart *et al.*, 2015; Hollebeek *et al.*, 2014; Osei-Frimpong and McLean, 2018; Potdar *et al.*, 2018), hence, there is limited empirical understanding of what drives consumer participation in SMBE activities (Dolan *et al.*, 2019).

In light of the above, this study takes a quantitative survey approach to explore the impact of consumer brand knowledge, perceived social pressure, brand trust, and perceived social relatedness on consumer social media brand engagement practices. As a result, this study seeks to achieve the following objectives: first, the study examines the influence of consumer brand knowledge, perceived social pressure and brand trust on SMBE. Second, to investigate the moderation effects of perceived social relatedness in SMBE activities. This study makes a number of significant contributions to the extant literature on social media and technology in human behaviour. The conceptualization of SMBE integrates the personal-level influencing factors (brand knowledge, brand trust), and perceived social factors (perceived social pressure and perceived social relatedness) through the lens of social cognitive theory (SCT) to significantly contribute to the social media brand engagement literature. This work also

responds to Ashley and Tuten (2015) and Kang *et al.* (2016) on a need to zoom out to further our understanding of online social media brand engagement by examining pertinent variables that could drive or moderate SMBE activities given the increasing interactive use of social media to engage customers.

The rest of this paper is organized as follows: first, the literature on social media brand engagement is reviewed followed by the hypotheses development. The next section describes the research methodology and discusses the statistical results. Finally, the findings are presented, followed with discussion and implications for theory and practice, and conclude with limitations and future research directions.

Brand Engagement Practices

Consumer brand engagement practices have gained traction in both research and practice in recent times. Hollebeek (2011, p. 790) defines customer brand engagement as "the level of an individual customer's motivational, brand-related and context-dependent state of mind characterised by specific levels of cognitive, emotional and behavioural activity in direct brand interactions". This presents a multidimensional attribute of customer engagement (de Villiers, 2015), which seems to build strong emotions and brand relationship. Further, brand engagement practices focus on the behavioural aspects of the customer-brand relationship (Hudson *et al.*, 2016; van Doorn *et al.*, 2010). While brand engagement on the part of the customer is considered as an individual's state of mind, the psychological state of the actor can influence their level of commitment, bonding and loyalty towards a brand (Brodie *et al.*, 2011). Accordingly, customer engagement gives participants the opportunity to exercise "voice", where they share their experiences in relation to the brand, or "exit", where they are likely to strengthen their relationship with the brand (van Doorn *et al.*, 2010). As a result, consumers voluntarily participate in brand engagement activities, which is driven by their own specific

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needs. In this case, participants commit their own resources (e.g., time, effort, cost, and cognitive abilities) to engage with brands. This study, therefore, pays particular attention in examining some pertinent drivers and consequences of consumer brand engagement practices on social media platforms.

Social Cognitive Theory and Social Media Brand Engagement (SMBE)

Social cognitive theory (SCT) has featured prominently in IS literature (Chiu *et al.*, 2006; Compeau *et al.*, 1999) and often considered as one of the most powerful theories to explain human behaviour. Accordingly, human behaviour is motivated by self-influence be it external or inherent. In this vein, Bandura (2001, p. 267) considers the "cognitive, vicarious, self-regulatory, and self-reflective processes as the central tenets of SCT". In effect, a consumer's intended behaviour towards SMBE practices could be considered as a function of their behaviour, personal (cognitive) and environmental (external) factors (Boateng *et al.*, 2016). Furthermore, Bandura (2001) notes that external factors influence behaviours indirectly through their cognitive processes. This suggests consumers' cognitive processes or factors help determine which social networking activities to observe and associate with, and its eventual participation.

In light of this, Bandura (1991) argues that human behaviour is largely driven and regulated by their self-influence, which not only acts as a mediating vehicle to external influences, but serve as the foundation of our actions. In this regard, Bandura (1991, p. 248) postulates three major self-regulative mechanisms, these include; "self-monitoring of one's behaviour, its determinants, and its effects; judgment of one's behaviour in relation to personal standards and environmental circumstances; and affective self-reaction". Primarily, individuals form beliefs and set goals for themselves in anticipation of some expected outcomes, partly driven by the

social or external environmental factors that tend to shape or influence their behavioural patterns.

Consequently, a consumer's participation in online social media brand engagement activities is anchored on these premises. While most researches on virtual community participation have focused on the effect of social influence, the critical role of "personal cognition" in such instances such as SMBE has received less attention (Chiu *et al.*, 2006; Dolan *et al.*, 2016). Effectively, consumers' participation in SMBE practices could be influenced by their prior experience (brand knowledge) and self-influence (beliefs such as brand trust) (Lee and Ma, 2012). Likewise, SCT gives prominence to the influence of perceived social factors (e.g. perceived social pressure and perceived social relatedness) that drive our actions and engagement behaviours.

This study builds on the assumptions of SCT to further our understanding of what drives consumers' participation in online SMBE practices. Social media platforms have created innovative avenues for social interactions and engagement practices in recent times. Although, this context-specific [*social media*] brand engagement is emerging (Dolan *et al.*, 2016), the concept of consumer brand engagement has long been discussed in the extant literature (e.g., Claffey and Brady, 2017; van Doorn *et al.*, 2010; Vivek *et al.*, 2012). What is peculiar to social media engagement platforms is the ease of which consumers are able to interact with the brand through their contributions, comments, among other reactions regardless of the location. Given the various conceptualisations of brand engagement in the literature (e.g., Brodie *et al.*, 2011; Claffey and Brady, 2017; Hollebeek *et al.*, 2014; Vivek *et al.*, 2012), this study adopts Osei-Frimpong and McLean's (2018, p. 12) definition of social media brand engagement as "*the connection, creation and communication of the brand's story between the firm and consumers (both existing and prospects), using brand or brand-related language, images and meanings*

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via the firm's social networking site resulting from motivational drivers".

Drawing on this definition, it is evident that engagement is behavioural driven by the consumer's motivation, which also goes beyond awareness, purchase, satisfaction and places much focus on the firm or brand (Hsieh and Chang, 2016; Sashi, 2012; van Doorn *et al.*, 2010). Vivek *et al.* (2012) place emphasis on the intensity of the consumer's level of participation in the engagement practices, which is critical given the amount of effort (be it physical, cognitive, or emotional) put in by an individual. In particular, social media brand engagement is dependent on customer characteristics, needs, motives and goals (Felix *et al.*, 2017). While these dependent elements define the rules of customer participation in SMBE activities (Osei-Frimpong and McLean, 2018), in essence, these motives could be personally or socially driven drawing on the assumptions of SCT (Bandura, 1991). The general assumption is that individuals are more likely to be personally or socially motivated depending on their needs satisfaction, beliefs and abilities in relation to their participation in SMBE activities. For instance, consumers with prior brand knowledge may be inclined to seek for new information from the brand (Brucks, 1985) to satisfy their personal goals.

The literature suggests the conceptualisation of consumer engagement goes beyond a pure action focus to rather incorporate socio-psychological and behavioural dimensions (Hollebeek *et al.*, 2014; So *et al.*, 2016). For instance, from the socio-psychological perspective, how do perceived social pressures and perceived social relatedness influence consumer participation in SMBE activities? In relation to the personal behavioural aspect, do consumer prior brand knowledge and brand trust drive their participatory behaviours in SMBE practices? It is envisaged that consumers participating in SMBE activities must have some psychological connection with the brand (So *et al.*, 2016). Hence, given the growing popularity of social media brand engagement in both practice and research, there is a need to integrate the socio-

psychological drivers (both personally and socially perceived), and the moderating role of perceived social relatedness, to further our understanding of social media brand engagement.

Hypothesised Model Development

Figure 1 illustrates the hypothesised model for the study, and the various relationships are discussed in detail.

