Facebook-based social media marketing and Facebook-based online purchases: evidence from the Facebook page admins of selected South Asian fashion retailers

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Abstract

Purpose – This study intends to explore the connection between Facebook-based social media marketing (FSMM) and Facebook-based online purchase order (FOPO) for 20 popular online fashion retail brands across three South Asian countries: India, Pakistan and Bangladesh. FSMM was further divided into four components: Perceived trust (PT), Perceived informativeness (PInf), Perceived interactivity (PInt) and Perceived benefit (PB).

Design/methodology/approach – The authors selected 20 popular Facebook-based online fashion brands involved in clothing and fashion accessories businesses in those three countries. Later, the authors purposively selected 114 region-based Facebook page administrators (admins) responsible for operating those brands’ Facebook pages and taking Facebook-based online orders. The authors collected primary data from those admins as respondents through a structured survey instrument. The authors applied SPSS 25 for descriptive analysis and a covariance-based structural equation modeling (CB-SEM) (through AMOS 25) for testing the hypothesized relations.

Findings – Based on the valid responses and application of proper statistical measures, it was revealed that three FSMM components: PT, PInf and PB have significant positive relationships with FOPO, while PInt has an insignificant relationship with FOPO.

Originality/value – South Asia is a growing business hub and the largest consumer market in terms of population. This study was conducted to identify the relationship between FSMM and FOPO in the three most prominent South Asian countries. As the first study was undertaken ever on customer perceptions of FSMM in a multi-country South Asian context, this paper is expected to be helpful for academics in conducting further empirical investigations on Facebook-based marketing as well as practitioners and policymakers in formulating and implementing Facebook-based marketing strategies.

Keywords Social media, Social networking sites, Facebook, Social media marketing, Facebook-based online purchase order, Fashion brands

1. Introduction

Social media (SM) is becoming a part of our daily lives affecting all activities from entertainment to shopping. In recent years, more and more people are joining this online...
platform irrespective of geographical location, age, gender, profession and income level (Hosain, Jamil, & Rasel, 2022). SM refers to the digital WEB 2.0 applications facilitating information interaction, user-generated content and affiliation (Elefant, 2011). According to a report published at the beginning of 2021, there were more than 2.7bn Facebook users, more than 370mn Twitter users, and more than 350mn LinkedIn users worldwide (WebsiteSetup.org, n.d.a, b). Among all the social networking sites (SNSs), Facebook has gained a superior number of users and it is increasing every day (WebsiteSetup.org, n.d.a, b). According to this site, which updates the number of the world population and SNS users, at the end of 2021, India had 416.6mn Facebook users, followed by the US (240mn) and Bangladesh (52.4mn) and Pakistan (49.2mn). The site is particularly popular among the young people, who are the majority in South Asia in proportion at present (Worldpopulationreview.com, n.d). A huge user base of SM platforms generates an enormous source of information through their posts, comments, likes and other shared contents (Hosain et al., 2022). In addition, due to having a large audience pool that might be turned into a customer base, the SNSs have the center of attraction for many small, medium and even larger firms in order to promote, advertise and even for selling their products online (Hosain et al., 2022). Particularly after 2010, many big and small, local and global firms are increasingly shaping their presence in SM platforms (particularly in Facebook) (Hoque, Joya, Akter, & Mukul, 2020; Karatzias, 2019; Hutter, Hautz, Dennhardt, & Fuller, 2018; Jung, Shim, Jin, & Khang, 2016; Zabeen, Ara, & Sarwar, 2013).

The impact of Facebook on businesses is currently expanding very quickly. Large or small, nonprofit or for-profit and local or international business firms use this sizable user base to broaden their reach. Because of this astounding growth, every firm is attempting to manage the best possible SM platform. One reasonable explanation for this is that the target audience pool is largely and actively present on popular SNSs like Facebook, where they entice them with their favorite brands and engage with them on various levels (Sikrant, 2020). By integrating their brand with Facebook, businesses can increase sales while improving customer relationships and providing higher-quality customer service. It makes digital marketing more accessible and more convenient.

Businesses and professionals use SM to connect with current and potential clients (Hosain et al., 2022; Sikrant, 2020). Facebook facilitates this by enabling users and businesses to set up profiles and pages for themselves to promote their merchandise directly or provide a link to the company’s sales page. For small and medium-sized businesses, this method streamlines the development of high-potential one-on-one interactions that may be used to promote their products. Numerous startups and business owners with promising business models today rely heavily (if not exclusively) on revenue generated via Facebook to stay afloat. Advertising and branding on Facebook may be done for next to nothing.

India is the second most populous nation on the planet, and South Asia has the highest population density of any region. According to the most recent estimates provided by the United Nations as of Wednesday, June 29, 2022, Southern Asia’s population was 1,984,245,743 in number (Worldometers.info, n.d). With a median age of 27.6 years, the population of South Asia accounts for 24.89% of the total population of the world (Worldometers.info, n.d). On the other hand, South Asia’s Internet and SM users are increasing rapidly. At the same time, Asia has the most significant Internet users (WebsiteSetup.org, n.d.a, b). Such a large number of people, mainly young people, can be considered as an attractive huge consumer market base for any business.

