

Author: Reham Shawky Ebrahim

Lecturer in Marketing – Faculty of Commerce, Tanta University

Tel: +201114768889

Email: reham.ibrahim@commerce.tanta.edu.eg

The impact of social media-based communities on building brand loyalty: An applied study on members of Facebook brand communities

Abstract

This paper is focusing on the transfer of consumer-relationships based on communities that built on social media platform to brand relationships. The brand community relationships are identified by: brand community identification, brand community engagement and brand community commitment; while brand loyalty represents the positive brand related outcome. Data is collected using questionnaire collected from a sample of 302 undergraduate students studying at University in Egypt. The findings show that brand community identification has a positive significant impact on both brand community engagement and brand community commitment. consumers dual engagement focusing on both the community and the brand motivate them to keep an enduring relationship with the community and the brand as well. The study reveals the importance of brand communities [groups and fan pages on Facebook) in building brand relationships.

Keywords:

Brand community identification, brand community engagement, brand community commitment, brand loyalty

1. Introduction

The emergence of social media and its interactive nature challenged to a great extent the influences of conventional marketing practices (Habibi et al., 2014). Many companies have moved to the complementary context of social media that constitute an important part of their online marketing strategies. Social media gives accessibility to both brands and consumers, and asserts the social entity of brands and the role of consumers as co-creators. Arguably, the mutual impact of social media on brands and consumers can be investigate using the lens of online brand communities (Habibi et al., 2016); representing the intersection of brand and consumers.

Brand communities are therefore extending the dyadic brand-consumer relationship by giving it a social structure (Muniz & O'Guinn, 2001); and allowing consumers to create a web of relationships (McAlexander et al., 2002). Through any social media channel, consumers either brand owners or non-owners, can join the brand community and share information, experiences, and stories about the brand. The role of brand communities is thus escalated by acting on behalf of the brand and providing an ideal context to build brand relationship and encourage loyalty. Brand managers develop tactics following the consumer empowerment approach to increase engagement with community members, and expand other practices from relationship marketing to engagement marketing (Dessart et al., 2019; Martínez-López et al., 2017).

The fan pages and groups created on social media channels such as Facebook or Twitter allow users to engage by commenting, sharing or liking posts, created by users or firms, and thus stimulating consumers' brand experience. Strong brand communities are of great value to marketers as they participate in maintaining and growing brand relationship (Kumar & Nayak, 2018). Brand community relationship can influence consumers to create positive attitudes, intentions and behaviours toward the brand and the community itself (Demiray & Burnaz, 2019; Dessart et al., 2016; Habibi et al., 2016; Kumar & Kumar, 2020; Laroche et al., 2012). Therefore, many of relationship marketing concepts are related to both the brand and community level, the key concept in such relationship is engagement; the anchor to brand community success.

Accordingly, this study gives special interest to brand communities based on social media channels specially Facebook; the world largest number of users. The number of active users on this media platform reaches 2.5 billion per month as the fourth quarter of 2019. The study is an attempt to investigate how brand communities are built on social media channels. As well as, identify the characteristics of these communities contributing to strong relationships among consumers, these relationships are then transmitted to the brand level. To achieve

these aims, the study proposes a conceptual model studying consumers-relationships related to both the community and the brand level.

2. Research problem

Consumer engagement in online brand communities-based on social media has received a significant attention from academics, practitioners and marketing professionals. These communities contribute to the success of companies; it serves as an efficient communication channel that allow both current and potential consumers, holding negative or positive passion for a brand, to establish a link based on their interest in the brand. The company's efforts to enhance consumer's engagement in social media brand pages will ultimately maintain a long-term relationship and facilitate the development of brand commitment and loyalty (Chan et al., 2014; Dessart et al., 2019).

Although, the concept of brand community witnessed a growing interest from several researchers; however, most of prior studies fall in three mainstreams. The first stream includes conceptual studies attempt to define brand community-based on social media and differentiate it from other types of virtual and online communities based on the company's website. The hallmarks or the traditional markers exhibited in a brand community are identified as shared consciousness, rituals and traditions and sense of moral (Muniz & O'Guinn, 2001). The second stream focuses on the outcomes of social media-based brand communities on brand trust (Habibi et al., 2014). The study of Habibi et al., (2016) examined the impact of brand community on brand relationship quality and brand loyalty mediated by the community markers and relationships levels. Finally, the third groups of studies examined the drivers of different behaviours conducted at the brand community level such as participation (Hajli et al., 2017), and engagement (Simon et al., 2016).

However, the dynamics of brand community relationship is still unidentified, that is the enhancement of brand relationship through consumer's engagement in social media-based brand community (Gómez et al., 2019; Kumar & Nayak, 2018; Laroche et al., 2012). This study aims to examine the shift from community-based relationship to brand related outcomes. It proposes and empirically test a conceptual model that define the facets of brand community; the characteristics of consumer-community relationship, that drive loyalty; a brand related outcome. This model sheds light on the importance of brand community engagement endorsed as a predictor of community based and brand related relational outcomes. Finally, the study is focusing on social media; the natural setting of interactivity that promotes for consumers engagement behaviour.

The study is structured as follows: the first section is a review of the basic concepts related to the research topic and a justification of the hypotheses proposed in the conceptual model, followed by the research methodology and data analysis techniques. Finally, is the discussion of the research findings, then the theoretical and managerial implications.

3. Research objectives

This study aims to:

Provide an understanding of how consumers' brand community relationships based on social media channels can be transmitted to brand-related outcomes.

As a result, the main objectives of this study are as follows:

- 1- Identify the characteristics of brand community based on social media that constitute brand community relationships.
- 2- Identify the dual role of brand community engagement in building and enhancing relationships at the community level and the relational transfer to the brand level.
- 3- Develop a conceptual framework that provide an understanding of the mechanisms through which the community-based relationships result in brand-based relationships.
- 4- Assess empirically the framework concerning the relationships between the three realms of brand community: identification, engagement and commitment, and brand loyalty
- 5- Extrapolate the results and suggest managerial implications to practitioners.

4. Research importance

Uncovering the significance of consumer's community-based relationships in generating brand-based relationship contributes to the extant literature through the followings:

- 1- It highlights the importance of brand community identification in enhancing consumers' engagement and commitment toward the brand community; thus, emphasise the importance of social and psychological sense in building brand communities.
- 2- It defines the three realms of brand community by considering the social identity of members or consumers, intrinsic motivational and emotional aspects.
- 3- It emphasis the role of social media platform specially Facebook in building consumer-brand relationships.

Besides these theoretical implications, this study also contributes to the managerial understanding on brand management in certain ways, as follows:

- 1- It helps managers to benefit from brand community in having loyal brand consumers.
- 2- It helps practitioners to enhance consumers' engagement in an online brand community by cultivating a culture where member members can share their knowledge, experiences and information.
- 3- This study stands with recent Facebook strategies enhancing interactive posts and stories, and brand-related activities.
- 4- The study is expected to help firms to design programs promoting for brand communities through the brand's unique image, personality and value to be in synchronisation with each other.