Figure 1: Research Model
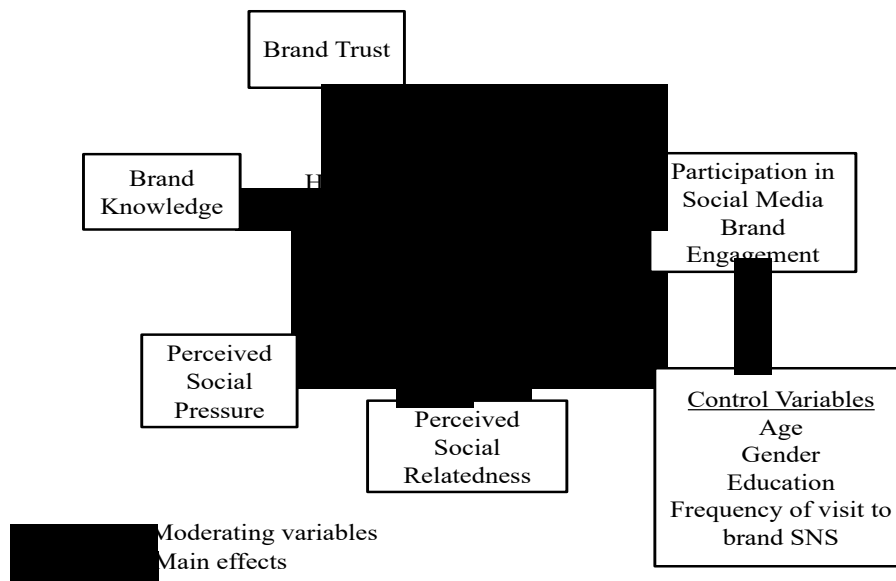
Brand Knowledge and Social Media Brand Engagement

Online social media brand engagement requires effort on the part of the participants who spend time, cost, and ability to follow brands on social media platforms by commenting, liking or reacting to a firm's post as well as post from other consumers. This study posits that consumer's knowledge of a process or brand is likely to influence their participation in social media brand engagement practices. This assertion is hinged on previous studies contending that brand knowledge could encourage consumers to search and gain new product information (Brucks,

1985; Hansen, 2017). The information-processing paradigm presents that consumers' exposure to a stimulus could elicit responses and contribute to the formation of prior knowledge (Brucks, 1985). According to Keller (2003, p. 596), brand knowledge can be defined in relation to a consumer's "personal meaning about a brand stored in consumer memory, that is, all descriptive and evaluative brand-related information".

Brucks (1985) explains three categories of brand knowledge to include subjective knowledge (what consumers perceive to know), objective knowledge (what is actually stored in the customer's memory), and experienced-based knowledge (usage experience with the brand). Among these categorisations, Flynn and Goldsmith (1999) note that subjective knowledge offers a stronger motivation of purchase intentions compared to objective knowledge. It could be argued that consumers brand related notions such as their awareness, brand attributes, benefits, images, and attitudes toward the brand are mainly driven by the subjective cognitions or experience. Consumers' prior knowledge of a brand could arouse their curiosity and attention to gaining more information on the brand. For instance, Simonson *et al.* (1988) found that consumers depend on their prior knowledge of a brand to ease their processing task in search of new information. Likewise, social cognitive theory (Bandura, 2001) assumes that individual personal factors including their cognition, beliefs and abilities (e.g. brand knowledge) drive their intentions and/or behaviours in participating in certain activities such as SMBE practices. This suggests that consumer's brand knowledge is likely to influence their participation in the social media brand engagement activities. Thus, the following hypothesis is presented:

H_1: A consumer's brand knowledge positively influences their participation in SMBE activities

Perceived Social Pressure and Social Media Brand Engagement

In explaining human behaviours toward social activities, social cognitive theory underscores the importance of social factors in driving such actions. In this case, while consumers can be proactive and engaged, the social context could project some differing interest. For instance, Karikari *et al.* (2017) note that social pressures are likely to influence behaviours that could either alienate or align consumers' interest toward social media use. Akman and Mishra (2017) found that perceived social pressure is positively related to consumers' behavioural intentions toward using social e-commerce. In effect, the perceived social pressure is determined by one's attitude and perceived behaviour, which influences their decision to perform a certain function or not (Ajzen, 1991; Akman and Mishra, 2017). Karikari *et al.* (2017) explain that social pressure drives a consumer's conviction as pertains to what his or her referent group (e.g., friends, parents, spouse etc.) believes in performing certain behaviours or functions. This suggests that consumers may feel pressured from others to use social networking sites and more so to follow brands on these platforms. Extending on the works of Karikari *et al.* (2017) and Akman and Mishra (2017), this study posits that consumers' perceived social pressure from others is likely to drive their interest in participating in social media brand engagement activities, thus, the following hypothesis is proposed:

> H_2: A consumer's perceived social pressure positively influence their participation in SMBE activities

Brand Trust and Social Media Brand Engagement

Brand trust has received much attention in research in recent years and particularly with regard to the social and online environment (Laroche *et al.*, 2013; Lee *et al.*, 2015). Trust is considered an important factor influencing consumers' decision to engage with and purchase from a brand.

In this regard, brand trust is viewed as an antecedent to social media brand engagement practices (van Doorn *et al.*, 2010). van Doorn *et al.* (2010) assert that a consumer's "predisposition" toward the brand is likely to drive their engagement behaviours. This assertion is underpinned in the assumptions of social cognitive theory suggesting that our beliefs influence our behavioural actions (Bandura, 2001; Boateng *et al.*, 2016). It could be argued that consumers' beliefs toward a particular brand in part define their level of trust relating to the brand. Brand trust is defined as the "willingness of the average consumer to rely on the ability of the brand to perform its stated function" (Chaudhuri and Holbrook, 2001 p. 82). Drawing from the definition, it could be argued that consumers may want to engage, share, and learn on the brand's social networking site because of the confidence they have in relation to the quality of information and the belief they hold in the brand's performance (De Matos and Rossi, 2008). Previous studies have established the critical importance of trust as a key construct that influence brand and networking activities on social media and other online platforms (Pentina *et al.*, 2013). As a result, it plays a key role in building and establishing long-term brand relationships. Hence, brand trust is particularly an essential factor that encourages and triggers consumers interest in engaging with brands on social media and other online platforms (Chahal and Rani, 2017). For instance, De Matos and Rossi (2008) consider trust as a behavioural construct that has the likelihood of influencing consumers to engage with brands or otherwise. On the basis of the above, this study posits that consumer's brand trust is likely to encourage brand engagement activities on social media; thus the following hypothesis is proposed:

H$_3$: A consumer's brand trust positively influence their participation in SMBE activities

Moderation effect of Perceived Social Relatedness

Motivational variables are considered to influence how individuals allocate effort to task and

it is assumed that these motivational interventions are likely to strengthen such an association (Yeo and Neal, 2008). Ryan and Deci (2000) argue that satisfying basic psychological needs influences consumers' behaviours, which projects their self-motivation and personality integration. Ryan and Deci (2000) further assert that the fundamental perceptions of autonomy, competence, and social relatedness stimulate the consumer's intrinsic motivation to perform certain social functions. Sweeney *et al.* (2014, p. 700) explain that relatedness "reflects a person's desire to feel related to significant others, to care for others, and to feel cared for". It is envisaged that consumers with prior knowledge of brands may be intrinsically driven to search and share more information with peers on social media platforms (Simonson *et al.*, 1988). In this case, the consumers' quest to feel related to others on brands' social media platforms is likely to reinforce their desire in searching and sharing brand information through social media brand engagement practices. Hence, drawing from social cognitive theory (Bandura, 2001), the social factors such as perceived social relatedness is likely to strengthen the association between the consumer's prior brand knowledge and social media brand engagement practices. Hence, this hypothesis is proposed:

> H_{4a}: Perceived social relatedness positively moderates the relationship between brand knowledge and online social media brand engagement practices.