However, despite the escalating popularity of Facebook, which can be used as an online sales platform for online fashion brands, this issue has yet to receive significant academic attention from academics and researchers (Chiu, 2022; Kunja, Kumar, & Rao, 2022; Sikrant, 2020). Particularly, questions like “How different Facebook-based features can influence its users?” “Can Facebook ads motivate users to buy a product/service online?” “What is
the role of Facebook page admins in influencing the online purchase orders?” are still unanswered. The authors believe that this particular paper is unique since (1) it has aimed to test the relationship between FSMM and FOPO, (2) it has based on an empirical study conducted in more than one country that is expected to provide a more representative outcome and (3) it has based on a study that incorporated 20 South Asian fashion brands. According to the authors' knowledge, such a large-scale study has been conducted rarely so far. Considering the largest population base and Facebook users in the world, the authors expect that this particular empirical paper can enrich the literature and reduce the gaps that have been mentioned already. The authors also hope that this study will motivate the researchers to conduct further investigations. This empirical study examines 20 popular online fashion retailers from India, Pakistan and Bangladesh to identify the correlation between Facebook-based social media marketing (FSMM) and Facebook-based online purchase order (FOPO). Thus, this empirical investigation seeks to answer the subsequent research question in light of its background and objective:

RQ. What are the relationships between the factors of FSMM and FOPO for South Asian online fashion brands?

2. Literature review

2.1 FSMM and FOPO: South Asian fashion industry perspective

Since the inception of Facebook-based marketing, a considerable part of such an effort has been occupied by the firms that produce or sell different fashion clothing and accessories. M2PressWIRE (2018) reports that the FSMM platform has quickly emerged as the most cutting-edge development in the fashion sector. According to findings published by Digital Research (Digitalresearch.biz, n.d.), a company that is conducting and publishing credible research on digital marketing, the presence of fashion retailers on Facebook has considerably increased comparing to other industries. Fashion houses, designers and retailers in South Asia are increasingly creating brand personalities by expansively utilizing online FSMM platforms (Lal & Sharma, 2021; Shafaat, Shareef, Kishwar, & Aleem, 2020; Khan, Yang, Shafi, & Yang, 2019; Kumari, 2019; Wang et al., 2019). By creating a Facebook profile, the designers can establish a direct line of communication with their clients. They do this via publishing films, advertisements, footage from behind the scenes and off-screen fashion displays; providing the customers the impression that they are similarly a significant member of the more prominent product family. The activities on the FSMM platforms owned by the brand generate communication between users, which can result in word-of-mouth impacts and include characteristics of fashion and trends (Alatawy, 2022; Sikrant, 2020).

A luxury fashion brand’s FSMM efforts emphasize aesthetic and factual values that may be attained through indirect brand experience, unlike current marketing strategies that directly call for the worth of tangible goods. In their study, Killian and McManus (2015) argued that the managers of fashion retail showrooms divided FSMM platforms into four groups: relationship building, content aggregation, innovation and amusement. By adhering to the four C’s – consistency, commitment, caution and customization; they employ all four platforms to develop an integrated brand image. According to an investigation conducted by Godey et al. (2016) on the impact of FSMM on five distinct brands in four different countries, FSMM significantly affects brand awareness, brand image; and ultimately, FOPO. Upon viewing communications on FSMM platforms, participants argued that they are prepared to pay even a superior price to their chosen brand and continue to be loyal to that brand. Nash (2019) determined that consumers’ interior and exterior motives impact their actions
The scenario is common in South Asian countries like India, Bangladesh and Pakistan (Wang, Ahmed, Deng, & Wang, 2019). Numerous fashion firms and individual small entrepreneurs are actively vigilant in different SNSs, particularly in Facebook. As an example, Ahmed, Salman, and Ashiq (2015) conducted a study to verify the impact of FSMM operations on the Pakistani fashion business. They discovered that FSMM in the fashion business might boost active followers by 10%, leading to a 20.6% rise in revenues in the South Asian fashion industry. Kumari (2019) found that Indian customers, mainly young adults, are increasingly placing FSMM-based purchase orders. She also observed that the Indian internet advertising and marketing sector is growing at 50% per year. Studies found that as new trends and designs are being introduced by clothing and apparel manufacturers in Pakistan, firms are increasingly relying on the SM-based online customers to develop their brands (Abrar, Bashir, Safeer, Shabbir, & Baig, 2019; Nasir, Vel, & Mateen, 2012). Earlier works described how Pakistan’s textile sector successfully attracts clients using FSMM (Husnain & Toor, 2017). Another research by Wang et al. (2019) in the Bangladeshi fashion sector showed that applying FSMM tactics helped the local Bangladeshi fashion businesses to create customer attachment and preference.

2.1.1 Perceived Trust (PT) and FOPO. One factor that may influence consumers’ perceived trust (PT) is the distinctiveness of the SM environment. In this regard, Kim and Park (2013) investigated the mediating function of PT on the association between behavioral purposes and social commerce structures and revealed that trust can shape consumer behavior. Social commerce that improves communication, status, transaction security, extent, information superiority and word-of-mouth recommendations are highly trusted. Tatar and Eren-Erdogmus (2016) examined how “social media marketing (SMM)” impacts tourist brands’ trust and loyalty. They demonstrated that SM-based familiarity, as considered by an apparent SM page, interaction, security and cooperation, is a significant driver of trust. According to Khong, Onyemeh, and Chong (2013), PT on the SM platform can also be developed through customers’ enablement or the existence of psychosomatic and operational conditions through users’ understanding of the superior capacity to communicate, easily access and conduct transactions on SM pages. Customers like to discuss similar perspectives and facts with family members, friends, relatives and peers who shape their decisions and trust (Jawad, Parvin, & Hosain, 2022). Customers put a superior value on community fellows who are reactive and enthusiastic to exchange information and individual understandings (Ridings, Gefen, & Arinze, 2002). In this aspect, Facebook is an easy SM platform where customers share personal information and experiences with others.