5. Literature review

The term of community was firstly introduced by Boorstin, (2010) relating it to consumption and defining it as invisible societies created by consumers sharing how and what they consume. A community is an entity of members with mutual interests who share their cognitive and emotional experiences and knowledge (McAlexander et al., 2002). The social bond around the brand, this how Muniz & O'Guinn, (2001) firstly introduce the idea of brand community defining it as "a specialised, non-geographically bond community, based on a structured set of social relationships among admirers of brand". This triadic perspective; consumer-brand-consumer, was then expanded by McAlexander et al., (2002) adopting a consumer-centric perspective. Hence, they define brand community as the integration of consumer interdependent experiences at four levels: company, product, brand, and other owners. These initial conceptualisation of brand communities are obsolete; it did not count for the interactions offered by new technologies, emergence of social media, that change the medium for brand communications (Balduş et al., 2015).

It can be argued that the evolution of brand community has passed through three stages: from traditional communities to online communities then to social media-based communities. In the traditional communities the membership is involuntarily, it is subject to geographical and time constraints that impose time and efforts costs, and it follows face to face interaction mode. The internet draws the virtual identity of brand communities, it thus eliminates geographical and time limitations and allows for volitional uncostly participation (Alalwan et al., 2017; Wirtz et al., 2013). Online brand communities refer to the virtual social aggregation of individuals engaging in online interactions and integrating through the communications of contents developed by community members (Jang et al., 2008).

Alike communities' characteristics, brand community exhibit three traditional markers; shared consciousness, rituals and traditions and sense of moral responsibility. Consciousness of kind or shared consciousness refers to the common intrinsic feel of belonging to the group. The ties and connections between the group members that distinguish their community from others. Rituals and traditions refer to the shared symbolic meanings of the community including culture, history, stories, and other behavioural norms and values governing the group. Sense of moral responsibility is the feeling of commitment to participate for the welfare of group fellows (Habibi et al., 2014; Muniz & O'Guinn, 2001).

The utilisation of Web 2.0 greatly emphasis users' participation and social interactions with self-selected online communities (Hajli, 2014). When Web 2.0 and user-generated content are combined with brand community they lead to the initiation of "social-media based brand community;" a subset of virtual community but on a social media platform. The basic three components comprising these are: consumers' brand experiences, the aggregation of community members, and the relationship among members (Li et al., 2019).

Companies are getting benefits from brand communities based on different channels of social media like Facebook and Twitter either initiated by them or by users, creating a pathway to online environment (Laroche et al., 2012). Through brand communities different likeminded people are engaging; sharing their unique experiences and obtaining information. People are joining social media groups or follow a brand fan page to fulfill the feelings of sense of belongingness, being recognised and socially connected (Zaglia, 2013). Social media provide different context to brand communities; however, the majority of prior studies are either investigating brand communities or social media separately.

Social media is hosting millions of users' private profiles, and at a wide scope, users can generate networked relationships, and create, share, and collaborate content (Tuten & Solomon, 2017). Accordingly, the distinguishable characteristics of social media may alter that of virtual brand communities in terms of its rationality, formation, users' perception and motivations and key markers (Zaglia, 2013). The study of Zaglia, (2013) revealed that, from users' perspective, joining or creating social media brand communities, group or fan page, is effortless. Consumers are requesting group membership to receive information and get advices from knowledgeable and experienced user, and to share their passion for a brand. With regard to the characteristics of brand communities, the three markers are existed; however, the domination of these aspect differs depending on the type of sub-group: group or fan page.

5.1 Brand community engagement

The concept of engagement has been widely used in many academic disciplines such as sociology, psychology, organisational behaviour (Saks, 2006), educational psychology (Skinner & Belmont, 1993). In the last decade and since the transfer “engagement” to the area of marketing, it gained a remarkable notability and had been listed at the top-priority of topics to be investigated. The underlying importance of engagement stems from being lying in relationship marketing and adding value to consumer-brand relationship; by going beyond the interactive experiential nature of this relationship to capture consumers’ active responses as co-creator of brand value (Dessart et al., 2015; Vivek et al., 2012).

Engagement is a context dependent state that can occur at different levels and towards any object (Hollebeek, 2011). Although there is no agreement on a common definition of engagement; however, the similarities among various definitions extrapolate its significant characteristics. First, engagement is the behavioural manifestation behind consumer’s psychological state induced from his/her interactive experiences toward an object and mapping the development of loyalty (Bowden, 2009; van Doorn et al., 2010). Second, engagement is a motivational state derived from the interactions that cause deep involvement and connections between a subject and an object, consumers are the key subjects while the objects, forming engagement base, may include brands (Hollebeek, 2011; Wong & Merrilees, 2015), organisation activities, media (Calder & Malthouse, 2015), virtual communities (Wirtz et al., 2013), and social media (Habibi et al., 2014, 2016). Consumers can engage with multiple objects simultaneously, for example the brand and the community members (Brodie et al., 2013; Dessart et al., 2015), the organisational offerings and activities (Vivek et al., 2012, 2014).

The following table, (table 1) provides an overview of community engagement conceptualised in previous research. Engagement in the online context depicts user’s intrinsic motivation to interact and cooperate with (brand) community members (Algesheimer et al., 2005; Baldus et al., 2015). The interactive behaviours and practices among community members include information sharing, product/brand-related experiences, interpersonal exchanges and communication, and participation in community online and offline activities (Kuo & Feng, 2013).

This study is focusing on engagement between the consumers or users of social media sites and the two levels of brand community; the relationship with the brand and community members. Prior studies attempt to identify the drivers that motivate consumers engagement behaviour in online brand communities;

these factors can be categorised into product/brand-related, community-based or social drivers, and consumer factors.

Table 1 Conceptualisation of community engagement

Authors	Research type	Engagement base	Definition	Dimensionality
(Kumar & Nayak, 2018, p.66)	Empirical quantitative	Community activities and members	BCE is “consumers' altruistic behaviours towards other members, dynamic participation in joint activities, and voluntary actions in the support of the initiatives endorsed by the community to enhance community value for oneself as well as for others”	Unidimensional (motivational) (4 statements)
((Simon et al., 2016, p.411)	Empirical quantitative	Brand, community activities, and community members	BCE is “consumer’s behavioural manifestations, such as sharing and socializing with the online brand community on Facebook”	Unidimensional (behavioural) (5 statements)
(Baldus et al., 2015, p.978)	Empirical qualitative and quantitative	Brand, community activities, and members	OBCE is “the compelling intrinsic motivations to continue interacting with an online brand community”	Multi-dimensional
(Wirtz et al., 2013, p.30)	Conceptual	Brand community members	OBCE is “an identification with the online brand community (OBC) that results in interactive participation in the OBC”	
(Laroche et al., 2012, p.1758)	Empirical quantitative	Community activities and members	CE is “the process of working collaboratively with relevant	Unidimensional (4 statements)

			partners who share common goals and interests”	
(Calder & Malthouse, 2015, p.322)	Empirical	Websites	Online engagement “A collection of experiences” (consumer's beliefs about how a site fits into his/her life) “with the site.”	Multi-dimensional
(Algesheimer et al., 2005, p.21)	Empirical quantitative	Brand community activities and members	CE is “the positive influences of identifying with the brand community, which are defined as the consumer’s intrinsic motivation to interact and cooperate with community members”	Multi-dimensional (4 statements)

According to the study of Simon et al., (2016) consumer engagement in a brand community is influenced by consumer-brand identification and self-image enhancement value acting as internal personal factors. In this study, the authors focus on social identity and social exchange theory in investigating the impact of user characteristics on brand community engagement.

