MARKETING | RESEARCH ARTICLE

Do Instagram fan pages develop consumer-brand relationships? Evidence from the telecommunications industry

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Abstract: Instagram’s growth has drawn the interest of many corporations that are searching for new ways to boost their customer relationships. Given the rapid adoption of Instagram marketing and the inadequate research in that field, the objective of this paper is to examine whether “following” brands on Instagram fan pages enhances consumer-brand relationship from the consumer perspective. The data were collected from consumers who follow Instagram fan pages of the four telecommunication companies that are operating in Egypt using an online questionnaire. The telecommunications industry is one of the major industries that rely heavily on Instagram marketing in Egypt. The results indicated that fan page following positively and significantly influences the consumers’ brand love and sense of brand community. Also, the findings indicated the consumers’ brand love positively impacts consumers’ purchase intention and word of mouth. Finally, it showed that consumers’ sense of brand community impacts their purchase intention and word of mouth positively. This article contributes theoretically by expanding the focus of brand community literature to fan pages as an innovative form of

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PUBLIC INTEREST STATEMENT
Instagram pages are being widely used by many corporations across a wide range of business sectors to boost the relationships with customers. The paper examines the outcomes of customers’ following of Instagram fan pages of telecommunications in Egypt on their perceptions towards these corporations. Our article indicates that Instagram brand pages can be adopted to boost customers’ emotional connections with brands and to enhance their sense of being part of a brand community. Consequently, this will have a positive influence on consumers’ intention to use the services of these companies and will ensure a long-term profitability as a result of enhancement of customers’ lifetime value. This article suggests that telecommunication firms should integrate Instagram pages in their marketing engagement strategies to strengthen the brand meaning for their customers. They should make sure to have active brand communities on various social networks to utilize the power of the two-way interaction between customers and brands in brand-building efforts.
social media brand communities. Furthermore, it provides recommendations to practitioners to follow when managing Instagram fan pages.

**Subjects:** Business, Management and Accounting; Marketing; Brand Management; Consumer Behaviour; Internet / Digital Marketing / e-Marketing

**Keywords:** Instagram; Brand Community; Telecommunications; Fan pages; Brand love; Social Media Marketing

1. Introduction

The rapid penetration of social networking sites worldwide is changing the traditional modes of communication and interaction (Duffett, 2017; Hutter et al., 2013). With this high popularity, the value of incorporating social media into their marketing communication plans has been understood by many firms in various industries (Tuten & Solomon, 2017). Social media with its interactive nature has provided consumers with an opportunity to have a say in the products they consume (Dolan et al., 2019). These media have empowered consumers by making them more knowledgeable about different brands. Moreover, they have allowed companies to communicate with consumers, and to get instant feedback from them about their marketing offerings (Dahl, 2018). This two-way interaction has allowed advertisers to adopt social media not just in ads but also in market analysis by gaining timely insights on the perceptions and behaviors of customers (Jacobson et al., 2020).

In recent years, the social networking website Instagram is one of the most social networking sites that has drawn advertisers’ interest (Casalò et al., 2020). Nearly one in three internet users are Instagram users, according to Statista (2021), where more than one billion monthly active users are on this social networking website. In terms of user numbers, it is considered the fastest growing social network at 5 percent growth a year, slightly ahead of Facebook (3.14 percent) and Snapchat (2.13 percent).

With Instagram’s rapid popularity among consumers, many businesses have dedicated a good part of their marketing budgets to the social network (Gaber et al., 2019). One of the most platforms that are being widely adopted by companies in marketing on Instagram are the “Instagram fan pages”. These pages are accounts that businesses create and manage to gather consumers who want to be related to their products (Pinto et al., 2019). Consumers usually join these pages for a variety of reasons such as: social pressure, amusement, searching for information and incentives (Machado et al., 2020).