According to Pentina, Zhang, and Basmanova (2013), trust plays a significant role on the SM platform because it is linked to users’ behavioral reactions, like their intents to stay following an advert on company’s SM page in the future and to recommend/advice it to others. They assume that users’ level of trust and SM’s incorporation within site are related. Customers’ trust in an SM page may be increased when it accurately showcases the items’ characteristics and pricing; and has favorable customer reviews (Yang, Lin, Chandrees, & Chao, 2009). Consumers commonly search the SM forum for recommendations from other users for e-vendors, which ultimately increases their confidence in that website. Many current and potential customers engage with their favorite companies through Facebook pages and brands use Facebook to do their businesses (Alalwan, 2018).

Consequently, building trust amid two parties is essential for minimizing uncertainty and risk (Hajli & Lin, 2016). Customers’ trust in FSMM eventually affects their FOPO. Since there are no face-to-face encounters between the company and the client on Facebook, where businesses promote via creating and maintaining their pages, higher levels of PT from the
customers are crucial (Featherman & Hajli, 2016). Potential customers only purchase through online platforms if they believe in the business and the goods advertised through FSMM (Vuong, 2022; De Silva & Herath, 2019; Gefen et al., 2003). On the basis of the reasoning presented until now, the authors thus propose to evaluate the subsequent hypothesis:

**H1.** PT has a positive relationship with FOPO.

### 2.1.2 Perceived Informativeness (PInf) and FOPO.

Rotzoll and Haefner (1990) identified “Informativeness” as “the extent to which a corporation can supply sufficient information on the basis of which customers may make better purchase decisions.” Informativeness is a perceptual construct that may be evaluated using a self-reported scale, according to Pavlou, Linag, and Xue (2007). In reality, this factor is further connected to the sender’s (advertiser’s) capacity to legitimately elicit a reaction from prospective customers since it permits the recipient to cognitively evaluate the acceptability of the information and messages delivered (Lee & Hong, 2016). By highlighting the influence of this factor on customers’ views, Gao and Koufaris (2006) underlined the higher significance of informativeness in the context of e-commerce. According to Taylor, Lewin, and Strutton (2011), a correlation exists between customers’ attitudes and informativeness in the SM domain. Phau and Teah (2009) conducted a further research study concentrating on the influence of Perceived informativeness (PInf) on customers’ perceptions of mobile-based short messaging services marketing.

In a similar manner, Lee and Hong (2016) used empirical evidence to pinpoint the beneficial influence of PInf on customers’ opinions of FSMM and, ultimately, on their desire to buy the goods advertised via FSMM. Kim and Niehm (2009) confirmed a substantial positive correlation between consumers’ e-loyalty intentions and the quality of the information offered on the corporate website. Considering all of these reasons and facts, the amount of PInf provided by the FSMM can drive customers to have improved brand loyalty, resulting in increased purchase intention. Ott, Vafeiadis, Kumble, and Waddell (2016) observed that higher and medium levels of interactions on a firm’s FSMM considerably raise PInf that ultimately increases product and brand likeability as well as consumer purchase intention (Hride, Ferdousi, & Jasimuddin, 2021; Mustafi & Hosain, 2020; Wang & Wen, 2017). Thus, the authors propose to test the following hypothesis:

**H2.** PInf has a positive relationship with FOPO.

### 2.1.3 Perceived Interactivity (PInt) and FOPO.

One of the crucial elements of online and SM-focused marketing is interactivity. Hence, academics looking into SMM or similar fields have developed a strong interest in this idea (Ebrahim, 2019; Wang et al., 2019; Alalwan, 2018; Shilburi et al., 2014; Kweon, Cho, & Kim, 2008). Indeed, the effective use of such technical elements may increase the perception of potential customers and, as a result, their ability to consciously assimilate more information (Mustafi & Hosain, 2020). Perceived interactivity (PInt) fundamentally changes the structure of the communication process and how online and SM information are shared between the parties (Sundar et al., 2003; McMillan & Hwang, 2002). Interactivity has been explored in a variety of contexts. While some researchers (Men & Tsai, 2015; Kelleher, 2009; Lowry, Romano, Jenkins, & Guthrie, 2009) have described it as a collaboration and communication procedure between two people, other researchers have focused on the technological aspects of individuals interacting with technological devices (such as personal computer, laptop and smartphone) (Oh & Sundar, 2015; Sicilia, Ruiz, & Munuera, 2005; Sundar, 2007).

As per Jensen (1998) and Steuer (1992), interactivity is the point to which a user controls the setting and content of a media platform. This idea was articulated by Kiousis (2002), Liu and Shrum (2002) concerning a media platform’s capacity to offer synchronous communications. Several research studies have confirmed the impact of interactivity on consumers’ intentions towards diverse technologies. For instance, Lee (2005) found that
interaction significantly influenced buyers’ intentions to utilize mobile commerce. According to Abdullah, Jayaraman, and Kamal (2016), there is a substantial association between PInt and customers’ intentions to revisit hotel websites. Similarly, Zhang, Lu, Gupta, and Zhao (2014) found that website interactivity passively affected users’ involvement with the social commerce website. Interactivity also plays a significant part in determining how customers behave while purchasing online, as claimed by Wang, Meng, and Wang (2013). Also, if the targeted website is less dynamic, buyers are less possibly to believe in the safety of their online purchasing processes (Chen, Hsu, & Lin, 2010).