Further, while consumers with prior brand knowledge are enthused in seeking new information, likewise, perceived social pressures also elicit their desire to engage in such activities. In this case, the perceived social relatedness is likely to reinforce their behaviours in participating in SMBE activities. Kim and Drumwright (2016) note that given the unique communicative capabilities of social media, consumers' perception of social relatedness is likely to enhance or shape their engagement behaviours with brands on such platforms. Effectively, social pressures from peers are perceived to influence social media participatory behaviours among individuals (Karikari *et al.*, 2017). Boateng *et al.* (2016) note that consumers' participatory behaviours in

SMBE could be driven by social and environmental factors. Hence, perceived social pressures coupled with perceived social relatedness is likely to reinforce consumers' participation in social media brand engagement activities. This suggests a potential interactive effect of perceived social relatedness on the relationship between perceived social pressures and social media brand engagement. Thus, this hypothesis is proposed:

H_{4b}: Perceived social relatedness positively moderates the relationship between perceived social pressure and online social media brand engagement practices.

Furthermore, previous studies have established the importance of this type of motivation in driving participants' level of involvement (Nagpaul and Pang, 2017; Sweeney *et al.*, 2014) in practices such as SMBE activities. Participants driven by autonomous motivation consider their involvement in SMBE activities as pleasant, interesting and fun. Relatedly, Kim and Drumwright (2016) found an interaction effect of perceived social relatedness on the association between motivation and consumer engagement on social media. In this case, consumers' level of trust towards the brand is sufficient motivation in driving their social media brand engagement participatory behaviours (van Doorn *et al.*, 2010). Although the potential interaction effects of perceived social relatedness on the relationship between brand trust and SMBE has not been established in the previous works, this study argues a likely moderation effect from the social cognitive theory perspective. The social cognitive theory asserts that consumers' beliefs (brand trust) coupled with social environmental factors (such as perceived social relatedness) are likely to strengthen the participatory behaviours in activities such as SMBE (Bandura, 2001). Extending on Kim and Drumwright (2016), it could be argued that consumers' perceived social relatedness is likely to moderate the effects of brand trust on social media brand engagement. Thus, this hypothesis is proposed:

H_{4c}: Perceived social relatedness positively moderates the relationship between brand trust and online social media brand engagement practices.

Methodology

Following a quantitative research approach, an online survey design was used in this study to better understand the SMBE phenomenon. This fundamental yet systematic and standardized research design was considered appropriate to help achieve the defined objectives and as well help obtain measurable and objective data from the respondents (Osei-Frimpong, 2017). This study is limited to Facebook users, but however, not focused on any particular brand. Facebook was selected because it is the "most ubiquitous example of social media" (Ferguson *et al.*, 2015, p. 305). 1023 consumers of Facebook in Ghana, who have experience following and engaging with brands on social media, were conveniently selected from Facebook users. This technology savvy population was selected considering their exposure to social media and their inclination to following brands. Prior to the main study, a pilot test with 30 respondents from the population of interest was conducted. A preliminary analysis of the pilot study satisfied the content validity and reliability of the data (Cronbach alpha > 0.7).

Data Collection

In the main study, Facebook users were interviewed using an online questionnaire. To ensure only respondents with prior experience following and engaging with brands on social media were involved in the study, inclusive and exclusive question was included in the questionnaire. Out of the 1023 respondents that responded to the messages posted on Facebook, 712 qualified respondents completed the questionnaire, suggesting the other respondents were excluded following the inclusion and exclusion question. Following an initial screening of the completed questionnaires, questionnaires with three or more unanswered questions were rejected following Hartline *et al.* (2000), which resulted in 687 useable questionnaires representing a valid response rate of 67.2%.

The respondents were made up of 44.8% males and 55.2% female. All respondents use social media more than twice a day. Further, respondents were asked to indicate the frequency of visiting and engaging with brands on their social media platforms. Following this question, the result indicates that, about 71.2% follow or engage with brands daily, 23.9% does it at least once a week, with the remaining 4.9% doing this at least once a month. The detailed respondent characteristics are presented in Table 1.

Table 1: Characteristics of Respondents

Respondent Characteristics	Frequency (n)	%
Gender		
Male	308	44.8
Female	379	55.2
Age (in years)		
20 – 29	268	39.0
30 – 39	208	30.3
40 – 49	77	11.2
50 – 59	134	19.5
Education		
Senior High School	56	8.2
Higher National Diploma	92	13.4
Undergraduates	287	41.8
Professional Qualification (e.g., ACCA, CIM, etc.)	41	6.0
Bachelor's Degree	146	21.3
Post-graduate Qualification	65	9.5
Frequency of visit to brand social networking page		
Multiple times daily	283	41.2
Once daily	206	30.0
Multiple times weekly	99	14.4
Once weekly	65	9.5
At least once a month	34	4.9

Measures

All scale items were drawn from the existing literature with slight modifications, and measured on a five-point Likert scale (unless specified) that ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). Perceived Social Relatedness was measured with a three-item scale adapted from Kim and Drumwright (2016). Again, a five-item scale was adapted from Osei-Frimpong and McLean (2018) to measure Social Media Brand Engagement. Also, Brand Trust was measured with a three-item scale adapted from Habibi *et al.* (2014). A three-item scale was developed from Akman and Mishra (2017) and Karikari *et al.* (2017) to measure Perceived

Social Pressure. Brand Knowledge was measured using a five-item scale developed and validated by Flynn and Goldsmith (1999), that mainly focuses on subjective brand knowledge of the consumer. All modifications were done with caution to suit the context of this research. All measures with their factor loadings are presented in Table 2.

Analysis and Results

The data was first screened using SPSS 23.0. Following the slight modifications made in the scale items, an exploratory factor analysis (EFA) was conducted using the principal component analysis and Varimax rotation Hansen (2017). The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.883, exceeding the cut-off value of 0.6 with a p-value $< .0001$ for Bartlett's Test of Sphericity. All items loaded well on constructs they were intended to measure and there was no evidence of cross loading. Following a confirmatory factor analysis (CFA) using AMOS 23.0, employing the maximum likelihood estimation, the internal consistency of the scale items was examined, with no evidence of cross loading. The factor loadings as presented in Table 2 and the fit indices indicated a reasonably fit to the data ($\chi^2_{(140)} = 406.111$ $\rho = .0001$, $\chi^2/df = 2.901$; GFI $= .941$; CFI $= .970$; RMSEA $= .053$).

Table 2: Scale Items and Factor Loadings

Item	Factor loading	CR	AVE
Perceived Social Pressure (Akman and Mishra, 2017; Karikari *et al.*, 2017)		0.862	0.677
Peers whom I respect would think that I should follow brands on social media	0.822		
People who are important to me participate in social media brand engagement activities	0.882		
Superiors whom I respect would think that I should follow brands on social media	0.759		
Perceived Social Relatedness (Kim and Drumwright, 2016)		0.806	0.581
"While engaging in the brand activity in social media, I felt …"			
A sense of contact with other people in social media	0.810		
Close and connected with other consumers because of a shared interest	0.741		
A strong sense of intimacy with the people on the brand social networking platform	0.733		

Brand Knowledge (Flynn and Goldsmith, 1999) — 0.919 | 0.695

I know pretty much about the brand I follow on social media	0.853
I feel very knowledgeable about the brand I follow on social media	0.840
Among my circle of friends, I know much about the brand I follow on social media	0.869
Compared to most other people, I know quite much about the brand	0.785
When it comes to this brand, I really do not know a lot (reverse scored)	0.820

Social Media Brand Engagement (Osei-Frimpong and McLean, 2018) — 0.913 | 0.723

I follow companies and their brands using social media	0.799
I participate in the brand engagement activities on social media	0.790
I participate in the brand engagement activities on social media to enable me share my experiences with others	0.857
I participate in the brand engagement activities to enable me reach personal goals	0.920
I participate in the brand engagement activities on social media due to the emotional attachment I have for the brand	0.830

Brand Trust (Habibi _et al._, 2014) — 0.916 | 0.784

This is an honest brand	0.856
I trust this brand	0.957
This brand is safe	0.839

Further analysis also satisfied discriminant and convergent validity of the measures following Fornell and Larcker (1981). The results presented in Table 3 indicate convergent validity was satisfied following the average variance extracted (AVE) values above .50 and construct reliabilities > .70. In addition, the AVE values were greater than the square of their correlations, hence, supporting discriminant validity.