This paper has the aim of investigating the impact of consumers’ following of Instagram fan pages on their relationships with the brands that operate these pages. This is considered important for a group of reasons. Firstly, with Instagram pages being highly popular among users, research on Instagram as a marketing communication tool is still in its infancy where the accelerated use of the business has not kept up with scholarly publications. Academic publications in the field of band Communities of Social Media have mainly focused on the reasons that motivate customers to enter these groups and engage in them (Ben-Shaul & Reichel, 2018; Cvijikj & Michahelles, 2013; De Veirman et al., 2017). Specifically, in the field of research that examined Instagram marketing, a number of recent publications examined why consumers tend to follow Instagram pages of brands in various industries (Machado et al., 2020). However, the academic publications that discuss the impact of customer membership and participation in these pages are rare (Barbe et al., 2020). Second, there are only a few studies to date that have studied Instagram’s use for commercial purposes, (e.g. Vassallo et al., 2018), so little work has been done to investigate the effect of Instagram marketing on consumers’ attitudes and behaviors (Młodkowska, 2019). This highlights an important research gap regarding branding products on social media. In particular, several of the few research carried out on Instagram marketing concentrated only on the viewpoint of the organization (Balio & Casais, 2020), accordingly, there is much work that has to be done regarding
consumers’ perceptions and behaviors. Thus, our article fills an interesting research gap, as it helps academics to better understand important insights about branding through Instagram fan pages (Datta & Kaushik, 2019). Finally, addressing the research gap of Instagram as a branding tool is important to marketers as Instagram is one of the top platforms that is currently used in social media marketing. Understanding the outcomes of consumer following of Instagram brand pages will allow companies to understand how consumers’ relationships with brands develop inside these online communities where the marketing literature shows some shortcomings in that area (Valentini et al., 2018).

As noted earlier, this article studies the impact of consumers’ following of Instagram pages on consumer-brand relationships. It mainly examines the influence of these pages on the development of customers’ sense of a brand community and brand love. This is considered an important field of study which has not drawn much publicity in recent academic publications (Pinto et al., 2019). Prior study had focussed primarily on factors that increase customer interest in online brand communities (Kuntara et al., 2019), so it would be useful to examine the influence of Instagram pages on the relationships of customers with brands that introduced these online communities. The critical role of customers’ sense of a brand community in enhancing their relationships with brands was highlighted in researches that examined traditional offline brand communities (McAlexander et al., 2002). So exploring whether online groups such as Instagram brand pages help to build this sense of a brand community would be beneficial. The sense of brand community by customers applies to the identification of consumers with the brand and the group of individuals who use it (Carlson et al., 2008).

On the other side, the brand love of consumers is a significant marketing construct that has recently emerged in scholarly publications to explain the intense emotional interactions of consumers with brands (Bairada et al., 2018). With the intense competition that companies are facing, our article provides an opportunity to examine the unexplored link between the interest of customers in Instagram fan pages and the growth of brand love. This would result in positive outcomes for companies including securing a price premium as well as a sustainable differentiation (Carroll & Ahuvia, 2006). Our article further examines the impact of consumers’ brand love and sense of brand community on their word of mouth and purchase intention. Positive word of mouth is considered an important construct to our study as one of the main aims of many marketers from utilizing different social media marketing platforms is to gain the advantage of these new media in generating positive recommendations and reviews about brands (Tuten & Solomon, 2017).

This article is structured as follows: firstly, a description of the background of Instagram brand pages as a form of online brand communities is introduced. After that, the conceptual framework and research hypotheses are discussed together with relevant literature. Then, the methodology that was used for data collection and analysis is discussed. Following this, the research findings are presented. Finally, in addition to the research shortcomings and directions for further research, a description of the research contributions to both theory and practice is presented.

2. Literature review

2.1. Instagram fan pages as a form of online brand communities

The notion of a brand community emerged in the literature on marketing to describe communities that collect customers who want to be connected to brands (Muniz & O’guinn, 2011). These communities represent customers’ chance to share their identification and love for brands (McAlexander et al., 2002). There are different motives that customers have that encourage them to become part of brand communities. Jahn et al. (2012) indicated that consumers join brand communities to get some benefits such as functional, hedonic and social values. They argued that these communities can be an ideal place for consumers to establish their self-concept values. Moreover, the literature analyzed the impact of consumer involvement in conventional offline communities that are operated by companies. For example, Algesheimer et al. (2005)
suggested that there are brand loyalty intentions by members of car clubs. In addition, they are more likely to discuss with their social group about the brands.