Based on the discussions held so far, the degree of interaction offered by FSMM might influence customers’ buying intentions for their desired items. Communication between brands and consumers is called interaction (Gallaugher & Ransbotham, 2010). The importance of social contact in the production of user-generated material was illustrated by Kaplan and Heinlen (2010). In addition to reaching a broad audience, advertising on Facebook creates a community where people can share their opinions and get their questions answered (Arora, 2022; Dougherty, Eastin, & Bright, 2013; Kaplan and Heinlen, 2010). A successful Facebook page creates a virtual community where people can interact virtually and share their thoughts and experiences. Thus, the authors propose to test the subsequent hypothesis:

**H3.** PInt has a positive relationship with FOPO.

### 2.1.4 Perceived Benefit (PB) and FOPO

Perceived benefit (PB) is a fundamental aspect of customers’ buying decisions (Al Amin, Nowsin, Hossain, & Bala, 2020). A company’s success depends on its clientele and FSMM may help the clientele learn more about the company’s goods and services through clear and concise communication (Dachyar & Banjarnahor, 2017). If clients see FSMM favorably, they can favor FOPO (Al Amin et al., 2020). Although FSMM-based awareness is generally well-received by the customers, a few hazards may be associated with this form of advertising (Hassan, Iqbal, & Khanum, 2018). To counteract this, businesses must offer compelling incentives, such as quick, accurate information and a simple interface. In addition, businesses can ask customers who have had a pleasant or negative online experience (or who have bought products or services from them in the past) to fill out a survey, the results of which would hopefully evoke favorable mental images of the brand and lead to increased sales (Dachyar & Banjarnahor, 2017).

Unfortunately, there is no concrete evidence from the earlier studies to grasp how PB may aid FOPO. In order to test the hypothesis that this FSMM’s dimension (PB) will affect FOPO, the authors included it in this study as the fourth dimension. Customers’ receptivity to a Facebook page’s good impressions and the related anticipation that FSMM will bring on a promise may give rise to the perception of worth (Tran, Blanchflower, & Lin, 2022; Sharma & Klein, 2020). Customers like to be informed about what they can anticipate from a company’s Facebook page before placing an online order. A few examples of what customers hope to gain from shopping online are as follows: (1) accurate and detailed information about the product’s performance; (2) the total price they will have to pay, including any service or delivery fees and (3) information about saving time and having a more convenient experience (navigation, submission of orders and time of receiving products). Businesses can lessen their anxiety and uncertainty by giving customers all the information they need before making an SM-based online purchase. The study proposes to examine the subsequent research hypothesis:

**H4.** PB has a positive relationship with FOPO.

### 2.2 Conceptual framework

This research aims to identify the relationships between the four factors of FSMM and FOPO. **Figure 1** provides a visual representation of the conceptual underpinnings of this empirical study.
3. Research methodology

3.1 Collection of data
This study adopted primary data as the authors intended to identify the perceptions of Facebook page admins of popular South Asian online fashion brands regarding the relationship between FSMM-based factors and FOPO. The authors employed a formal survey instrument (structured survey questionnaire) to accumulate primary data from the respondents who were purposefully selected in advance. All the respondents worked as the region-based Facebook page admins of 20 pre-selected brands in those three South Asian countries (Appendix 1).

3.2 Measurement tool
The study collected primary data using a “19-item structured questionnaire” with a “5-point Likert Scale” constructed from the literature review (Appendix 2). Before distributing the questionnaire, respondents were briefed about the items to minimize confusion and inaccuracies.

3.3 Sampling method and sample size
As this study had a specified goal, purposive sampling was used to gather the respondents. Purposive sampling limits respondents or participants to those who can provide specific information, either since they are the sole ones who possess such information or since they comply with particular criteria specified by the researchers (Sekaran & Bougie, 2010). According to Blumberg, Cooper, and Schindler (2011) purposive sampling technique is suitable when researchers utilize their preferred samples to meet any particular criteria.

Purposive sampling was utilized to acquire data from selected respondents who managed the Facebook pages of 20 online fashion firms and took FOPOs. Since the number of respondents was limited according to the study objective (region-wise Facebook page admins only), the authors identified 116 region-based Facebook page admins representing those 20 fashion brands from three South Asian counties. Initially, the authors sent out 116 questionnaire forms to all of those targeted respondents and received back 114 of those instruments. Thus, the sample size (n) was determined as 114.
4. Analysis and interpretation

4.1 Demographic information

As stated before, the authors selected the respondents purposefully to create a sample pool that reasonably characterizes the South Asian Facebook-based digital fashion industry. Table 1 breakdowns the allocation of samples on the basis of demographic features of the survey instrument and monthly purchase orders taken (in number) through the brand’s Facebook pages.

Of respondents, 51.75% of those who filled out the survey instrument were male and exactly half of them were aged between 28 to 37 years followed by 18 to 27 years (30.70%). 59.65% of the respondents had a bachelor degree. 42.98% of the selected respondents received between 100 and 200 Facebook-based purchase orders monthly while another 28.07% reported that they received between 201 and 300 purchase orders monthly.

<table>
<thead>
<tr>
<th>Demographic factors</th>
<th>Group</th>
<th>Absolute number</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>59</td>
<td>51.75</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>55</td>
<td>48.25</td>
</tr>
<tr>
<td></td>
<td>Total (n)</td>
<td>114</td>
<td>100</td>
</tr>
<tr>
<td>Age range (in year)</td>
<td>18-27</td>
<td>35</td>
<td>30.70</td>
</tr>
<tr>
<td></td>
<td>28-37</td>
<td>57</td>
<td>50.00</td>
</tr>
<tr>
<td></td>
<td>38-47</td>
<td>22</td>
<td>19.30</td>
</tr>
<tr>
<td></td>
<td>Total (n)</td>
<td>114</td>
<td>100</td>
</tr>
<tr>
<td>Educational level</td>
<td>Undergraduate</td>
<td>68</td>
<td>59.65</td>
</tr>
<tr>
<td></td>
<td>Masters</td>
<td>46</td>
<td>40.35</td>
</tr>
<tr>
<td></td>
<td>Total (n)</td>
<td>114</td>
<td>100</td>
</tr>
<tr>
<td>Facebook-based purchase orders taken (Monthly)</td>
<td>Less than 100</td>
<td>15</td>
<td>13.16</td>
</tr>
<tr>
<td></td>
<td>100–200</td>
<td>49</td>
<td>42.98</td>
</tr>
<tr>
<td></td>
<td>201–300</td>
<td>32</td>
<td>28.07</td>
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<tr>
<td></td>
<td>301–400</td>
<td>18</td>
<td>15.79</td>
</tr>
<tr>
<td></td>
<td>Total (n)</td>
<td>114</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 1. Demographic information