Table 3: Reliability and Validity Results

	Mean	SD	CR	AVE	BTRU	SMBE	PSP	PSR	BKN
Brand Trust (BTRU)	3.73	0.62	0.916	0.784	0.886				
Social Media Brand Engagement (SMBE)	3.01	0.77	0.913	0.723	0.130	0.851			
Perceived Social Pressure (PSP)	3.33	0.77	0.862	0.677	0.272	0.186	0.823		
Perceived Social Relatedness (PSR)	3.33	0.72	0.806	0.581	0.217	0.207	0.510	0.762	
Brand Knowledge (BKN)	3.28	0.76	0.916	0.784	0.886	0.851	0.307	0.320	0.834

SD – Standard Deviation; CR – Construct Reliability; AVE – Average Variance Extracted

Before the structural equation modelling, common method bias and multicollinearity were checked. With regard to common method bias, Harman's one factor test in addition to

Podsakoff *et al.* (2003) approach were conducted. The Harman's one factor test showed the presence of all the factors in the model, and the most variance explained by one factor was 23.7%. Further, following Podsakoff *et al.* (2003) and Ranaweera and Jayawardhena (2014), a common latent factor was introduced and assigned it with all the items or indicators of the principal constructs included in the model in AMOS as an extension of the confirmatory factor analysis. The analysis indicated that while the indicators of the principal constructs explained an average variance of 0.69, the common latent factor explained an average variance of 0.10, with most of its coefficients being insignificant. Given the results above, common method bias is unlikely in the data. Further, multicollinearity of all the variables was checked using variance inflation factor (VIF). The highest value recorded among the variables was 1.836 suggesting that the assumption of multicollinearity was not violated when compared to a cut-off point of 10 (Hair *et al.*, 2014).

Structural Model Estimation Results

The full structural model was estimated using SEM with AMOS 23.0. The model evaluation presented the following acceptable fit indices ($\chi^2_{(160)}$ = 422.723, ρ < 0.001, χ^2/df = 2.642, GFI = .940, AGFI = .922, CFI = .967, TLI = .960, RMSEA = .049, PCLOSE = .613). A detailed list of the standardized path coefficients with their respective t-values and R^2 are presented in Table 4.

Table 4: Structural parameter estimates (standardized coefficients)

Paths	Focal Model		
	β	t-value	R^2
Brand Knowledge → Social Media Brand Engagement (H1)	.117**	2.707	0.092
Perceived Social Pressure → Social Media Brand Engagement (H2)	.240***	5.631	
Brand Trust → Social Media Brand Engagement (H3)	.159***	3.873	
Control Variables			
Age → Social Media Brand Engagement	-.022[ns]	-0.583	

Gender → Social Media Brand Engagement	.050^{ns}	1.322
Education → Social Media Brand Engagement	.013^{ns}	0.341
Frequency of visit to brand social networking site → Social Media Brand Engagement	-.059^{ns}	-1.546

***$p < 0.001$, **$p < 0.05$, ns – non-significant*

Results

The results (Table 4) indicate that the control variables (Age, Gender, Education, and Frequency of visit to brand social networking site) had no significant effects on consumers' participation in SMBE practices, and therefore, will not influence the findings. Effectively, brand knowledge had significant influence on participation in SMBE practices (β = .117, $p < 0.05$), hence, supporting hypothesis H1. This suggests that, consumers' prior knowledge of a brand motivates them to engage in SMBE activities to gain new information regarding the brand. Perceived Social Pressure also significantly influence consumer participation in SMBE activities as reported in Table 4 (β = .240, $p < 0.001$), hence, supporting hypothesis H2. This suggests that consumers are more inclined to yield to external pressures and for want of being associated with such a group are influenced to engage in SMBE activities. Further, brand trust also significantly influence consumer participation in SMBE activities as reported in Table 4 (β = .159, $p < 0.001$), hence, supporting hypothesis H3. The result indicates that customers trusting the brand are motivated to engage further with the brand on social media.

Interaction effects of perceived social relatedness

Following Xanthopoulou *et al.* (2007), the interaction effects were examined hierarchically using moderated SEM with AMOS 23. Following Ranaweera and Jayawardhena (2014) and McLean and Osei-Frimpong (2017), additional variables were created to test the interactive effects. The continuous independent variables (Brand Knowledge, Perceived Social Pressure, and Brand Trust) and the moderating variable (Perceived Social Relatedness) were changed

through mean centering, then created an interactive term by multiplying the independent variables and the moderating variable. This resulted in creating the following interactive terms: 'Brand Knowledge X Perceived Social Relatedness', 'Perceived Social Pressure X Perceived Social Relatedness', and 'Brand Trust X Perceived Social Relatedness'. The dependent variable (Social Media Brand Engagement) was regressed on the independent variables, the moderator (Perceived Social Relatedness), and the interactive terms. The results of the respective interaction tests are presented in Table 5.

Table 5: Results of moderated SEM interactions: dependent variable (Social Media Brand Engagement

Path	γ	t-value	β	R^2
Model 1:				
Brand Knowledge $\rightarrow$ Social Media Brand Engagement	.781	3.518	.775***	.101
Perceived Social Relatedness $\rightarrow$ Social Media Brand Engagement	.277	2.452	.252**	
Brand Knowledge X Perceived Social Relatedness $\rightarrow$ Social Media Brand Engagement (H4a)	.176	2.515	.153**	
Model fit indices: $\chi^2_{(195)}$ = 565.213, p < 0.001, GFI = .918, AGFI = .902, CFI = .959, RMSEA = .053				
Model 2:				
Perceived Social Pressure $\rightarrow$ Social Media Brand Engagement	.273	2.292	.274**	.170
Perceived Social Relatedness $\rightarrow$ Social Media Brand Engagement	.408	2.385	.410**	
Perceived Social Pressure X Perceived Social Relatedness $\rightarrow$ Social Media Brand Engagement (H4b)	.165	3.534	.136***	
Model fit indices: $\chi^2_{(195)}$ = 574.246, p < 0.001, GFI = .926, AGFI = .906, CFI = .965, RMSEA = .053				
Model 3:				
Brand Trust $\rightarrow$ Social Media Brand Engagement	.258	1.109	.040ns	.081
Perceived Social Relatedness $\rightarrow$ Social Media Brand Engagement	.992	.718	.911ns	
Brand Trust X Perceived Social Relatedness $\rightarrow$ Social Media Brand Engagement (H4c)	-.362	-.912	-1.592ns	
Model fit indices: $\chi^2_{(195)}$ = 584.421, p < 0.001, GFI = .913, AGFI = .900, CFI = .952, RMSEA = .054				

*** $\rho < 0.001$, ** $\rho < 0.05$; γ – Unstandardized Path Coefficient; β – Standardized Path Coefficient*

From Table 5 (Model 1), Perceived Social Relatedness was found to significantly moderate the influence of Brand Knowledge on SMBE, hence, supporting hypothesis H4a. The effects are pronounced given that, with 10.1% of explained variance, high levels of Perceived Social Relatedness caused a much stronger effect of the association between the consumer's Brand Knowledge and SMBE. Following Cohen *et al.* (2003) recommended procedure, the interaction effect was plotted to enhance its interpretation. The plot is illustrated with a positive slope in Figure 2.