With the rise of social networking platforms, many companies developed traditional offline communities and moved it to online environments. An online brand community, based on a structured collection of social relationships among lovers of a brand, is described as a specialized, non-geographically connected community (Muniz & O’guinn, 2011). Consumers enter these online communities for numerous purposes, such as: accessing brand information, collecting feedback and ratings from other users, and accessing deals and sales to which non-members do not have access (Kang et al., 2014). Also, consumers join these online communities is to portray positive images about themselves by associating themselves to brands that have favorable images (Tsai & Men, 2013).

Instagram fan pages are one of the social media brand communities that are drawing marketers’ interest. These platforms allow customers to interact with the business and other customers. When customers “follow” a certain brand on Instagram, they start following its updates and become part of its brand community. Companies keep posting different forms of content on their Instagram fan pages with the aim of enhancing consumer engagement (Gaber et al., 2019). When customers perform some of the interaction activities on these sites, such as liking, commenting and sharing content, other customers can see these behaviors. This makes these communities a very powerful tool in initiating electronic word of mouth about brands and its operations (Phua et al., 2017).

Due to the rapid adoption of Instagram fan pages by companies in customer communication, academic publications in that area still show some shortcomings. For instance, the knowledge of the effect of customer engagement in these online communities on consumer–brand relationships remains inadequate (Ceyhan, 2019), where the great majority of the study was focused on antecedents of consumer participation and the best ways to engage consumers in these online communities (Adegbola et al., 2018).

2.2. Brand love
In the branding literature, the definition of “brand love” has tended to define deep emotional bonds that form between customers and products (Carroll & Ahuvia, 2006). Depending on Sternberg’s (1986) triangle theory of interpersonal love, Pawle and Cooper (2006) concluded that customers behave with brands in the same manner they behave with other persons where they can hate certain brands while enjoying others. The marketing literature showed some positive outcomes for brand love. For instance, it has been associated with high levels of brand satisfaction, loyalty and less sensitivity to price changes (Delgado-Ballester et al., 2017).

Previous scholarly work has sought to examine the origin of brand love. Batra et al. (2012), for instance, mentioned that the following are drivers of brand love: a) facilitating passion-driven behaviors, that is, actions that generate frequent interaction with the brand; b) building brands that symbolise or facilitate the brand’s integration with the self-identity of the customer, including aspects such as the client’s important values and meanings they give to life (self-identification values): marketing communications could integrate and emphasize these aspects; c) building positive bonds with the brand, which is more than just creating positive emotions: treating the brand as an old friend; d) considering the brand as a reliable and trustworthy resource, generating a source of knowledge and advice; and e) improving the sense of a long-term relationship with brands that has been enhanced by social media growth.

2.3. The conceptual model and research hypotheses
A conceptual model was designed in the light of previous studies on social media brand communities to show the connection between Instagram fan page following, brand love, sense of brand
community, purchase and word of mouth intentions, (see Figure 1). The coming sections discuss the proposed research hypotheses.

2.3.1. Fan page following and consumers’ sense of brand community
The conceptual model proposes a positive relationship between Instagram page following and consumers’ sense of a brand community. In the work of Muniz & O’Guinn (2011), the idea of the consumer’s sense of a brand community was addressed. They indicated that members of brand communities possess a high sense of consciousness of kind which refers to their feelings of belongingness to an imagined community who want to be connected to certain products or services. These customers perceive a feeling of relation in the brand community with other members and a perceived distinction with non-members. The social identity theory has been used in some research articles to explain why consumers join some brand communities to enhance their feeling of connection to communities of brands and to associate themselves with these brand users (Coelho et al., 2018; Tsai & Men, 2013). In the current article, we argue that consumers’ following of Instagram fan pages has a role in enhancing their sense of a brand community. The continuous exposure to brand messages inside the community as well as the interaction with like-minded consumers help to construct consumers’ social identity. From the following discussions, the following hypothesis is developed:

**H1:** Following a fan page on Instagram has a significant positive influence on customers’ sense of a brand community.

2.3.2. Fan page following and consumers’ brand love
In the context of brand communities, current research has demonstrated that the involvement of customers in these networks has a positive effect on their brand decisions. For example, McAlexander et al. (2003) showed that brand communities have a positive role in consumers’ satisfaction and loyalty. Another group of studies indicated that consumers’ involvement in brand communities can lead to the development of positive emotional connections between consumers and brands (Bergkvist & Bech-Larsen, 2010; Ismail. & Spinelli, 2012). Within the scope of research on social media brand communities, Kudeshia et al. (2016) indicated that consumers’ following of fan pages has a positive role in enhancing consumers’ brand love. This can be explained by the ability of brand pages to give a voice to consumers in expression of their devotion to the brands they follow by interaction with like-minded consumers. Our article argues that the regular interactions on Instagram brand pages between customers and companies play a role in encouraging the meaningful emotional relations of customers to brands. From this review, the following hypothesis is introduced:

**Figure 1. Proposed conceptual model.**
H2: Following the fan page on Instagram has a significant positive effect on the love of customers for the brand.

2.3.3. Sense of brand community and purchase intention
This article argues that there is a positive link between the sense of a brand community by customers and their desire to buy. Since members of a brand community possess high levels of belonging to a community of brand users where they enjoy being identified with brands, it is expected that they will allocate resources to purchasing it to enhance their self-image. Additionally, the continuous exposure of consumers to the brand-related content inside the brand community as well as recommendations and feedback from the other consumers is expected to enhance their awareness about brands and different promotions, thus, enhancing their purchase intention. Recent research that examined social media marketing practices of companies indicated that consumer engagement advertising has a positive role in enhancing brand equity and brand image as well as their purchase intention (Dehghani & Tumer, 2015). We suggest the following from this discussion:

H3: Consumers’ sense of a brand community positively influences their purchase intention.

2.3.4. Brand love and purchase intention
The conceptual model proposes that when consumers love the brands, they are more likely to purchase it. By revisiting the attachment literature, a clear reason for this may be understood. Brands are like individuals. The close connection an individual has with another individual guides behavior that preserve attachment to the figure of attachment (Thomson et al., 2005). The marketing literature reports that the personal connection of buyers to a company describes their dedication to the brand (Ahuvia, 2005). Another reason is that when people are deeply attached to a particular object, when removed from that attachment object, they sometimes experience discomfort (Cassidy, 2000). They are also prepared to do everything they can to stay close to the figure of the attachment. Customers are prepared to pay extra for the products they are addicted for the purpose of maintain their association with it and remove the bad feelings of alienation from that product or service (Batra et al., 2012). Likewise, Thomson et al. (2005) suggested that if they miss their favorite brand, customers may experience unpleasant emotional experiences. A third reason is that customers who are emotionally committed to a single brand prefer to expend money to preserve their bond with the brand (Albert & Merunka, 2013).

In the current research, we suggest that the brand love of customers that is generated as a result of their membership on Instagram pages has a role to play in improving their buying intent. We suggest the following hypothesis from the preceding assumptions:

H4: Brand love has a significant positive effect on the intention of customers to purchase.

2.3.5. Brand love and word of mouth
Several definitions of word of mouth have been introduced in the marketing literature.

For instance, Hutter et al. (2013) noted that word of mouth involves all types of interpersonal contact between a receiver and a communicator about a business, brand or product. Another description suggested that word of mouth is the informal contact between a perceived non-commercial communicator and a receiver about a brand, a commodity, an organization or a service from person to person. (Harrison-Walker, 2001). Since word of mouth is perceived to be more trustworthy and reliable than marketing strategies, most enterprises are searching for methods to encourage customers to take part in meaningful communications about their brands. Consumers will express their constructive and derogatory thoughts and viewpoints on products
they want or hate with thousands of people on social media, irrespective of time and geographic limits (Dahl, 2018).

The link between the affection of customers for brands and the positive word of mouth can be clarified by examining the triangular love theory that explains the emotion of love in interpersonal relationships (Sternberg, 1986). This theory assumes that individuals prefer to talk about their loved ones with others a lot. In the consumer behavior literature, this theory has been borrowed to explain the positive outcomes of consumers' love for brands. Research has shown, for example, that people with a high degree of brand love prefer to speak about it favorably (Carroll & Ahuvia, 2006). Our article argues that Instagram fan pages can be an ultimate place for developing deep emotional connections between consumers and brands which will cause positive word-of-mouth communication about these brands. The following hypothesis is constructed from the preceding discussion:

**H5:** Brand love affects the word of mouth of customers significantly and positively.

### 2.3.6. Consumers' sense of brand community and word of mouth

We suggest a positive link between the sense of brand community among customers and their positive word of mouth about the brands that introduced these communities. Customers' sense of a brand community originates from the notion that they wish to be identified with brands that portray positive image about themselves (Carlson et al., 2008). The theoretical basis of consumer-brand identification is the theory of social identity, which suggests that by categorizing themselves and others into categories, people make sense of the world (Tajfel & JC, 1986). Brand communities allow its members to show others that they belong to a community of brand users (Muniz & O’guinn, 2011). Therefore, they are supposed to talk favorably about the brands that they are connected to their communities. Existing literature indicates that user participation with a brand community not only increases the possibility of producing post-purchase feedback, but also increases the probability of favorable online reviews (Wu et al., 2018). We suggest the following hypothesis from the previous discussion:

**H6:** Consumers’ sense of a brand community positively affects their word of mouth.

### 3. Empirical study

#### 3.1. Data collection and sampling

This research focuses on the followers of Instagram pages of telecommunication companies in Egypt. The telecommunication companies in Egypt are considered one of the main sectors that use Instagram extensively to connect with their customers or fans. The four Egyptian telecommunication companies that are operating in Egypt have succeeded in attracting millions of users to follow their Instagram pages as shown in Table 1.

| Company          | Number of Followers on Instagram |
|------------------|----------------------------------|
| Vodafone Egypt   | 1,100,000 followers              |
| Etisalat Misr    | 748,000 followers                |
| Orange Egypt     | 517,000 followers                |
| Telecom Egypt    | 450,000 followers                |

Source: Official Instagram accounts of these companies (accessed in November 2019)
A link to the online survey was posted for data collection on the official Instagram pages of the four telecommunication companies operating in Egypt. In order to know the official Instagram pages of the companies studied, the websites of the corporations were checked to gain access to the Instagram pages link. Instagram search engines have also been used to find links to these official websites. In the current research, customers who are fans of the telecommunication firms on Instagram were the target of the online survey. Therefore, the most effective way to reach the target population was to put the link of the online survey on these Instagram pages to capture their attitudes about their relationships with the brand pages and the brands that run these online communities. In several studies carried out in the social media marketing area, online surveys on fan pages as a method of data gathering have seen rapid popularity in social media literature, e.g. (Dessart et al., 2016; Kudeshia et al., 2016). The use of online surveys was also relevant in data collection, as participants responding to online questionnaires feel a high level of privacy, enabling them to show what they feel freely (Blumberg et al., 2014).

After multiple postings on the four pages over a period of two weeks, the study was able to gather 493 complete responses. The answers were stored in an online database to be used in further statistical analysis. This article adopted the convenience sampling technique to collect data from users of Instagram pages of telecommunication companies. The researchers did not intervene in selecting who replied to the survey in which the followers of Instagram pages were free to participate in the research sample. With the assistance of SmartPLS3, the collected data were analyzed using partial least square structural equation modeling (PLS-SEM). Considering the design and sample size of this research, the PLS-SEM method is appropriate. It has the benefit of minimizing the residual variances of the endogenous variables, and it is also an effective approach to discuss multiple relationships at the same time (Hair et al., 2012). In comparison to covariance-based methods, which require normal distribution, the PLS approach also does not require normal distribution (Henseler et al., 2015).

For the model evaluation of PLS-SEM, R-square values for the dependent constructs and the effect size, significance degree, and t-values of the structural path coefficients are used (Fornell & Cha, 1994). The estimates of standard errors and t-values were provided in a bootstrap resampling procedure (Chin, 2010).

### 3.2. Questionnaire design and Measures

The online survey started by a statement that explained the objectives of the research and asking and asking the Instagram pages users to take part in the survey. Following this, some questions regarding the demographics of the respondents and their duration of membership in the pages were introduced. The participants were then expected to provide responses that were relevant to the study’s key objectives. Regarding the items that measured the study’s constructs, the researchers developed these items based on the literature where a five-point Likert scale was used. Likert scale provides a well representation of an interval scale (Byrne, 2010), where respondents can provide answers on the scale that ranges from strongly disagree to strongly agree. One of the main advantages of that scale that it allows researchers to perform powerful statistical analysis (Malhotra et al., 2012).