Source(s): Survey instrument
Nevertheless, it was found that one indicator (PInf4) of one of the independent variables (PInf) exhibits a little kurtosis (−1.20). Sposito, Hand, and Skarpness (1983) suggest a range of −3.3 to 3.3 as the lower and upper thresholds for normality; while this finding does not adhere to the rigorous requirements of normality, it does adhere to the more flexible rules.

4.4 Evaluation of the model
4.4.1 Measurement model (exploratory factor analysis). According to Field (2000) and Hair et al. (1998), there are four widely accepted assumptions that must be met in order to evaluate “exploratory factor analysis” (EFA): (1) sampling adequacy (Kaiser–Mayer–Olkin [KMO]) measure greater than 0.5; (2) the minimum eigen value for each factor; (3) considering the sample size, factor loading of 0.50 for each item was considered as the threshold for retaining items to ensure greater confidence; and (4) varimax rotation was used since it is an excellent general approach that simplifies the interpretations of the factors (Field, 2000).

The EFA outcomes have been shown in Table 4. When both the “Bartlett’s test of sphericity” and the “KMO test” are significant, factor analysis, according to Hair, Black, Babin, and Anderson (2010), may be conducted. “Bartlett’s test of sphericity” $\chi^2 (p = 0.000)$ and an index of Kaiser’s measures of sampling adequacy (Overall MSA = 0.828) indicated that the factor analysis was appropriate for additional data analysis in our study. Table 4 indicates that all the items had factor loadings more than 0.50 after observing the EFA pattern matrix.

It is evident that the first factor (PT), when combined with three items, can explain 24.54% of the overall variance. The second factor (PInf), when combined with four items, can explain 16.60% of the overall variance. The third one (PInt), when combined with five items can explain 15.60% of the total variance. Finally, 8.73% of the variation with three items can be explained by the fourth and final independent component (PB). In this research, with four items, the single dependent variable (FOPO) can account for 9.18% of the overall variation. Furthermore, all the variables’ reliability values (Cronbach’s alpha) were higher than 0.7, meeting the Nunnally and Berstein recommended cutoff point (1994). All the 19 items were appropriate for additional study using confirmatory factor analysis and structural equation modeling (SEM).

Results demonstrate that factor analysis was suitable. After validating study structures, “maximum likelihood (ML)” and the “promax method (PM)” were utilized to precisely extract variables from 19 items. Hair et al. (2010) advised that item factors loading must exceed 0.50 to be very significant. A five-factor model with eigen value greater than 1 explains 74.65% of the dataset’s variation. Eigen value aggregated 19 elements into five components. The variable factor loadings ranged from 0.718 to 0.922. Thus, all factors were suitable for further study after factor analysis (Table 4).

4.4.2 Outcomes of the measurement model. The statistical method known as “confirmatory factor analysis (CFA)” is universally used to verify the observed variables’ factor structure. Using CFA, the researchers can verify that the variables are linked to associated elements.

<table>
<thead>
<tr>
<th></th>
<th>FOPO</th>
<th>PT</th>
<th>PInf</th>
<th>PInt</th>
<th>PB</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOPO</td>
<td>0.91</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT</td>
<td>0.06**</td>
<td>0.87</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PInf</td>
<td>0.301***</td>
<td>0.456**</td>
<td>0.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PInt</td>
<td>0.443**</td>
<td>0.112*</td>
<td>0.470**</td>
<td>0.81</td>
<td></td>
</tr>
<tr>
<td>PB</td>
<td>−0.091*</td>
<td>0.461***</td>
<td>0.211***</td>
<td>0.07*</td>
<td>0.78</td>
</tr>
</tbody>
</table>