Figure 2: Moderation effect of Perceived Social Relatedness (PSR) on Brand Knowledge (BKN) and Social Media Brand Engagement (SMBE)
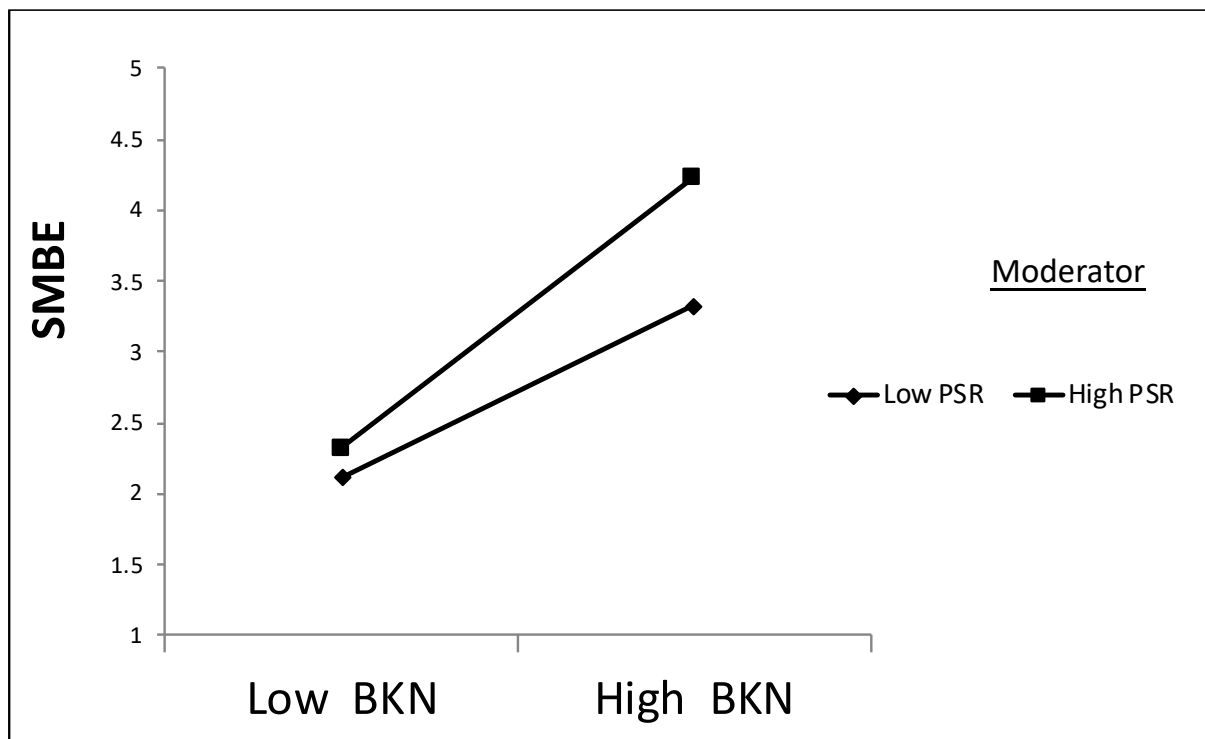
From Model 2 (Table 5), Perceived Social Relatedness significantly strengthened the positive effects of Perceived Social Pressure on SMBE. In particular, the introduction of the Perceived Social Relatedness construct caused a much stronger significant positive effect of Perceived Social Pressure on SMBE, which is also reflected in the 17.0% of explained variance. This

significant moderation effect as illustrated with a positive slope in Figure 3, suggests that while perceived social pressure is able to influence consumers to participate in SMBE activities, their perception of Social Relatedness among members on the platform rather strengthens such an association, hence supporting hypothesis H4b. On the contrary, there was no significant moderation effect of Perceived Social Relatedness on the path between Brand Trust and SMBE, hence, hypothesis H4c was not supported. This suggests that perceived social relatedness does not reinforce the significant relationship between brand trust and SMBE.

Figure 3: Moderation effect of Perceived Social Relatedness (PSR) on Perceived Social Pressure (PSP) and Social Media Brand Engagement (SMBE)
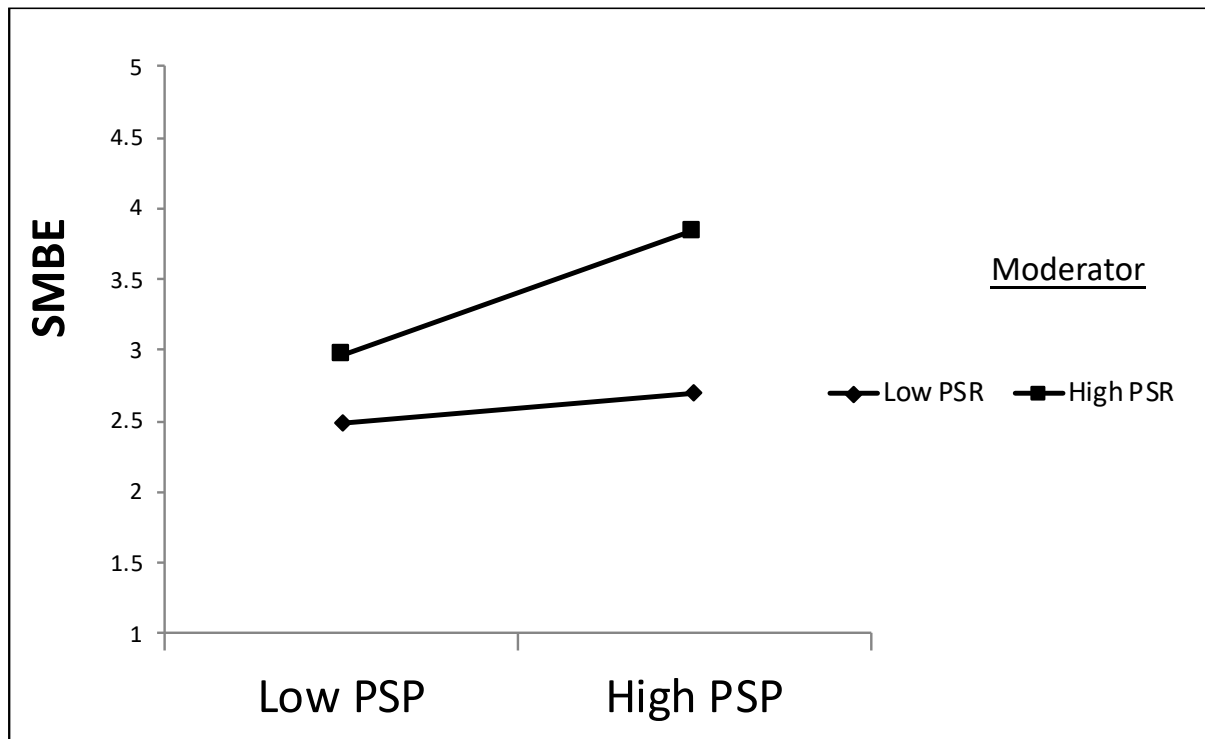
Discussion and Implications

This study proposes an integrated framework of social media brand engagement encompassing personal-level factors (brand knowledge and brand trust), perceived social factors (perceived social pressure and perceived social relatedness) from a social cognitive theory perspective.

The findings shed light on the application of social cognitive theory (SCT) on consumers' participation in SMBE activities. For instance, SCT argues that individuals' perceptions of a system or social practices consistent with their beliefs among other environmental factors are likely to drive behaviours toward certain activities (Bandura, 2005; Boateng *et al.*, 2016). Hence, this paper has established the role of consumers' prior brand knowledge, brand trust and perceived social pressure in social media brand engagement practices. While there is a general assertion that consumers with prior brand knowledge are inclined to seek further information (Brucks, 1985), its effect in driving consumer participation in SMBE activities has not been established. Also, this study confirms Karikari *et al.* (2017), and has established that perceived social pressure does not only drive individual social media use, but also motivate consumers to follow brands on social media platforms.