Fan page following was assessed using six items adopted from Kudeshia et al. (2016). Sense of a brand community was assessed by four items that were previously used in prior studies of Carlson et al. (2008) and Palazon et al. (2019). Brand love was measured using six items adopted from Carroll and Ahuvia (2006) and Vernuccio et al. (2015). Purchase intention was assessed by borrowing four items from Jahn et al. (2012) and Kudeshia et al. (2016). Finally, word of mouth was assessed by borrowing four items from Kudeshia et al. (2016). The questionnaire items are displayed in Table 2.
Table 2. Questionnaire items

| Fan Page following                  |
|-------------------------------------|
| FPF1  | I find products on the fan page unique.  |
| FPF2  | I joined the fan page to have my queries solved. |
| FPF3  | Joining the fan page makes me look cool. |
| FPF4  | This fan page makes me know more about the brand. |
| FPF5  | This fan page allows me to have direct contact with the organization. |
| FPF6  | I engage with other customers on the page that I follow. |

| Sense of Brand Community          |
|-----------------------------------|
| SBC1    | I perceive close ties with other service users. |
| SBC2    | Forming a bond with other customers is easy for me. |
| SBC3    | I experience a feeling of connectedness to other customers on the fan page. |
| SBC4    | There is a clear sense of camaraderie between me and the brand’s other customers. |

| Brand Love                        |
|----------------------------------|
| BL1     | The telecommunication company is considered wonderful. |
| BL2     | The telecommunication company gives me a positive feeling. |
| BL3     | The telecommunication company is simply fantastic. |
| BL4     | I’m really pleased with this brand. |
| BL5     | It’s absolute joy with this telecommunication company. |
| BL6     | I have a love for this telecommunication company. |

| Purchase Intention                |
|----------------------------------|
| P11     | I purchase the brand that I follow on Instagram pages. |
| P12     | I purchase the products directly from Instagram pages when I need them. |
| P13     | I intend to continue using the service of this telecommunication company. |
| P14     | I have a sense of loyalty towards this telecommunication company. |

| Word of Mouth                     |
|----------------------------------|
| WOM1    | I always talk about this telecommunication company favorably because I follow it on Instagram’s fan page. |
| WOM2    | When my friends and family ask me about telecommunication companies, I recommend this company. |
| WOM3    | I am influenced by the information that is posted on the Instagram page. |
| WOM4    | I tell other customers about this telecommunication company. |

4. Results

4.1. Descriptive statistics
Of the 493 respondents who were surveyed, 191 were females (42%) and 260 were males (57.6%). Most of the respondents (319 respondents) were between the ages of 18 and 29 (70.73%), 83 respondents were between 30 and 39 (18.4%), while only 49 respondents were above 40 years with a percentage of 11%. Table 3 lists the demographic description of the 451 respondents.

4.2. Model assessment
Two stages were carried out to test the conceptual construct using PLS analysis. The first phase involved the assessment of the (outer) model of measurement. The second phase was carried out through the structural (inner) model evaluation.

4.2.1. Measurement model
Testing the unidimensionality of each block in the model is critical in PLS-SEM. A block is called unidimensional when Cronbach’s alpha (α) and composite reliability (CR) values are greater than 0.7 (Bagozzi & Yi, 1988). As seen in Table 4, it is apparent that the Cronbach’s values range from 0.892 to 0.941 and the CR values from 0.925 to 0.953 which is above the threshold of 0.7. The outer loadings, which represent the loadings of the reflective manifest variables with their respective latent variable, are beneficial in determining the reliability of individual items. When loadings are greater than 0.7, the reliability of the item is confirmed (Henseler et al., 2015). All items were retained as they had outer loadings ranging from 0.836 to 0.905 exceeding the 0.7 threshold. AVE was determined for each construct in our proposed model to test convergent validity, according to
Fornell and Larcker (1981). Since the AVE of all constructs is above the 0.50 cut-off where they varied from 0.738 to 0.860, convergent validity is confirmed by the findings. Table 4 details the results of the calculation of the model measurements, mainly the outer loadings, and values of average variance extracted (AVE).
For the purpose of evaluating the discriminant validity of the study’s variables, Fornell and Larcker (1981) recommended to examine the square root of the Average Variance Extracted (AVE) to make sure that exceeds the correlations between each variable and other values in the model. The findings confirmed the discriminant validity of the research’s variables as presented in Table 5.