The social identity theory posits that individual’s perceptions of belonging to a group is to identify his/her self-concept. Accordingly, it is suggested that the involvement and engagement in community activities, increases social identification and enhance self-enhancement. While the social exchange theory focuses on the values or the benefits of engagement behaviour with group members, at the community level, the rewards are self-recognition and enhancement of self-image. The results of this study revealed that consumers are incorporating the brand into their self-concept and they are engaging in brand communities based on social media to express their sense of belonging.

Moreover, consumers value mostly the channels through which they can form favourable impressions on others and thus enhance their self-image such as brand pages on Facebook. Another value or benefits derived from the hedonic perspective of brand communities is the experiential benefit; the group activities, events, and discussions appealing to consumer’s sensorial, emotional, social (behavioural), and intellectual responses. Accordingly, the online experiential benefits, representing the perceived community values, positively influence brand community engagement (Kumar & Kumar, 2020). In the same essence,

Wang et al., (2019) emphasize the role of both social and informational value in influencing consumers' engagement with the brand community. They also uncover the role of consumer characteristics; mainly extraversion, who enjoy sociable activities, in strengthening the impact of social benefits on brand community engagement.

On contrary, Vernuccio et al., (2015) support that experiential engagement; social-interactive engagement, the holistic experience of consumers socialising and participating in an online community, allow consumers to develop their social identity. Accordingly, consumers are engaging with a community to feel the sense of belonging to the group members and enhance their self-concept on one hand and on the other the social identity is created from consumer experiential engagement with group members.

The type of community plays an important role in the relationship between social-identification and community engagement behaviour, consumers; hence consumers show greater motivation to participate in consumer created communities (Lee et al., 2011). To stand on the role of both brand and community forces, Cruz & Lee, (2014) provide insights to the significant impact of brand personality in online brand engagement intensity; moreover, the congruence between the offline and online social media brand personality significantly influence online brand sentiment.

On the other hand, brand community engagement exerts numerous significant outcomes at the brand relationship such as brand loyalty (Kumar & Kumar, 2020), brand relationship quality (Habibi et al., 2016; Khan & Khattak, 2017), and brand trust (Laroche et al., 2012) and at the community level it affects brand community commitment (Kumar & Kumar, 2020) and perceived relationship benefits (Gummerus et al., 2012) and also on consumer attitudes and behaviours; loyalty intentions (Kumar & Nayak, 2018).

5.2 Brand community identification

Consumers can build strong relationships with the brand (e.g. Stokburger-Sauer et al., 2012; Tuškej et al., 2013) and the group (Bagozzi & Dholakia, 2006). Theoretically, social identity is part of an individual's self-concept derived from the knowledge of group membership and the consequent value and emotional attachment to that membership (Tajfel, 1978). Following the social-psychological approach, social identity is composed of three dimensions: cognitive, evaluative and emotional. Consumer awareness of membership in a group is created through his/her sense of belonging which constitutes the cognitive dimension, the value connotation derived from this membership that constitute the evaluative dimension and lastly the emotional attachment to the group that denotes the emotional dimension (Ellemers et al., 1999).

Moreover, Ellemers et al., (1999) argue that the prevailing aspect of social identification is commitment, the emotional dimension that define the individual's inclination to join a group. Later, research show that collective identity can be captured by two dimensions only namely the cognitive and the motional which overlap with brand community markers: shared consciousness and traditions and rituals respectively (Laroche et al., 2012). Additionally, these two dimensions show prevalence in Facebook group communities (Zaglia, 2013). Li et al., (2019) suggests that social connections in a community develop relationships manifested by identification and commitment.

Brand community identification (BCI) describes the strength consumer's relationship with a brand community (Algesheimer et al., 2005), it captures the dynamics of consumer connections to community and brand at the same time (Hung & Lin, 2015). Recent studies document that the drivers enhancing consumer's degree of belongingness to a brand community are the community characteristics (Hung & Lin, 2015; Phua et al., 2017), and the firm-created content on an online community which depends much on the platform settings, for example friendly navigation and media content (Demiray & Burnaz, 2019). This sense of identification with a group results in positive and negative consequences for consumers at the level of self, such as brand choice, brand satisfaction, and brand loyalty (Stokburger-Sauer, 2010) and at group level by showing willingness to help and support other group members' through recommendations and positive word-of-mouth (Hung & Lin, 2015).

5.3 Brand community commitment

Social groups allow their members to cognitively identify themselves; self-categorisation and being distinguishable among group members, and obtaining a positive self-concept. A psychological bond is then created defines commitment toward the group. Commitment is defined as an individual intentions and desires to maintain an enduring relationship with a group, holding group responsibilities and related to its promising valued outcomes (Moorman et al., 1992).

Previous research found that alongside the prevalence of internet, commitment stands out as an important factor influencing both attitudinal and behavioural brand-related outcomes; brand loyalty (Jang et al., 2008; Kumar & Kumar, 2020), brand commitment (Kuo & Feng, 2013) purchase intention and word-of-mouth (Demiray & Burnaz, 2019).

6. Conceptual model and hypotheses development

6.1 Conceptual model

The proposed research framework (fig.1) elaborates on brand relationship transferred from brand community relationships dimensions. Based on previous research, brand community identification, brand community engagement (Algesheimer et al., 2005; Bagozzi & Dholakia, 2006; Kumar & Nayak, 2018) and brand community commitment (Li et al., 2019; Zhou et al., 2012) are identified as important indicators of community-based relationship. The model proposes that consumers joining the brand community on social media channels such as Facebook, or Twitter are enhancing their self-categorisation. Which in turn will enhance their engagement to the brand community and intentions toward having sustained relationships with group members; hence affecting the development of brand loyalty. Also, the role of brand community engagement mediating the influence of brand identification on enhancing both community and brand relationships is examined.