**Note(s):** Significance of correlations: * $p < 0.050$, ** $p < 0.010$ and *** $p < 0.001$

**Source(s):** SPSS 25

**Table 2.** Discriminant validity
The fit indices likewise indicated a decent match for the measurement model. For example, the relative chi-square for this model was 4.015, below 5.0, as Marsh and Hocevar (1985) advised. The model’s “goodness of fit index” was 0.916, more than the minimum 0.90 recommended by Joreskog and Sorbom (1993). Table 5 displays the investigation’s summarized findings. According to the fit indices, the model was ideal for the data.
<table>
<thead>
<tr>
<th>Factors</th>
<th>EV</th>
<th>PV</th>
<th>CV</th>
<th>Items</th>
<th>Factor loading</th>
<th>CR</th>
<th>AVE</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT</td>
<td>7.65</td>
<td>24.54</td>
<td>24.54</td>
<td>PT1: Trust is a significant factor for Facebook-based marketing</td>
<td>0.881</td>
<td>0.81</td>
<td>0.81</td>
<td>0.897</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PT2: To build a trusted relationship, online brands must respond to customers’ inquiry specifically and timely</td>
<td>0.822</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PT3: A trusted brand is recommended by the customers to their friends, family members and relatives</td>
<td>0.814</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plnf</td>
<td>4.83</td>
<td>16.60</td>
<td>41.14</td>
<td>Plnf1: FSMM is a fine source of product information and innovative offerings</td>
<td>0.922</td>
<td>0.86</td>
<td>0.82</td>
<td>0.911</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Plnf2: FSMM provide timely and updated product information</td>
<td>0.814</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Plnf3: FSMM is a convenient source of providing product information</td>
<td>0.834</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Plnf4: I try my best to respond any inquiry made by the customers about my company’s products</td>
<td>0.815</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PInt</td>
<td>3.77</td>
<td>15.60</td>
<td>56.74</td>
<td>PInt1: FSMM is effective in gathering customers’ feedback</td>
<td>0.803</td>
<td>0.88</td>
<td>0.67</td>
<td>0.864</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PInt2: Through FSMM, my company listens to the views and opinions of customers</td>
<td>0.729</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PInt3: FSMM encourages customers to offer feedback</td>
<td>0.776</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PInt4: FSMM offers customers the opportunity to inquire, complain and suggest about my company’s products, price and delivery services</td>
<td>0.779</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PInt5: FSMM facilitates a collaborative communication between the customers and the companies</td>
<td>0.718</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PB</td>
<td>4.11</td>
<td>8.73</td>
<td>65.47</td>
<td>PB1: FSMM is a good source to advertise and promote my company’s products</td>
<td>0.781</td>
<td>0.77</td>
<td>0.71</td>
<td>0.817</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PB2: It is easy for me to reach mass customers through FSMM</td>
<td>0.890</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PB3: As an admin of my company’s brand, I recommend other companies to grab the benefits of Facebook-based marketing and promotion</td>
<td>0.763</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOPO</td>
<td>3.74</td>
<td>9.18</td>
<td>74.65</td>
<td>FOPO1: Customers put online orders through company’s Facebook page</td>
<td>0.815</td>
<td>0.85</td>
<td>0.71</td>
<td>0.857</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>FOPO2: I enjoy my job as I can satisfy my customers</td>
<td>0.736</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>FOPO3: I feel proud when my customers happily put Facebook-based online purchase orders</td>
<td>0.899</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>FOPO4: My customers are generally satisfied after buying products online</td>
<td>0.723</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note(s):** EV = Eigen value; PV = Percent of variance; CV = Cumulative variance; KMO = 0.828, DF = 251 and Significance = 0.000

**Source(s):** SPSS 25

Table 4. EFA outcomes
According to Anderson and Gerbing (1984), the current study’s “adjusted goodness of fit index (AGFI)” was determined to be 0.854, meeting the recommended value of (>0.85), making it a better fit. Besides, the “comparative fit index (CFI)”, a nonincremental fit metric, was 0.916, which is higher than the suggested cut-off level of 0.90 (Bentler, 1990). The “root mean residual (RMR)” score was 0.078, below the acceptable limit of 0.08 and is frequently advised as acceptable (Hu and Bentler, 1999). When compared to the indicated excellent fit to the data, the “root means square error of approximation (RMSEA)” was 0.077 that is also smaller than the recommended value of 0.08 by Browne and Cudeck (1993). Finally, it was discovered that the “standardized means square residual (SRMR)” had a value of 0.076, which is smaller than 0.08 that Browne and Cudeck proposed (1993).

4.5 Collinearity assessment
This study calculated “variance inflation factors (VIFs)” to test multicollinearity. VIFs can be 1 to 10 or higher (Hair et al., 1998). The VIF number shows each coefficient’s variance inflation percentage. With the variance inflation factor, 1 is considered as not correlated, 1–5 as moderately correlated and a VIF score higher than 5 indicates strong correlation (Hair et al., 1998).

The authors computed VIFs to test for multicollinearity and found a maximum value of 1.847 (Table 6), which is within the allowable limit suggested by Hair et al. (1998).

4.6 Common method bias
Whether or not a single factor can account for most of the variance is a question that may be investigated with “Harman’s single factor test”. The “common method bias (CMB)” is unlikely to have happened if a single component cannot account for a large proportion of the observed variation (Aguirre-Urreta & Hu, 2019).

Based on the results indicated in Table 7, a single factor can only explain a 18.541% variance in this study, meaning that CMB did not take place.

<table>
<thead>
<tr>
<th>Goodness of fit indices</th>
<th>Value</th>
<th>Level of acceptance</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square/df</td>
<td>4.015</td>
<td>&lt;5.0</td>
<td>Marsh and Hocevar (1985)</td>
</tr>
<tr>
<td>CFI</td>
<td>0.916</td>
<td>&gt;0.90</td>
<td>Bentler (1990)</td>
</tr>
<tr>
<td>RMR</td>
<td>0.078</td>
<td>&lt;0.08</td>
<td>Hu and Bentler (1999)</td>
</tr>
<tr>
<td>GFI</td>
<td>0.916</td>
<td>&gt;0.90</td>
<td>Joreskog and Sorbom (1993)</td>
</tr>
<tr>
<td>AGFI</td>
<td>0.854</td>
<td>&gt;0.85</td>
<td>Anderson and Gerbing (1984)</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.077</td>
<td>&lt;0.08</td>
<td>Browne and Cudeck (1993)</td>
</tr>
<tr>
<td>SRMR</td>
<td>0.076</td>
<td>&lt;0.08</td>
<td></td>
</tr>
</tbody>
</table>

Table 6. VIF and tolerance in multicollinearity

<table>
<thead>
<tr>
<th>Construct</th>
<th>PT</th>
<th>PlInf</th>
<th>PInt</th>
<th>PB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tolerance</td>
<td>0.716</td>
<td>0.912</td>
<td>0.731</td>
<td>0.693</td>
</tr>
<tr>
<td>VIF</td>
<td>1.498</td>
<td>1.847</td>
<td>1.317</td>
<td>1.422</td>
</tr>
</tbody>
</table>

Note(s): Dependent variable: OPO
Source(s): SPSS 25
4.7 Structural model
The study used covariance-based structural equation modeling (CB-SEM), a multivariate
analysis approach, to determine the correlations between four FSMM factor components and
FOPO. The structural parameter estimations and the outcomes of the hypotheses testing
have been presented in Table 8 and Figure 2.