To confirm the results of the discriminant validity, the heterotrait-monotrait ratio of correlations (HTMT) was examined as recommended by Henseler et al. (2015) when using PLS-SEM. The results indicated that all the study’s constructs possess an accepted discriminant validity with values less than the recommended threshold of 0.85. The HTML values of the all variables are demonstrated in Appendix 1.

4.2.2. Structural model assessment

Consequently, to the validation of the measurements of the study’s model, the structural model which shows the connection between the study’s variables was estimated. The findings indicated that fan page following significantly influences consumers’ sense of brand community (β = 0.585***, p = 0.000, t = 15.791), thus H1 is confirmed. The results also revealed that fan page following significantly influences consumers’ love of the followed brands on Instagram (β = 0.973***, p = 0.000, t = 19.007, thus H2 is supported. Consumers’ purchase intention was significantly and positively impacted by consumers’ sense of brand community (β = 0.291***, p = 0.000, t = 6.057), and brand love (β = 0.460***, p = 0.000, t = 6.291), thus supporting H3 and H4, respectively. H5 was supported where the results showed a significant and positive relationship between brand love and word of mouth (β = 0.498***, p = 0.000, t = 10.882). Finally, H6 was confirmed as consumers’ sense of brand community had as positive significant influence on customers’ word of mouth (β = 0.290***, p = 0.000, t = 6.291).

The R-square of “sense of brand community” was 0.342 which indicates that 34.2% of the change in that construct is explained by fan page following. On the other hand, the R-square of “brand love” was 0.452 which shows that 45.2% of the change of that construct is explained by the fan page following. The R-square of “purchase intention” was 0.428 which demonstrates that 42.8% of the change of that construct is explained by the sense of brand community and brand love. Finally, the R-square of “word of mouth” was 0.473 which confirms that 47.3% of the change of that construct is explained by brand love and consumers’ sense of brand community. See Figure 2 for the path coefficients that shows the relationships between the study’s constructs together with the R-squares. Also, SmartPLS output (Bootstrapping, Path coefficients and t-values) of the study’s conceptual framework are shown in Appendix 2.

5. Discussion and implications

5.1. Theoretical contributions

The paper provides some theoretical contributions. For instance, it expands the focus of the brand community literature to online environments, where the academic literature has not caught up with the rapid industry usage for consumption communities that are available in social networks.

| Table 5. Discriminant validity of the study’s constructs |
|----------------|---|---|---|---|---|
|               | BL | FPF | PI | SBC | WOM |
| BL            | 0.879 |     |    |     |     |
| FPF           | 0.673 | 0.859 |     |     |     |
| PI            | 0.603 | 0.730 | 0.875 |     |     |
| SBC           | 0.490 | 0.585 | 0.516 | 0.898 |     |
| WOM           | 0.640 | 0.748 | 0.724 | 0.553 | 0.870 |
(Dessart et al., 2015). With the growing social media proliferation among customers and the rise in the usage of online communities in marketing communications, a rising stream of research has examined consumers’ behaviors and relationships with these online environments. Many of the current research focuses on factors that boost customer interaction within these communities. (Wirtz et al., 2013), the drivers for users’ participation in the brand pages on different social media platforms (Dessart et al., 2015; Dodoo, 2018) as well as the nature of consumer behavioral engagement and participation in brand pages (Baldus et al., 2015; Harrigan et al., 2017).

Our article adds to body of knowledge of the online marketing literature by the association between following a brand page and the sense of a brand community that has been little examined in the extant research (Chu et al., 2016; Dessart et al., 2015). The marketing literature stills have a debate regarding the effects of customer participation in online brand pages, where some authors indicated that that brand page following don’t have an effect on consumer brand relationships while others associated it with some positive outcomes such as brand satisfaction and brand loyalty (Apens Søren, 2016). Thus, our study contributes to scholarly work regarding the positive consequences of following a brand page on social networks. The sense of the brand community that develops inside brand communities was highlighted in some academic publications that examined brand pages on social media, e.g. (Palazon et al., 2019). It develops because of the interactions of with the brand community members with like-minded consumers as well as their desire to be connected with the brand and its customers (John et al., 2012).