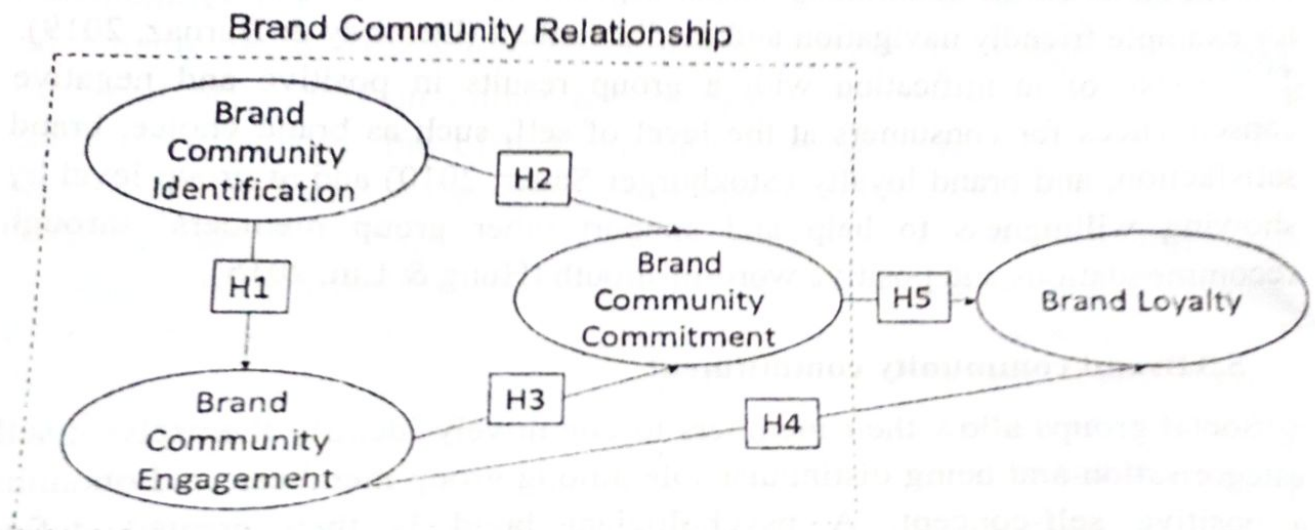


Figure 1: Conceptual framework

6.2 Hypotheses development

6.2.1 The effect of brand community identification

Based on the social identity theory proposed by Tajfel, (1978) consumers' perceptions of belongingness to brand community increase their participation with group activities and involvement with the brand. Consumers tend to value the group that endorses their enhanced self-identification and self-categorisation and are likely to engage in different practices and activities such as detailed information and personalised solutions (Algesheimer et al., 2005). The interactive experience between members distinct self-identity and group-identity exhibit high level of commitment toward brand-related group (Demiray &

Burnaz, 2019). Accordingly, brand community identification is the domain for relationship building that is expanded by consumers' engagement behaviour (Khan & Khattak, 2017) and psychological attachment.

H1: Brand community identification will have a positive effect on brand community engagement.

H2: Brand community identification will have a positive effect on brand community commitment.

6.2.2 The relationship between brand community engagement and commitment

The process of consumer engagement outlines the development of consumer-brand relationship and loyalty. The relationship between engagement and loyalty and other positive related consequences is well-constructed and supported in prior studies (e.g. Bowden, 2009; Dessart et al., 2015; France et al., 2016).

At the community level, the benefits pursue the engagement behaviour and positive perceptions of interactions with group members impose a positive disposition toward the brand community (Kuo & Feng, 2013). The reciprocating behaviour of consumers sustain the developed bonds they created at different levels; company, brand, and consumers, and increases their commitment toward online communities (Chan & Li, 2010). Moreover, the brand community theory posits that members engaging in value creation practices grow their sense of obligations and responsibility to both members and community.

In brand communities, consumer engagement plays a central role in relational exchange process and generates the pathway to relational constructs including commitment, self-brand connections, brand attachment and loyalty (Brodie et al., 2011).

H3: Brand community engagement will have a positive effect on brand community commitment.

6.2.3 Antecedents of brand loyalty

Building online brand communities contribute to brand loyalty (Laroche et al., 2012; Muniz & O'Guinn, 2001; Zhou et al., 2012). Brand loyalty is defined as favourable attitudinal and behavioural responses to a brand (Oliver, 1999; Yoo & Donthu, 2001). Both engagement and commitment play a crucial role in enhancing loyalty behaviours (Hur et al., 2011; Jang et al., 2008). Consumer identification to a community leads to positive outcomes manifested by greater community engagement and favourable attitudes toward holding a long-term relationship that goes beyond the act of purchase (Dessart et al., 2015).

H4: Brand community engagement will have a positive effect on brand loyalty

H5: Brand community commitment will have a positive effect on brand loyalty

7. Methodology and results

7.1 Sample and data collection

The target population of the study is active members of brand communities on Facebook brand pages and groups who lives in Egypt. By February 2019, the number of Facebook users in Egypt reached about 4,0140000, 31.6% of this figure are undergraduate students aged 18 to 24 (Napoleoncat, 2019)) and this age group constitute 18% of the Egyptian population (CAPMAS, 2019). Undergraduates are of the top users of technological devices and social media; therefore, they conform the aim of the study (Yang et al., 2017) . A non-probability convenience sample was used to test hypotheses of the proposed conceptual model, this sample type is commonly used in brand community and engagement research (France et al., 2016; Hollebeek et al., 2014).

The data was collected from undergraduate students in Tanta University, using paper-based self-administered questionnaire in two languages: English and Arabic, over a period of two month starting from September, 2019. During that period, 600 were distributed among students and only 302 valid responses were collected; however, a sample size of 200 is considered acceptable for the current study (Kline, 2015). The female respondents represented 62.3% while 38.7% were male, ranging in age from 18 to 21 with an average age of 19. The majority of the respondents are intensive users of Facebook social media platform.

The questionnaire has a cover page that include a synopsis of the study's aim, consent of respondents' voluntary participation and the contact information of the corresponding researcher. The instrument consists of two sections; the first section is related to the respondents' social media experiences and demographic characteristics. The opening of this section is a screening question ensuring that respondents meet the target specifications. The second section is related to the constructs of interest, the questions are derived from established valid scales in prior studies (Churchill, 1979). In this part participants were asked to think of the brand page or group they follow on Facebook and to keep it in their mind while answering the coming questions.

The brand community identification was measured using four items adapted from (Habibi et al., 2016) and Hung & Lin, (2015). The measurement scale of brand community engagement consists of four items, adapted from Algesheimer et al., (2005) and Laroche et al., (2012). Brand community commitment scale is based on (Zhou et al., 2012) and consists of four items as well, finally brand loyalty three items scale is derived from Laroche et al., (2012). All the items were scored on five-point Likert scale ranging from (1) strongly disagree to (5) strongly agree.