According to the study, three independent factors – PT, PInf and PB have significant positive relationships with FOPO. PInt, on the other hand, exhibits a negligible correlation with FOPO, rejecting H3 and supporting H1, H2 and H4.

The $R^2$ value of the model was 48.2 indicating that all the four factors can explain 48.2% variance of the dependent variable, FOPO. The results of SEM have been shown in Table 8 and Figure 2.

---

### Table 7.
CMB test

<table>
<thead>
<tr>
<th>Component</th>
<th>Total</th>
<th>Initial eigen values</th>
<th>Extraction sums of squared loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>% Of variance</td>
<td>Cumulative %</td>
</tr>
<tr>
<td>1</td>
<td>6.211</td>
<td>26.007</td>
<td>26.007</td>
</tr>
</tbody>
</table>

**Source(s):** SPSS 25

### Table 8.
Regression weights:
(Group number 1–Default model)

<table>
<thead>
<tr>
<th>Path-model</th>
<th>Hypothesis</th>
<th>Estimate</th>
<th>SE</th>
<th>CR</th>
<th>$p$-value</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOPO ← PT</td>
<td>H1</td>
<td>0.21</td>
<td>0.074</td>
<td>1.192</td>
<td>0.018</td>
<td>Supported</td>
</tr>
<tr>
<td>FOPO ← PInf</td>
<td>H2</td>
<td>0.18</td>
<td>0.063</td>
<td>2.318</td>
<td>0.008</td>
<td>Supported</td>
</tr>
<tr>
<td>FOPO ← PInt</td>
<td>H3</td>
<td>0.15</td>
<td>0.077</td>
<td>1.336</td>
<td>0.056</td>
<td>Not supported</td>
</tr>
<tr>
<td>FOPO ← PB</td>
<td>H4</td>
<td>0.23</td>
<td>0.069</td>
<td>3.156</td>
<td>0.001</td>
<td>Supported</td>
</tr>
</tbody>
</table>

**Source(s):** AMOS 25

---

![Conceptual framework with hypotheses testing results](image-url)
5. Discussion
According to the statistical analysis, PT has a significant positive relationship with FOPO \((\beta = 0.21; CR = 1.192; P < 0.05)\), which is supportive to the previous arguments and outcomes reported by Featherman and Hajli (2016), Hajli and Lin (2016) and Yang et al. (2009) who argued that SM-based marketing such as FSMM can increase brand trust and purchase intention. They further pointed that a two-way communication, either created by firm itself or generated by the users can boost brand trust and improve the relationship between the firms and customers. PInf was also identified to be significantly and positively related to FOPO \((\beta = 0.18; CR = 2.318; P < 0.05)\) duly supported by a number of previous research studies conducted by Mustafi and Hosain (2020), Wang and Wen (2017), Ott et al. (2016) and Lee and Hong (2016).

The study revealed that the third component of FSMM, PInt has a non-significant relationship with FOPO \((\beta = 0.15; CR = 1.336; P > 0.05)\). Although the relationship is positive, such an outcome is contradictory to most of the previous findings. Finally, according to the analysis, the study found that PB has a significant positive relationship with FOPO \((\beta = 0.23; CR = 3.156; P < 0.05)\) duly supported by Al Amin et al. (2020), Sharma and Klein (2020), Hassan et al. (2018) and Dachyar and Banjarnahor (2017). According to them, Facebook page’s perceived positive impressions and implied expectations can positively convey a promise to the customers.

6. Research implications
6.1 Theoretical implications
Theoretical contribution to this timely and engaging topic is anticipated from this empirical work. Despite the proliferation of papers on SMM and branding, the significance of Facebook-based marketing in driving up Facebook-based online purchases has been often overlooked. This paper is unique and can contribute to the academia based on at least three reasons: (1) it included Facebook page admins as the respondents that has never been done so far in the academia according to the authors’ knowledge; (2) this empirical research was conducted in three different countries, which is relatively uncommon in academic studies and (3) the study considered the 20 largest and famous online fashion brands from the three South Asian countries which is also quite a novel approach.

Although social media marketing/advertising is not a new approach, its appeal is not declining. Rather, many young people are now being engaged in online buying behavior in order to save their time and energy (Alalwan, 2018). Therefore, more and more empirical research are required to be conducted to guide the online marketers and customers so that they can get the best benefits out of this technological tool. As the authors, we believe that this research can serve as a starting point for academics interested in pursuing additional research studies into this rapidly developing sub-field of advertising and marketing.

6.2 Practical implications
South Asia is at present the largest populated area in the entire world. Therefore, any research outcomes are crucial for the policymakers as they can get valuable guidelines from such research outcomes. This empirical study was conducted in three South Asian countries based on the Facebook page admins of 20 popular online fashion brands. Thus, the research outcomes are expected to aid the SMM strategists, policymakers and regulating agencies all alike in order to protect the rights and interest of all the stakeholders.