Another relevant result of this article is the positive influence that customers’ following of brand pages on their love for brand that operate these pages on Instagram. The brand love construct has appeared recently in marketing academic publications to describe a state of deep emotional relationships that customers have with their beloved brands (Carroll & Ahuvia, 2006). Thus, our study adds to the growing literature of brand love and provides answers on how to develop it in online environments. A few researchers were eager to understand the relationship between brand page following and constructs that describe relationships that develop between customers and brands such as brand attitude and brand trust (Gober et al., 2019) as well as loyalty (Lipsman et al., 2012). The results also indicate that customers’ love for the telecommunication brands that is developed from their participation in Instagram pages has a positive role in influencing their positive word of mouth about the company and their future intention to purchase for these corporations. These results are in line with the results of Kudeshia et al. (2016) which showed how brand love is boosted in Facebook fan pages.
5.2. Managerial implications
Marketeters are actively looking for innovative ways to target customers who have been sensitive to conventional ads and promotion (Gaber & Wright, 2014). Through its engaging features, social media can give brands with some chances to strengthen their connections with their existing and prospective clients. On Instagram, one of the most popular social networking sites, the present study investigated the relationships of consumers with brands. The popularity of Instagram among consumers has attracted the attention of companies that want to engage consumers with their brands. The study provides a number of insights and guidelines for marketers when adopting Instagram marketing. Firstly, the study findings showed that the fan page following results in consumers’ sense of a brand community and brand love. In other words, it indicated the brand pages following can enhance consumers’ positive emotional connections with brands. These findings should encourage marketers to build consumption communities on different social networks such as Instagram to benefit from the emotional connection that develops within these communities between consumers and brands. The marketing literature shows positive outcomes for consumers’ sense that they are part of communities of consumption including consumer-brand identification (Zhou et al., 2012) and trust (Habibi et al., 2014). Thus, companies should use a variety of techniques to encourage users to like their Instagram pages to benefit from these positive outcomes. They can diversify their posting strategies to include different content types to satisfy the different needs that consumers have when they join these online communities (Gaber et al., 2019). Also, companies must make sure to make their Instagram pages a source of timely information about the brands and its offers and allow consumers to express their passion and love for brands. This can be done by asking consumers to describe their experiences and feedback regarding the companies’ marketing offerings.

The results further illustrate the strength of brand love in initiating positive word of mouth for these products and in raising the intention to purchase. This should encourage companies to make their brand pages active as much as possible to attract millions of users who share brand stories and recommendations on that social network. Also, marketers should make sure to provide information and offers about their brands on the brand pages to encourage consumers to take actions regarding purchases. This can be conducted by selling the products or the services directly on the brand pages where the findings indicated that brand pages can be considered a reliable source of brand-related information. Finally, the study underscores the value of consumers’ sense of brand community and enhancing positive word of mouth and purchase intention. These results indicate that marketers should enhance the image of their brand communities to make consumers eager to be part of their communities.

In summary, companies must take the consequences of brand page following seriously where brand pages on social networking sites can be adopted as a component of their integrated marketing engagement strategies. They should facilitate consumer participation in these pages to encourage their brand-building efforts.

6. Research limitations and scope for further research
The study possesses several shortcomings that can introduce a scope for further research in the area of social media marketing. For instance, this paper only focused on brand pages on only one social networking website which is Instagram; this limits the results to that specific context and hinders the generalisability of the results on other brand communities on other social networking websites. Future research can examine the impact of customers’ interactions in brand communities on other social networking sites which are also being extensively used by companies in marketing such as Twitter and Facebook. Another limitation of this research is that it examined the Instagram pages of a single business sector which is the Egyptian telecommunications industry. Despite that this business sector relies heavily on Instagram for customer communication, future research can examine online communities of other industries to enhance the generalisability of the results. Finally, the paper only focussed only on the official pages that are initiated and managed by the telecommunication companies. Future research can examine fan pages that
are initiated by consumers and can provide a comparison between the two types of brand communities. Also, further research can compare between the behaviours of fan page members based on their age and gender which were not conducted in this article.

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Appendix 1

Heterotrait-Monotrait Ratio (HTMT)

Appendix 2

SmartPLS output (Bootstrapping, Path coefficients and t-values) of the study's model.