The interaction effects of perceived social relatedness was positive and significant. In addition, this moderating variable had a significant positive influence on the dependent variable (Social Media Brand Engagement) examined. The results reported in this study indicate both significant effects of the interaction terms and the moderating variable, which suggest that perceived social relatedness duly moderates SMBE taking into account the consumer's prior brand knowledge and perceived social pressure. Although, perceived social relatedness is largely used as an antecedent to consumer brand engagement practices on online communities, this in turn also moderates the process. This study therefore, provides new perspectives into the conceptual understanding of brand engagement and contends that perceived social relatedness on the part of the consumer moderates SMBE practices. Further, the significant interaction effect of perceived social relatedness on perceived social pressure and SMBE is suggestive of the importance of a person's desire to feel related to significant others (Sweeney *et al.*, 2014) and therefore, eager to participate in SMBE activities. This finding also extends on Kim and Drumwright (2016), and argues that while consumers' perceived social pressure

and prior brand knowledge could drive their motivation to participate in SMBE activities, their desire to feel related to others drawn from their autonomous motivation (Ryan and Deci, 2000) reinforces them to perform such practices.

Furthermore, brand trust had a significant positive relationship on social media brand engagement; however, this relationship is not moderated by perceived social relatedness. The finding reported in this study suggests that consumers' brand trust is a motivational factor that drives them to the brands social media platform to participate in engagement activities. While some studies have conceptualised brand trust as an outcome of consumer brand engagement (e.g. Habibi *et al.*, 2014; Hollebeek *et al.*, 2014), the conceptualisation of brand trust as an antecedent to SMBE established in this study aligns with van Doorn *et al.* (2010) and Brodie *et al.* (2011). This study therefore, provides empirical support to van Doorn *et al.* (2010) assertion that customers predisposition toward the brand is a likely determinant of their brand engagement behaviours. This also suggests that consumers who trust their brands are confident of the integrity of information shared on the brand's social media platform, hence, their desire to participate in such activities to share and learn more about the brand. This study argues that, consumers are more likely to participate in social media brand engagement activities when they trust the brand.

Surprisingly, the findings indicate a lack of significant positive moderation effect of perceived social relatedness on the relationship between brand trust and SMBE. While brand trust is considered a motivational variable which underscores the beliefs consumers hold on a brand (Chaudhuri and Holbrook, 2001), it was expected that the perception of social relatedness would rather encourage or upsurge consumers' participatory behaviours in SMBE. On the other hand, Kim and Drumwright (2016) assert that consumers who are intrinsically motivated are more likely to perform an activity at a level that may not be much affected by another intrinsic

motivational factor. Given that both brand trust and perceived social relatedness are considered as intrinsic motivational variables, it could be argued that consumers driven by their self-beliefs (brand trust) could maintain their level of engagement behaviours on brand platforms regardless of the level of perceived social relatedness. This also suggests a potential suppressing complementary effect between the two intrinsic motivational variables, hence, the unsupported moderation effect of perceived social related on the relationship between brand trust and SMBE."

From the above, the conceptualization of SMBE integrates the personal-level and social-level influencing factors and moderating effects of perceived social relatedness, and makes a significant contribution to the social media brand engagement literature. This work sheds light on our understanding of how prior brand knowledge, brand trust and perceived social pressures influence consumers engagement with brand on social media, and extends on Hollebeek *et al.* (2014); Kang *et al.* (2016) and Osei-Frimpong and McLean (2018) by examining these pertinent antecedent factors of SMBE and moderating variables of interest, focusing on general brands. While there is a lack of understanding on consumer-level factors (be it personal or social) that drive their participation in social media brand engagements drawing from the emergent nature of this research area (Dolan *et al.*, 2016), this work is one of the few studies to empirically examine the antecedents of social media brand engagement. In this regard, this research has explored essentially, how these consumer-level factors influence SMBE practices, and unearthed their motives of social media brand engagement, which is surprisingly lacking or missing in the literature given the vast amount of works done in social media research. Hence, this research provides new perspectives into the conceptual understanding of social media brand engagement from the consumer-level factors (personal and social) from the social

cognitive theoretical perspective and contends that brand knowledge, brand trust and perceived social pressure influence consumer participation in SMBE activities. It is also established in this study that the effects of brand knowledge and perceived social pressure on SMBE are duly moderated by perceived social relatedness.

Managerial Implications

In addition to the theoretical contributions highlighted above, this study also provides implications for practice or managers. The findings suggest consumers' prior brand knowledge drives consumers interest in participating in social media brand engagement practices. This suggests that while social media has come to shape brand communications in practice, these will not fully replace conventional above the line marketing communications (Sweeney *et al.*, 2014). Hence, there is a need for managers to build brand awareness or knowledge by engaging in other forms of communication channels, which will influence consumer interest in engaging with the brand on their social networking sites. Hence, a good integration of these channels is critical in enhancing brand interactions and engagements, which is likely to build brand trust and subsequently lead to brand purchase intention.

Further, it is established that perceived social pressure drives social media brand engagement practices, which suggests that consumers' referent groups are influential in their participation or not on such platforms. Thus, as consumers use social media with avidity, managers should employ techniques that would arouse interest and curiosity of others who are also likely to influence their peers, subordinates or superiors to attract their attention to the brand's social networking site. Presumably, normative social influence is powerful and persuasive that is likely to create pressure for individuals to adopt to certain practices (Akman and Mishra, 2017). As a consequence, firms must adopt strategies that would enhance the sharing of interesting information about their brand on their social media platforms to attract others through customer

networks. For instance, as outlined by Karikari *et al.* (2017), firms should share interesting messages or information on their social networking sites to stir up discussions that could allow participants to share their experiences on such platforms as well as their personal social media pages. The assumption is that participants sharing their experiences with others could motivate and encourage them to engage and share their experiences as well.

Relatedly, the brand's social media platform should be well managed to create a balance in the information sharing in a manner where users will be more active than the firm. Although, Osei-Frimpong and McLean (2018) call for a need for managers to adopt creative strategies in line with firm-generated content, similarly, users must also be encouraged to share relevant, accurate, and interpretable information and experiences to enhance consumer confidence and to elicit positive brand trust. Effectively, brand stories or comments from the firm should be well coordinated and align well with the brand's performance and positive experiences shared by other consumers. As established in the findings, consumers' brand trust is a likely determining factor in participating in SMBE activities. Managers should note that building trusting beliefs toward their brands by customers define their engagement behaviours. Managers should therefore ensure their brand's functional performance and experiential needs align with the messages they communicate to the public.

Further, there is a need for managers to develop approaches that could excite consumers to want to share their experiences with others, which could increase consumer participation in such social media brand engagement activities. Given that perceived social relatedness plays a critical moderating role in SMBE activities as established in this study, firms must make every effort to attract more consumers on their social networking sites, and encourage them to be involved and engage productively in the creation of the firm's offering.