7.2 Data analysis and results

The validity and reliability of the constructs were assessed using exploratory and confirmatory factor analysis subsequently. EFA is conducted by SPSS 26.0 using the principal component analysis and varimax rotation. The measure of sampling adequacy was evaluated using Kaiser-Meyer-Olkin (KMO) index suggesting the factorability of the data with a value of 0.833. Four factors were extracted namely: brand community identification, brand community engagement, brand community commitment and brand loyalty, with eigenvalue 1.8 explaining 78% of the total variance and acceptable communalities ranging from 0.71 to 0.84. The reliability test reveal that all constructs have good reliable measures with acceptable Cronbach alpha's value ranged from 0.8 to 0.927 exceeding threshold of 0.7.

Structural equation modelling was developed using maximum likelihood procedure, the measurement model was firstly tested by AMOS 24.0 yielding a satisfactory statistical fit ($\chi^2 = 209$; $p > .000$; $df = 84$, $CFI = 0.96$, $SRMR = 0.042$, $IFI = 0.96$). The standardised factor loading estimates are higher than 0.5, with the lowest value equals 0.74 and significant critical ratios above the threshold of ± 1.96 ($p < 0.001$). All the average variance extracted exceeds the recommended value of 0.5 and the internal consistency of constructs were assessed by composite reliability starting from 0.8, thus considered good. Both table 2 and 3 support the existence of convergent and discriminant validity. Finally, common method variance was assessed, the Harman's single-factor test supports the unlikely existence of method bias problem (Podsakoff et al., 2003).

Table 2 Correlation matrix

Constructs	BCI	BCE	BCC	BL	CR**	Variance Extracted	Cronbach Alpha α
BCI	0.842*				0.918	0.737	0.917
BCE	0.270	0.860*			0.927	0.761	0.927
BCC	0.301	0.342	0.811*		0.900	0.694	0.900
BL	0.024	0.230	0.235	0.664*	0.815	0.595	0.814

* SQRT (AVE)
 ** CR: composite reliability

Table 3 Measure development

Item	Mean	Std. Dev.	Factor loading
Brand community identification (Habibi et al., 2016)			
BCI1: I am very attached to this brand community	4.11	1.13	0.877
BCI2: I see myself as an integral part of this brand community	4.06	1.08	0.867
BCI3: The friendship I have with other brand community members means a lot to me.	3.94	1.09	0.887
BCI4: I feel a sense of belonging toward this brand community.	4.05	1.14	0.799
Brand community engagement (Algesheimer et al., 2005; Laroche et al., 2012)			
BCE1: I benefit from following this brand community's rules.	4.20	1.09	0.883
BCE2: I am motivated to participate in the activities because I feel good afterwards or because I like it.	4.18	1.06	0.854
BCE3: I am motivated to participate in this brand community's activities because I am able to support other members	4.18	1.05	0.879
BCE4: I am motivated to participate in this brand community's activities because I am able to reach personal goals	4.19	1.08	0.875
Brand community commitment (Zhou et al., 2012)			
BCC1: I would feel a loss if this brand community is no longer available.	3.98	1.20	0.890
BCC2: I really care about the fate of this brand community.	3.88	1.01	0.766
BCC3: The relationship I have with this brand community is one I intend to maintain indefinitely.	3.84	1.03	0.783
BCC4: The relationship I have with this brand community is important to me	3.91	1.274	0.887
Brand loyalty (Laroche et al., 2012)			
BL1: I consider myself to be loyal to this brand	4.08	0.88	0.740
BL2: If this brand is not available at the store, I would buy the same brand from some other store	4.00	0.84	0.794
BL3: I am willing to pay more for my brand	3.86	0.83	0.780

The structural model is specified by five structural relationships between the exogenous construct; brand community identification, and three endogenous constructs; brand community engagement, brand community commitment and brand loyalty. the structural model yielded an adequate level of fit ($\chi^2 = 210$; $p < .000$; $df = 85$, CFI = 0.96, SRMR = 0.045, IFI = 0.96). The hypotheses are tested by diagnosing the path estimates using critical value t-value, all the hypotheses are supported, see table 4. Both brand community engagement and brand community commitment were positively and significantly explained by brand community identification with standardised path coefficient (SPC) of 0.065,

0.075, t -value = 4.34, 3.61 respectively at significance level of p less than 0.001, thus supporting H1 & H2. Brand community engagement exerted a positive significant influence on brand community commitment with path estimate 0.071 at significance level of p less than 0.0001, H3 is accepted. Finally, brand loyalty is explained by brand community engagement; supporting H4 (SPC = 0.041, t = 2.49, $p < 0.05$), and brand community commitment; supporting H5 (SPC = 0.047, t = 2.41, $p < 0.05$).

Table 4 Path estimates

Path	Path coefficient	t-value	Sig.	R ²
H1: BCI→BCE	0.065	4.345	0.000	0.269
H2: BCI→BCC	0.075	3.615	0.000	0.224
H3: BCE→BCC	0.071	4.576	0.000	0.282
H4: BCE→BL	0.041	2.491	0.016	0.168
H5: BCC→BL	0.047	2.411	0.013	0.175

8. Discussion and implications

The propose of this research was to propose and empirically test the role of brand communities based on social media in building brand relationships; that is transmitting the brand relationships from the platform of online communities to create brand-based outcomes such as loyalty. The study defines the characteristics of brand community relationships by identification, engagement and commitment. Therefore, it considers the strength of consumer's connections with the community and its focal brand, their motivations toward interactions with community members and desires to have enduring relationships on the community base and related to the brand.

The findings support that brand community identification will have a positive significant effect on brand community engagement and brand community commitment. This shows consistency to a number of prior studies (Algesheimer et al., 2005; Khan & Khattak, 2017; Kumar & Nayak, 2018) emphasising that identification is a prerequisite to experience the extra-role behaviour and involve within the boundaries between ingroup members and outsiders; non-members. These strong feelings among group members with the sense of obligation and identification enhance their value creation through engagement in support and participation activities. Moreover, members are encouraged towards building an enduring relationship with the group members; thus, demonstrating the emotional aspect of their social and psychological sense of brand community.

The findings also reveal the significance of the positive effect of brand community engagement on emphasising consumer mutual relationship with the platform of social media community and the brand. Firstly, this study adds to the extant literature and support the direct impact of engagement behaviour on the commitment of community members. The majority of prior studies support the indirect relationship, Algesheimer et al., (2005) posit that the engagement behaviour elicits the willingness of consumers to continue their membership to brand community to ensure the replication of positive rewards captured. While, community interactivity allows consumers to pursue information sharing and product or brand knowledge and grow the dynamics of effective ties and connections with other inspiring members. The engagement behaviour triggers consumers to perceive the benefits of group membership and denotes their intentions to keep a long-term relationship with the community (Kuo & Feng, 2013). In line with (Chan & Li, (2010) and Raies et al., (2015) consumer engagement in communities reinforce bonds and high levels of different commitment types; affective, calculative and normative. Secondly, consumers participation in virtual communities enhances their loyalty to brands.