In addition, FSMM is currently a trending topic in the business sector. The authors expect that this, along with other scientific (quantitative and qualitative) findings, will be useful to regulators like chief executive officers (CEOs), brand managers and independent agencies
such as consumer groups and governments in undertaking, governing and regulating SMM policies and strategies that can be beneficial for all the involved stakeholders.

7. Limitations and further scope:
This research study is one of the fewer ones that has looked at how FSMM may affect FOPO. However, it does have some apparent drawbacks. For instance, this research focused on just one industry (the fashion industry) and a few retail brands. More comprehensive studies encompassing a wider range of countries and sectors may yield more representative results. Also, a larger sample size for such investigations may deliver better results.

The authors strongly believe that more academics will step forward to look at this crucial topic and offer some helpful advice for businesses and regulators. Such research will not only lead to some essential policy suggestions but also direct and inspire academics to continue studying this significant and relatively new issue.

8. Conclusion
It is important to remember that SM is more than just a mean of staying in touch with friends and family and passing the time. In addition to promoting businesses, it may aid those vulnerable to disasters such as the ones we are currently experiencing, the breakout of Covid-19 and the Russia–Ukraine war. Because of the wide range of participants, the only purpose of an online media platform cannot be to facilitate social interaction. Advertising on SM and maintaining a company profile might help develop a timely and effective marketing plan.

According to the outcomes of this study, there is a significant positive correlation between FSMM-based various independent constructs and the number of Facebook-based online sales orders for South Asian online fashion businesses. Therefore, medium and smaller organizations, including fashion houses, should prioritize and be active more on Facebook-based promotion and marketing to reach mass people as the potential customer base. The CEOs and brand/marketing managers of those firms are also recommended to identify and examine more investigative attempts like this one to grab the benefits offered by online social media more effectively and efficiently.

References


Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research, 12*, 382–388.


**Further reading**


**Corresponding author**

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## Appendix 1

<table>
<thead>
<tr>
<th>Country</th>
<th>Brand names</th>
</tr>
</thead>
</table>
| India       | Flipkart  
               Myantra  
               Ajio  
               Jabong  
               Global Deshi  
               Bombay Selection  
               Pantaloons  
               Biba  
               FabIndia  |
| Pakistan    | Khaadi  
               Nishat  
               Gul Ahmed  
               Outfitters  
               Limelight  
               Trendz  
               Sanasafinaz  |
| Bangladesh  | Yellow  
               Arong  
               Ecstasy  
               Westechs  |

Total number of brands 20

**Source(s):** Authors' selection

*Table A1.* (Selected fashion brands)
Appendix 2

<table>
<thead>
<tr>
<th>Factors</th>
<th>Items</th>
<th>Reference(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Trust (PT)</td>
<td>PT1: Trust is a significant factor for Facebook-based marketing</td>
<td>Jawad et al. (2022), Vuong (2022), De Silva and Herath (2019), Alalwan (2018)</td>
</tr>
<tr>
<td></td>
<td>PT2: To build a trusted relationship, online brands must respond to customers’ inquiry specifically and timely</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PT3: A trusted brand is recommended by the customers to their friends, family members and relatives</td>
<td></td>
</tr>
<tr>
<td>Perceived Informativeness (PInf)</td>
<td>PInf1: FSMM is a fine source of product information and innovative offerings</td>
<td>Hride et al. (2021), Mustafi and Hosain (2020), Wang and Wen (2017), Lee and Hong (2016)</td>
</tr>
<tr>
<td></td>
<td>PInf2: FSMM provide timely and updated product information</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PInf3: FSMM is a convenient source of providing product information</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PInf4: I try my best to respond any inquiry made by the customers about my company’s products</td>
<td></td>
</tr>
<tr>
<td>Perceived Interactivity (PInt)</td>
<td>PInt1: FSMM is effective in gathering customers’ feedback</td>
<td>Arora (2022), Mustafi and Hosain (2020), Ebrahim (2019), Wang et al. (2019), Alalwan (2018), Shilburi et al. (2014)</td>
</tr>
<tr>
<td></td>
<td>PInt2: Through FSMM, my company listens to the views and opinions of customers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PInt3: FSMM encourages customers to offer feedback</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PInt4: FSMM offers customers the opportunity to inquire, complain and suggest about my company’s products, price and delivery services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PInt5: FSMM facilitates a collaborative communication between the customers and the companies</td>
<td></td>
</tr>
<tr>
<td>PB (Perceived Benefit)</td>
<td>PB1: FSMM is a good source to advertise and promote my company’s products</td>
<td>Tran et al. (2022), Sharma and Klein (2020), Al Amin et al. (2020), Hassan et al. (2018), Dachyar and Banjarnahor (2017)</td>
</tr>
<tr>
<td></td>
<td>PB2: It is easy for me to reach mass customers through FSMM</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PB3: As an admin of my company’s brand, I recommend other companies to grab the benefits of Facebook-based marketing and promotion</td>
<td></td>
</tr>
<tr>
<td>Facebook-based online purchase order (FOPO)</td>
<td>FOPO1: Customers put online orders through company’s Facebook page</td>
<td>Lal and Sharma (2021), Shafaat, Shareef, Kishwar, and Aleem (2020), Khan et al. (2019), Kumari (2019), Wang et al. (2019)</td>
</tr>
<tr>
<td></td>
<td>FOPO2: I enjoy my job as I can satisfy my customers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FOPO3: I feel proud when my customers happily put Facebook-based online purchase orders</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FOPO4: My customers are generally satisfied after buying products online</td>
<td></td>
</tr>
</tbody>
</table>

Table A2. (Selected factors and questionnaire items with literature sources) **Source(s):** Literature review