Limitations and Directions for Future Research

This research provides empirical evidence backing the relationships between consumer level factors (brand knowledge, brand trust and perceived social pressure) and SMBE, and the moderating effect of perceived social relatedness in SMBE practices. However, there are some limitations that need to be considered. First, the study was cross-sectional meaning that respondents were not studied over a period of time. This makes it difficult to draw conclusions about causality. For instance, taking into account a consumer's perceived social relatedness that seems to influence their autonomous motivation, it will be interesting to employ a longitudinal experimental research to bring out other pertinent insights. In addition, future studies are encouraged to build and extend on the model presented here and consider other variables of interest such as the moderation effects of consumer demographics (e.g., age, gender, usage frequency), differential effects of pressures emanating from electronic word of mouth and offline word of mouth. In addition, examining the effects of other social factors and market characteristics on SMBE and the intended outcomes will be interesting to study. While perceived social relatedness moderates SMBE activities, future research could extend on this finding to establish the relative effects of perceived critical mass, perceived homophily, and other socio-psychological factors that could elicit some sense of belongingness on the part of the consumer. Furthermore, the lack of a significant positive interaction effect of perceived social relatedness on the relationship between brand trust and SMBE requires further research to explain the basis of this result and also to ascertain the results or otherwise.

The study is restricted to Ghanaian consumers or users of social media. Although, interesting findings are reported, it is encouraged that future research extends this scope to include social media users from other countries and conduct cross-cultural comparisons. It will be interesting to test this proposed model in other geographical locations to ascertain the reported findings.

Furthermore, this study did not focus on a specific product or brand, and therefore, presents an exploratory and generic view of the role of the variables in social media brand engagement and expected consequences. It could be argued that while this study provides good insights into the dynamics of SMBE, studying specific product or brand categories could present different effects given the product characteristics. Hence, future research is encouraged to examine specific brand categories to ascertain or otherwise the results reported here. In this case, future research could focus on examining how participant behaviours in SMBE could differ with regard to hedonic products and utilitarian products.

This study also acknowledges the limitation of employing a non-probabilistic sampling technique, as this could introduce some level of bias in our findings. Although this is not new (e.g., Mai and Olsen, 2015), the findings should be treated with caution and rather encourage future research to test our model in other context using probability-sampling technique to ascertain the findings. Finally, the study focusing mainly on technology savvy respondents on Facebook only could affect the tendency of generalizing the results, future research could employ a mixed sample of respondents to compare the effects of brand engagement practices on social media and offline.

REFERENCES

Ajzen, I. (1991), "The theory of planned behavior", *Organizational Behavior and Human Decision Processes*, Vol. 50 No. 2, pp. 179-211.

Akman, I. and Mishra, A. (2017), "Factors influencing consumer intention in social commerce adoption", *Information Technology & People*, Vol. 30 No. 2, pp. 356-370.

Anderson, S., Hamilton, K. and Tonner, A. (2016), "Social labour: Exploring work in consumption", *Marketing Theory*, Vol. 16 No. 3, pp. 383-400.

Ashley, C. and Tuten, T. (2015), "Creative strategies in social media marketing: An exploratory study of branded social content and consumer engagement", *Psychology & Marketing*, Vol. 32 No. 1, pp. 15-27.

Bagozzi, R.P. and Lee, K.-H. (2002), "Multiple routes for social influence: The role of compliance, internalization, and social identity", *Social Psychology Quarterly*, Vol. 65 No. 3, pp. 226-247.

Bandura, A. (1991), "Social cognitive theory of self-regulation", *Organizational Behavior and Human Decision Processes*, Vol. 50 No. 2, pp. 248-287.

Bandura, A. (2001), "Social cognitive theory of mass communication", *Media Psychology*, Vol. 3pp. 265-299.

Bandura, A. (2005), "The primacy of self‐regulation in health promotion", *Applied Psychology*, Vol. 54 No. 2, pp. 245-254.

Boateng, H., Adam, D.R., Okoe, A.F. and Anning-Dorson, T. (2016), "Assessing the determinants of internet banking adoption intentions: A social cognitive theory perspective", *Computers in Human Behavior*, Vol. 65pp. 468-478.

Brodie, R.J., Hollebeek, L.D., Juric, B. and Ilic, A. (2011), "Customer engagement: conceptual domain, fundamental propositions, and implications for research", *Journal of Service Research*, Vol. 14 No. 3, pp. 252-271.

Brucks, M. (1985), "The effects of product class knowledge on information search behavior", *Journal of Consumer Research*, Vol. 12 No. 1, pp. 1-16.

Chahal, H. and Rani, A. (2017), "How trust moderates social media engagement and brand equity", *Journal of Research in Interactive Marketing*, Vol. 11 No. 3, pp. 312-335.

Chaudhuri, A. and Holbrook, M.B. (2001), "The chain of effects from brand trust and brand affect to brand performance: the role of brand loyalty", *Journal of Marketing*, Vol. 65 No. 2, pp. 81-93.

Chiu, C.-M., Hsu, M.-H. and Wang, E.T. (2006), "Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories", *Decision Support Systems*, Vol. 42 No. 3, pp. 1872-1888.

Claffey, E. and Brady, M. (2017), "Examining Consumers' Motivations to Engage in Firm-Hosted Virtual Communities", *Psychology & Marketing*, Vol. 34 No. 4, pp. 356-375.

Cohen, J., Cohen, P., West, S.G. and Aiken, L.S. (2003), *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences.*, Lawrence Erlbaum, New Jersey.

Compeau, D., Higgins, C.A. and Huff, S. (1999), "Social cognitive theory and individual reactions to computing technology: A longitudinal study", *MIS Quarterly*, Vol. 23 No. 2, pp. 145-158.

De Matos, C.A. and Rossi, C.A.V. (2008), "Word-of-mouth communications in marketing: a meta-analytic review of the antecedents and moderators", *Journal of the Academy of Marketing Science*, Vol. 36 No. 4, pp. 578-596.

de Villiers, R. (2015), "Consumer brand enmeshment: Typography and complexity modeling of consumer brand engagement and brand loyalty enactments", *Journal of Business Research*, Vol. 68 No. 9, pp. 1953-1963.

Dessart, L., Veloutsou, C. and Morgan-Thomas, A. (2015), "Consumer engagement in online brand communities: a social media perspective", *Journal of Product & Brand Management*, Vol. 24 No. 1, pp. 28-42.

Dholakia, U.M. (2006), "How customer self-determination influences relational marketing outcomes: evidence from longitudinal field studies", *Journal of Marketing Research*, Vol. 43 No. 1, pp. 109-120.

Dimitriu, R. and Guesalaga, R. (2017), "Consumers' Social Media Brand Behaviors: Uncovering Underlying Motivators and Deriving Meaningful Consumer Segments", *Psychology & Marketing*, Vol. 34 No. 5, pp. 580-592.

Dolan, R., Conduit, J., Fahy, J. and Goodman, S. (2016), "Social media engagement behaviour: A uses and gratifications perspective", *Journal of Strategic Marketing*, Vol. 24 No. 3-4, pp. 261-277.

Dolan, R., Conduit, J., Frethey-Bentham, C., Fahy, J. and Goodman, S. (2019), "Social media engagement behavior: A framework for engaging customers through social media content", *European Journal of Marketing*, Vol. 53 No. 10, pp. 2213-2243.

Felix, R., Rauschnabel, P.A. and Hinsch, C. (2017), "Elements of strategic social media marketing: A holistic framework", *Journal of Business Research*, Vol. 70 No. 1, pp. 118-126.

Ferguson, R., Gutberg, J., Schattke, K., Paulin, M. and Jost, N. (2015), "Self‐determination theory, social media and charitable causes: An in‐depth analysis of autonomous motivation", *European Journal of Social Psychology*, Vol. 45 No. 3, pp. 298-307.

Flynn, L.R. and Goldsmith, R.E. (1999), "A short, reliable measure of subjective knowledge", *Journal of Business Research*, Vol. 46 No. 1, pp. 57-66.

Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39-50.

Habibi, M.R., Laroche, M. and Richard, M.-O. (2014), "The roles of brand community and community engagement in building brand trust on social media", *Computers in Human Behavior*, Vol. 37, pp. 152-161.

Hair, J.F., Black, W., Babin, B.J. and Anderson, R.E. (2014), *Multivariate data analysis*, Pearson Prentice Hall Upper Saddle River, NJ.