The results of this study contribute to the extant literature in three folds. Firstly, it accentuates the importance of brand community in consumer-brand relationship and defines the cornerstones characterising a brand community; the notion of aggregating people around the brand thus forming a structured set of social relations. Consumers are joining communities for self-categorisation and self-identity to enhance the social-self aspect; therefore, they are motivated to deeply engage in communities. The higher the level of identification they experience the more they are motivated toward engaging to this community and developing strong bonds with members to assure the continuity of community-based relationship.

Secondly, it authenticates that engagement evolved to elevate relationship marketing by unfolding the interactions between the engaged subjects and multi-focal objects (e.g. brand and community). The duality of engagement-focus allows for the integration of objects; therefore, the engagement to both community and brand is intertwined and the significance of their impact cannot be isolated. This mutual impact of brand community engagement is transferring the consumer relationships at the community level to the brand level.

Thirdly, the dynamics of engagement-community relationships provide a path way for brand community identification leading to favourable behavioural and attitudinal responses towards brands. Unlike what is prevailing in brand literature, consumer engagement and commitment to a community can be translated directly to brand loyalty. brand community characteristics may be sufficient to initiate intimate relationships with the brand. that is being part of a

community focusing on a brand with an aspect of identification which creates the motivation of participation triggering the emotional side of consumer to sustain their membership.

In addition to the theoretical implications, this study also contributes to the benefit of brand managers. The results of the study support the transition of customer relationship from community to brand, thus emphasising the importance of brand communities on social media in building strong brands.

Beside the theoretical implications, the study contributes to the utility of brand managers and practitioners by highlighting the prominence of social media and the necessity of designing new marketing related tactics. The results of the study go beyond the ordinary use of having a brand online channel on the social media platform; increase brand accessibility to unbelievable consumers at a low cost and in short time, it thus emphasis the use of these communities as a tool for enhancing brand-related relationships. These groups or fan pages are used effectively in C2C relationship with social orientation that facilitate the social value among members. The brand should be the tie that link the self-identification of members in the group and motivate them to engage by sharing information, brand knowledge, and stories about the brand; hence, consumers community-based relationships are rendered by brand. Marketers should correspond to consumers social needs of belonging to a group by the means of brand community membership.

From the results it was revealed that brand community identification facilitates consumers' dual engagement; towards the community and the brand. Accordingly, it is suggested that at the essence of such communities, managers need to develop an engaging culture cultivating consumers desires to keep an enduring relationship with other members and the brand itself. However, the relationships with the brand should be the core constituent for administrating and building the communities. The dynamics of virtual communities are of strategic importance to brand success since the inherent community ties and bonds experienced by both new comers and old members are reflected at the brand level.

It worthwhile that the platform of Facebook allows brand users to constitute communities for the brand they are fan of; hence, managers need to support these communities and use them as brand endorsers. On the other hand, the brand fan pages and/or group hosted by the company should focus on self-directed drivers through the content of its News Feed and posts that influence the identification level of members. Facebook new strategy is encouraging interactive posts and deemphasising passive ones despite being enjoyable or informative. Following social identity marketing strategies that adhere with Facebook strategies, consumers pursue posts that provide them with special promotions or incentives,

create touch points with authorised people in the company, and keep them up to date about the brand.

9. Limitations and future research

This study suffers from the following limitations: first, the sample is a convenient sample of undergraduate students and it also depends on one social media channel; Facebook, this hinder the generalisability of the results. Second, the used cross-sectional survey approach did not capture the long-term behaviour of community members. Third, the study did not consider the duration of community membership; it did not differentiate between new and old members. Finally, the study is conducted in Egypt only; therefore, the results might be different when the model is tested in different county and using the data from other platform such as Twitter and Instagram.

Future research should consider the impact of the multidimensions of engagement and community, add other brand-related outcomes such as brand advocacy and differentiate between attitudinal and behavioural loyalty. In order to have deeper understanding of brand community other identifiable constructs that determine the quality of brand-community relationship should be added to the model such as brand community satisfaction and trust.

References

- Alalwan, A. A., Rana, N. P., Dwivedi, Y. K., & Algharabat, R. (2017). Social media in marketing: A review and analysis of the existing literature. In *Telematics and Informatics* (Vol. 34, Issue 7, pp. 1177–1190). Elsevier Ltd. <https://doi.org/10.1016/j.tele.2017.05.008>
- Algesheimer, R., Dholakia, U. M., & Herrmann, A. (2005). The Social Influence of Brand Community: Evidence from European Car Clubs. In *Journal of Marketing* (Vol. 69).
- Bagozzi, R. P., & Dholakia, U. M. (2006). Open Source Software User Communities: A Study of Participation in Linux User Groups. *Management Science*, 52(7), 1099–1115. <https://doi.org/10.1287/mnsc.1060.0545>
- Baldus, B. J., Voorhees, C., & Calantone, R. (2015). Online brand community engagement: Scale development and validation. *Journal of Business Research*, 68(5), 978–985. <https://doi.org/10.1016/j.jbusres.2014.09.035>
- Boorstin, D. J. (2010). *The Americans: the democratic experience*. Vintage.
- Bowden, J. (2009). The process of customer engagement: A conceptual framework. *Journal of Marketing Theory and Practice*, 17(1), 63–74. <https://doi.org/10.2753/MTP1069-6679170105>
- Brodie, R. J., Hollebeek, L. D., Jurić, B., & Ilić, A. (2011). Customer engagement: Conceptual domain, fundamental propositions, and implications for research. *Journal of Service Research*, 14(3), 252–271. <https://doi.org/10.1177/1094670511411703>
- Brodie, R. J., Ilic, A., Juric, B., & Hollebeek, L. (2013). Consumer engagement in a virtual brand community: An exploratory analysis. *Journal of Business Research*, 66(1), 105–114. <https://doi.org/10.1016/j.jbusres.2011.07.029>
- Calder, B. J., & Malthouse, E. C. (2015). Media Engagement and Advertising Effectiveness. In *Kellogg on Advertising & Media* (pp. 1–36). John Wiley & Sons, Inc. <https://doi.org/10.1002/9781119198154.ch1>
- CAPMAS. (2019). *Central Agency for Public Mobilisation and Statistics*. Retrieved February 15, 2019, from Central Agency for Public Mobilisation and Statistics
- Chan, K. Wa., & Li, S. Y. (2010). Understanding consumer-to-consumer interactions in virtual communities: The salience of reciprocity. *Journal of Business Research*, 63(9–10), 1033–1040. <https://doi.org/10.1016/j.jbusres.2008.08.009>
- Chan, T. K. H., Zheng, X., Cheung, C. M. K., Lee, M. K. O., & Lee, Z. W. Y. (2014). Antecedents and consequences of customer engagement in online brand communities. *Journal of Marketing Analytics*, 2(2), 81–97. <https://doi.org/10.1057/jma.2014.9>
- Churchill, G. A. (1979). A Paradigm for Developing Better Measures of Marketing Constructs. *Journal of Marketing Research*, 16(1), 64–73. <https://doi.org/10.1177/002224377901600110>
- Cruz, R. A. B., & Lee, H. J. (2014). The Brand Personality Effect: Communicating Brand Personality on Twitter and its Influence on Online Community Engagement. *Journal of Intelligence and Information Systems*, 20(1), 67–101. <https://doi.org/10.13088/jiis.2014.20.1.067>
- Demiray, M., & Burnaz, S. (2019). Exploring the impact of brand community identification on Facebook: Firm-directed and self-directed drivers. *Journal of Business Research*, 96, 115–124. <https://doi.org/10.1016/j.jbusres.2018.11.016>
- Dessart, L., Aldás-Manzano, J., & Veloutsou, C. (2019). Unveiling heterogeneous engagement-based loyalty in brand communities. *European Journal of Marketing*, 53(9), 1854–1881. <https://doi.org/10.1108/EJM-11-2017-0818>

- Dessart, L., Veloutsou, C., & Morgan-Thomas, A. (2015). Consumer engagement in online brand communities: A social media perspective. *Journal of Product and Brand Management*, 24(1), 28–42. <https://doi.org/10.1108/JPBM-06-2014-0635>
- Dessart, L., Veloutsou, C., & Morgan-Thomas, A. (2016). Capturing consumer engagement: duality, dimensionality and measurement. *Journal of Marketing Management*, 32(5–6), 399–426. <https://doi.org/10.1080/0267257X.2015.1130738>
- Ellemers, N., Kortekaas, P., & Ouwerkerk, J. W. (1999). Self-categorisation, commitment to the group and group self-esteem as related but distinct aspects of social identity. *European Journal of Social Psychology*, 29(2–3), 371–389.
- France, C., Merrilees, B., & Miller, D. (2016). An integrated model of customer-brand engagement: Drivers and consequences. In *Journal of Brand Management* (Vol. 23, Issue 2, pp. 119–136). Palgrave Macmillan Ltd. <https://doi.org/10.1057/bm.2016.4>
- Gómez, M., Lopez, C., & Molina, A. (2019). An integrated model of social media brand engagement. *Computers in Human Behavior*, 96, 196–206. <https://doi.org/10.1016/j.chb.2019.01.026>
- Gummerus, J., Liljander, V., Weman, E., & Pihlström, M. (2012). Customer engagement in a Facebook brand community. *Management Research Review*, 35(9), 857–877. <https://doi.org/10.1108/01409171211256578>
- Habibi, M. R., Laroche, M., & Richard, M.-O. (2014). The roles of brand community and community engagement in building brand trust on social media. *Computers in Human Behavior*, 37, 152–161. <https://doi.org/10.1016/j.chb.2014.04.016>
- Habibi, M. R., Laroche, M., & Richard, M.-O. (2016). Testing an extended model of consumer behavior in the context of social media-based brand communities. *Computers in Human Behavior*, 62, 292–302. <https://doi.org/10.1016/j.chb.2016.03.079>
- Hajli, M. N. (2014). A study of the impact of social media on consumers. *International Journal of Market Research*, 56(3), 387–404. <https://doi.org/10.2501/IJMR-2014-025>
- Hajli, N., Shanmugam, M., Papagiannidis, S., Zahay, D., & Richard, M.-O. (2017). Branding co-creation with members of online brand communities. *Journal of Business Research*, 70, 136–144. <https://doi.org/10.1016/j.jbusres.2016.08.026>
- Hollebeek, L. (2011). Demystifying customer brand engagement: Exploring the loyalty nexus. In *Journal of Marketing Management* (Vol. 27, Issues 7–8, pp. 785–807). <https://doi.org/10.1080/0267257X.2010.500132>
- Hollebeek, L. D., Glynn, M. S., & Brodie, R. J. (2014). Consumer brand engagement in social media: Conceptualization, scale development and validation. *Journal of Interactive Marketing*, 28(2), 149–165. <https://doi.org/10.1016/j.intmar.2013.12.002>
- Hung, H.-Y., & Lin, T.-L. (2015). A moderated mediation model of consumers' role behaviors in brand communities. *Asia Pacific Management Review*, 20(3), 191–200. <https://doi.org/10.1016/j.apmr.2014.12.014>
- Hur, W., Ahn, K., & Kim, M. (2011). Building brand loyalty through managing brand community commitment. *Management Decision*, 49(7), 1194–1213. <https://doi.org/10.1108/00251741111151217>
- Jang, H., Olfman, L., Ko, I., Koh, J., & Kim, K. (2008). The influence of on-line brand community characteristics on community commitment and brand loyalty. *International Journal of Electronic Commerce*, 12(3), 57–80. <https://doi.org/10.2753/JEC1086-4415120304>

- Khan, Z., & Khattak, A. (2017). Developing Brand Relationship Quality through Online Brand Communities. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, 11(1), 275–292.
- Kline, R. B. (2015). *Principles and practice of structural equation modeling*. Guilford publications.
- Kumar, J., & Kumar, V. (2020). Drivers of brand community engagement. *Journal of Retailing and Consumer Services*, 54, 101949. <https://doi.org/10.1016/j.jretconser.2019.101949>
- Kumar, J., & Nayak, J. K. (2018). Brand community relationships transitioning into brand relationships: Mediating and moderating mechanisms. *Journal of Retailing and Consumer Services*, 45, 64–73. <https://doi.org/10.1016/j.jretconser.2018.08.007>
- Kuo, Y.-F., & Feng, L.-H. (2013). Relationships among community interaction characteristics, perceived benefits, community commitment, and oppositional brand loyalty in online brand communities. *International Journal of Information Management*, 33(6), 948–962. <https://doi.org/10.1016/j.ijinfomgt.2013.08.005>
- Laroche, M., Habibi, M. R., Richard, M. O., & Sankaranarayanan, R. (2012). The effects of social media based brand communities on brand community markers, value creation practices, brand trust and brand loyalty. *Computers in Human Behavior*, 28(5), 1755–1767. <https://doi.org/10.1016/j.chb.2012.04.016>
- Lee, D., Kim, H. S., & Kim, J. K. (2011). The impact of online brand community type on consumer's community engagement behaviors: Consumer-created vs. marketer-created online brand community in online social-networking web sites. *Cyberpsychology, Behavior, and Social Networking*, 14(1–2), 59–63. <https://doi.org/10.1089/cyber.2009.0397>
- Li, S., Modi, P., Wu, M.-S. (Sharon), Chen, C.-H. (Steve), & Nguyen, B. (2019). Conceptualising and validating the social capital construct in consumer-initiated online brand communities (COBCs). *Technological Forecasting and Social Change*, 139, 303–310. <https://doi.org/10.1016/j.techfore.2018.11.018>
- Martínez-López, F. J., Anaya-Sánchez, R., Molinillo, S., Aguilar-Illescas, R., & Esteban-Millat, I. (2017). Consumer engagement in an online brand community. *Electronic Commerce Research and Applications*, 23, 24–37. <https://doi.org/10.1016/j.elerap.2017.04.002>
- McAlexander, J. H., Schouten, J. W., & Koenig, H. F. (2002). Building Brand Community. *Journal of Marketing*, 66(1), 38–54. <https://doi.org/10.1509/jmkg.66.1.38.18451>
- Moorman, C., Zaltman, G., & Deshpande, R. (1992). Relationships between Providers and Users of Market Research: The Dynamics of Trust within and between Organizations. *Journal of Marketing Research*, 29(3), 314–328. <https://doi.org/10.1177/002224379202900303>
- Muniz, A. M., & O'Guinn, T. C. (2001). Brand Community. *Journal of Consumer Research*, 27(4), 412–432. <https://doi.org/10.1086/319618>
- Napoleoncat. (2019). *Napoleoncat.com*. Retrieved September 18, 2019, from <https://napoleoncat.com/stats/facebook-users-in-egypt/2019/02>
- Oliver, R. L. (1999). Whence Consumer Loyalty? *Journal of Marketing*, 63(4_suppl1), 33–44. <https://doi.org/10.1177/00222429990634s105>
- Phua, J., Jin, S. V., & Kim, J. (Jay). (2017). Gratifications of using Facebook, Twitter, Instagram, or Snapchat to follow brands: The moderating effect of social comparison, trust, tie strength, and network homophily on brand identification,