Hansen, T. (2017), "The moderating effects of financial broad‐scope trust on consumer knowledge, cognitive effort, and financial healthiness", *Journal of Consumer Behaviour*, Vol. 16 No. 2, pp. 161-175.

Hartline, M.D., Maxham III, J.G. and McKee, D.O. (2000), "Corridors of influence in the dissemination of customer-oriented strategy to customer contact service employees", *Journal of Marketing*, Vol. 64 No. 2, pp. 35-50.

Hollebeek, L.D. (2011), "Demystifying customer brand engagement: Exploring the loyalty nexus", *Journal of Marketing Management*, Vol. 27 No. 7-8, pp. 785-807.

Hollebeek, L.D., Glynn, M.S. and Brodie, R.J. (2014), "Consumer brand engagement in social media: Conceptualization, scale development and validation", *Journal of Interactive Marketing*, Vol. 28 No. 2, pp. 149-165.

Hsieh, S.H. and Chang, A. (2016), "The psychological mechanism of brand co-creation engagement", *Journal of Interactive Marketing*, Vol. 33pp. 13-26.

Hudson, S., Huang, L., Roth, M.S. and Madden, T.J. (2016), "The influence of social media interactions on consumer–brand relationships: A three-country study of brand perceptions and marketing behaviors", *International Journal of Research in Marketing*, Vol. 33 No. 1, pp. 27-41.

Kang, M., Shin, D.-H. and Gong, T. (2016), "The role of personalization, engagement, and trust in online communities", *Information Technology & People*, Vol. 29 No. 3, pp. 580-596.

Karikari, S., Osei-Frimpong, K. and Owusu-Frimpong, N. (2017), "Evaluating Individual Level Antecedents and Consequences of Social Media Use In Ghana", *Technological Forecasting & Social Change*, Vol. 123 No. October, pp. 68-79.

Keller, K.L. (2003), "Brand synthesis: The multidimensionality of brand knowledge", *Journal of Consumer Research*, Vol. 29 No. 4, pp. 595-600.

Kim, E. and Drumwright, M. (2016), "Engaging consumers and building relationships in social media: How social relatedness influences intrinsic vs. extrinsic consumer motivation", *Computers in Human Behavior*, Vol. 63pp. 970-979.

Koetsier, J. (2013), Facebook: 15 million businesses, companies, and organizations now have a Facebook page [Online]. Available at: https://venturebeat.com/2013/03/05/facebook-15-million-businesses-companies-and-organizations-now-have-a-facebook-page/ [Accessed 30 November 2017 2017].

Laroche, M., Habibi, M.R. and Richard, M.-O. (2013), "To be or not to be in social media: How brand loyalty is affected by social media?", *International Journal of Information Management*, Vol. 33 No. 1, pp. 76-82.

Lee, C.S. and Ma, L. (2012), "News sharing in social media: The effect of gratifications and prior experience", *Computers in Human Behavior*, Vol. 28 No. 2, pp. 331-339.

Lee, D., Moon, J., Kim, Y.J. and Mun, Y.Y. (2015), "Antecedents and consequences of mobile phone usability: Linking simplicity and interactivity to satisfaction, trust, and brand loyalty", *Information & Management*, Vol. 52 No. 3, pp. 295-304.

McLean, G. and Osei-Frimpong, K. (2017), "Examining satisfaction with the experience during a live chat service encounter-implications for website providers", *Computers in Human Behavior*, Vol. 76 No. November, pp. 494-508.

Nagpaul, T. and Pang, J.S. (2017), "Extrinsic and Intrinsic Contingent Self-Esteem and Materialism: A Correlational and Experimental Investigation", *Psychology & Marketing*, Vol. 34 No. 6, pp. 610-622.

Osei-Frimpong, K. (2017), "Patient participatory behaviours in healthcare service delivery: self-determination theory (SDT) perspective", *Journal of Service Theory and Practice*, Vol. 27 No. 2, pp. 453-474.

Osei-Frimpong, K. (2019), "Understanding consumer motivations in online social brand engagement participation: Implications for retailers", *International Journal of Retail & Distribution Management*, Vol. 47 No. 5, pp. 511-529.

Osei-Frimpong, K. and McLean, G. (2018), "Examining online social brand engagement: A social presence theory perspective", *Technological Forecasting and Social Change*, Vol. 128 No. March, pp. 10-21.

Pentina, I., Zhang, L. and Basmanova, O. (2013), "Antecedents and consequences of trust in a social media brand: A cross-cultural study of Twitter", *Computers in Human Behavior*, Vol. 29 No. 4, pp. 1546-1555.

Podsakoff, P.M., MacKenzie, S.B., Lee, J.-Y. and Podsakoff, N.P. (2003), "Common method biases in behavioral research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903.

Potdar, V., Joshi, S., Harish, R., Baskerville, R. and Wongthongtham, P. (2018), "A process model for identifying online customer engagement patterns on Facebook brand pages", *Information Technology & People*, Vol. 31 No. 2, pp. 595-614.

Prado-Gascó, V., Moreno, C.F., Sanz, A.V., Núñez-Pomar, J. and Hervás, C.J. (2017), "To post or not to post: social media sharing and sporting event performance", *Psychology & Marketing*, Vol. 34 No. 11, pp. 995-1003.

Ranaweera, C. and Jayawardhena, C. (2014), "Talk up or criticize? Customer responses to WOM about competitors during social interactions", *Journal of Business Research*, Vol. 67 No. 12, pp. 2645-2656.

Ryan, R.M. and Deci, E.L. (2000), "Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being", *American Psychologist*, Vol. 55 No. 1, pp. 68-78.

Sashi, C.M. (2012), "Customer engagement, buyer-seller relationships, and social media", *Management Decision*, Vol. 50 No. 2, pp. 253-272.

Simonson, I., Huber, J. and Payne, J. (1988), "The relationship between prior brand knowledge and information acquisition order", *Journal of Consumer Research*, Vol. 14 No. 4, pp. 566-578.

So, K.K.F., King, C., Sparks, B.A. and Wang, Y. (2016), "The Role of Customer Engagement in Building Consumer Loyalty to Tourism Brands", *Journal of Tourism Research*, Vol. 55 No. 1, pp. 64-78.

Solem, B.A.A. and Pedersen, P.E. (2016), "The effects of regulatory fit on customer brand engagement: an experimental study of service brand activities in social media", *Journal of Marketing Management*, Vol. 32 No. 5-6, pp. 445-468.

Sweeney, J.C., Webb, D., Mazzarol, T. and Soutar, G.N. (2014), "Self-Determination Theory and Word of Mouth about Energy-Saving Behaviors: An Online Experiment", *Psychology & Marketing*, Vol. 31 No. 9, pp. 698-716.

van Doorn, J., Lemon, K.N., Mittal, V., Nass, S., Pick, D., Pirner, P. and Verhoef, P.C. (2010), "Customer Engagement Behavior: Theoretical Foundations and Research Directions", *Journal of Service Research*, Vol. 13 No. 3, pp. 253-266.

Vivek, S.D., Beatty, S.E. and Morgan, R.M. (2012), "Customer engagement: exploring customer relationships beyond purchase", *Journal of Marketing Theory and Practice*, Vol. 20 No. 2, pp. 127-145.

Xanthopoulou, D., Bakker, A.B., Dollard, M.F., Demerouti, E., Schaufeli, W.B., Taris, T.W. and Schreurs, P.J. (2007), "When do job demands particularly predict burnout? The moderating role of job resources", *Journal of Managerial Psychology*, Vol. 22 No. 8, pp. 766-786.

Yeo, G. and Neal, A. (2008), "Subjective cognitive effort: a model of states, traits, and time", *Journal of Applied Psychology*, Vol. 93 No. 3, pp. 617-631.