- brand engagement, brand commitment, and membership intention. *Telematics and Informatics*, 34(1), 412–424. <https://doi.org/10.1016/j.tele.2016.06.004>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Rafes, K., Mühlbacher, H., & Gavard-Perret, M. L. (2015). Consumption community commitment: Newbies' and longstanding members' brand engagement and loyalty. *Journal of Business Research*, 68(12), 2634–2644. <https://doi.org/10.1016/j.jbusres.2015.04.007>
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(7), 600–619. <https://doi.org/10.1108/02683940610690169>
- Simon, C., Brexendorf, T. O., & Fassnacht, M. (2016). The impact of external social and internal personal forces on consumers' brand community engagement on Facebook. *Journal of Product & Brand Management*, 25(5), 409–423. <https://doi.org/10.1108/JPBM-03-2015-0843>
- Skinner, E. A., & Belmont, M. J. (1993). Motivation in the classroom: Reciprocal effects of teacher behavior and student engagement across the school year. *Journal of Educational Psychology*, 85(4), 571–581. <https://doi.org/10.1037/0022-0663.85.4.571>
- Stokburger-Sauer, N. (2010). Brand community: Drivers and outcomes. *Psychology & Marketing*, 27(4), 347–368. <https://doi.org/10.1002/mar.20335>
- Stokburger-Sauer, N., Ratneshwar, S., & Sen, S. (2012). Drivers of consumer–brand identification. *International Journal of Research in Marketing*, 29(4), 406–418. <https://doi.org/10.1016/j.ijresmar.2012.06.001>
- Tajfel, H. (1978). Social categorization, social identity and social comparison. *Differentiation between Social Group*, 61–76.
- Tuškej, U., Golob, U., & Podnar, K. (2013). The role of consumer–brand identification in building brand relationships. *Journal of Business Research*, 66(1), 53–59. <https://doi.org/10.1016/j.jbusres.2011.07.022>
- Tuten, T. L., & Solomon, M. R. (2017). *Social media marketing*. Sage.
- van Doorn, J., Lemon, K. N., Mittal, V., Nass, S., Pick, D., Pirmer, P., & Verhoef, P. C. (2010). Customer engagement behavior: Theoretical foundations and research directions. *Journal of Service Research*, 13(3), 253–266. <https://doi.org/10.1177/1094670510375599>
- Vernuccio, M., Pagani, M., Barbarossa, C., & Pastore, A. (2015). Antecedents of brand love in online network-based communities: A social identity perspective. *Journal of Product & Brand Management*, 24(7), 706–719. <https://doi.org/10.1108/JPBM-12-2014-0772>
- Vivek, S. D., Beatty, S. E., Dalela, V., & Morgan, R. M. (2014). A generalized multidimensional scale for measuring customer engagement. *Journal of Marketing Theory and Practice*, 22(4), 401–420. <https://doi.org/10.2753/MTP1069-6679220404>
- Vivek, S. D., Beatty, S. E., & Morgan, R. M. (2012). Customer Engagement: Exploring Customer Relationships Beyond Purchase. *Journal of Marketing Theory and Practice*, 20(2), 122–146. <https://doi.org/10.2753/MTP1069-6679200201>

- Wang, J., Liao, J., Zheng, S., & Li, B. (2019). Examining Drivers of Brand Community Engagement: The Moderation of Product, Brand and Consumer Characteristics. *Sustainability*, 11(17), 4672. <https://doi.org/10.3390/su11174672>
- Wirtz, J., den Ambtman, A., Bloemer, J., Horváth, C., Ramaseshan, B., van de Klundert, J., Gurhan Canli, Z., & Kandampully, J. (2013). Managing brands and customer engagement in online brand communities. *Journal of Service Management*, 24(3), 223–244. <https://doi.org/10.1108/09564231311326978>
- Wong, H. Y., & Merrilees, B. (2015). An empirical study of the antecedents and consequences of brand engagement. *Marketing Intelligence and Planning*, 33(4), 575–591. <https://doi.org/10.1108/MIP-08-2014-0145>
- Yang, Y., Asaad, Y., & Dwivedi, Y. (2017). Examining the impact of gamification on intention of engagement and brand attitude in the marketing context. *Computers in Human Behavior*, 73, 459–469. <https://doi.org/10.1016/j.chb.2017.03.066>
- Yoo, B., & Donthu, N. (2001). Developing and validating a multidimensional consumer-based brand equity scale. *Journal of Business Research*, 52(1), 1–14. [https://doi.org/10.1016/S0148-2963\(99\)00098-3](https://doi.org/10.1016/S0148-2963(99)00098-3)
- Zaglia, M. E. (2013). Brand communities embedded in social networks. *Journal of Business Research*, 66(2), 216–223. <https://doi.org/10.1016/j.jbusres.2012.07.015>
- Zhou, Z., Zhang, Q., Su, C., & Zhou, N. (2012). How do brand communities generate brand relationships? Intermediate mechanisms. *Journal of Business Research*, 65(7), 890–895. <https://doi.org/10.1016/j.jbusres.2011.06.034>

Variable	Mean	Standard Deviation	Skewness	Kurtosis
Brand Community Engagement	4.56	1.21	0.85	2.15
Brand Attitude	4.32	1.18	0.72	2.08
Brand Relationship	4.28	1.15	0.68	2.05
Brand Identification	4.15	1.12	0.65	2.02
Brand Loyalty	4.05	1.10	0.62	1.98
Average	4.27	1.14	0.70	2.04