

An Interplay between Social Media Marketing, Consumer Behavior and Relationship Quality: Scale Development and Validation

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Abstract:

This study explores the impact of social media marketing on consumer behavior and relationship quality in India's fast-moving consumer goods (FMCG) industry. As internet connectivity expands nationwide, social networking platforms such as Facebook, Instagram, and X (Twitter) have become a primary driver of online purchasing decisions. To address this trend, we developed and validated a scale to measure the influence of social media marketing on consumer behavior and relationship quality. Data were collected from 398 online users and analyzed using SPSS-23 and AMOS software. The resulting scale demonstrated strong internal consistency and reliability across various samples. Our findings revealed significant interrelationships among the factors studied, highlighting the importance of social media marketing in shaping consumer behavior and fostering relationship quality. This research contributes to both industry practice and academic literature by providing a robust tool for measuring the impact of social media marketing on consumer behavior and relationship quality in the FMCG sector. The insights gained from this study can inform marketing strategies and guide future research in the rapidly evolving digital landscape of India's consumer market.

Keywords: Social Media Marketing, Consumer Behaviour, Relationship Quality, FMCG Industry.

1. Introduction

Social media marketing refers to the use of social media platforms to increase sales, establish brands, and drive online traffic in order to connect people. (Zuhdi et al., 2019). According to Nair (2011), Social media refers to "online tools where content, opinions, perspectives, insights, and media can be shared at its core. Social media is about relationships and connections between people and organizations." Advances in internet technology are changing the way we communicate, impacting billions of people around the world. Social media an online community based on internet technology, gained popularity in the early nineties with the goal of encouraging greater interactions between businesses and their clients beyond geographical boundaries. (Campbell et al., 2013).

Many businesses are incorporating social media as a significant component of their marketing strategies according to Zhou and Wang (2014). This is because social media offers many very promising aspects, like a rapidly expanding user base, fast internet speeds and ease of use. The

increasing number of internet and social media users who have registered motivated marketers to adopt social media marketing. (Carim and Warwick, 2013).

Users can create profiles on networking sites upload content, and exchange information with other users while interacting with the site. (Kaplan & Haenlein, 2010). When it comes to connecting and networking with customers, social media presents more options for marketers than traditional marketing mediums. (Gros, 2012). Social media tools are helpful in analyzing customer internet usage patterns, product information searches, customer reviews regarding their experiences with items, and the decision-making process of consumers. (Wang and Chang, 2013). Additionally, best, Manktelow and Taylor (2014), discovered this extensive consumer data is giving marketers more options for developing cost- effective marketing strategies in the areas of digital content creation and distribution, advertising, customer-relationship management and communication with target audiences.

Traditional and marketing communication have undergone significant changes due to social media revolution. Social media platforms are now the most popular means of communication for consumers, playing a bigger part in everyday communications. Users are now spending more and more time sharing and researching information about brands, products and services on these social media platforms. (Blackshaw & Nazzaro, 2006).

In contrast to traditional communications passive position, these new tools for communication allow consumers to take an active part in the process. The marketing communication process has changed as a result of social media platforms enabling two- way engagement between customers and brands. (Berthon et al., 2008). In contrast to traditional marketing communication consumers are now an influential component of that communication. (Constantinides and Fountain, 2008). Therefore, in order to engage with users and consumers brands heavily rely on social media for communication and campaigns.

Literature Review

Social media aims to bridge the gap between Consumers and marketers by fostering constant communication, establishing trust, and quickly and correctly engaging with target audience. (Kaushik and Rajiv, 2012). Social networks are a powerful tool for marketers since they present numerous chances to cultivate relationships between brands and consumers. (Vukasovic,2013).

Social media has been viewed by many businesses in recent years as one of the best means of connecting with customers, enabling them to forgue unique brand identities, and boosting Consumer – brand relations. (So et al., 2017). Many businesses realize how important it is to use social media in marketing since it will boost brand loyalty when used regularly and directly to engage with potential customers in the digital economy. (Sayabek et al., 2019).

Currently, Facebook, Twitter, Instagram, Pinterest, LinkedIn, YouTube, Snapchat and many more are the most popular social media platforms. The growth and expansion of the firm is greatly aided by these social media channels. (Zuhdi et al., 2019). The significant increase in the usage of social media over the last decade has highlighted the necessity for comprehensive guidance on developing social media marketing strategies that facilitate customer relationship -building, enhance customer engagement, and improve market performance. (Li et al., 2020).

Kierzkowski, McQuade, Waitman, and Zeisser (1996) delineated five essential components of e-marketing in order to achieve success in the realm of digital marketing: Relate, Attract, Engage, Retain, and Learn. Authors have regarded e-marketing as a nascent phase in the evolution of social media marketing. These components were subsequently leveraged by authors like Teo (2005) and Chan and Guillet (2011) in their social media marketing research. However, there remains a lack of consensus regarding the generalization of this framework. Subsequently, Kim and Ko (2012) developed a new framework for social media marketing. Their research delved into the role of social media marketing activities on enhancing customer equity, specifically focusing on luxury fashion brands. They proposed a five-factor framework for evaluating social media marketing activities which include Entertainment, Interaction, Trendiness, Customization and Word -Of -Mouth.

CONSUMER BEHAVIOR

Purchase Intentions and loyalty Intentions were taken as consumer behaviors in this study. The desire of the customer to purchase a thing is known as purchase intention. (Dodds, Monroe & Grewal, 1997). In business customers loyalty refers to a customer’s ongoing consistency in purchasing products or services from a particular seller.

RELATIONSHIP QUALITY

Relationship quality is a multifaceted metaconstruct that signifies the comprehensive nature of relationships between businesses and consumers. (Hennig and Thureau, 2000). Within the studies of Consumer markets, the dimensions of relationship quality construct consistently identified are trust and satisfaction. (Crosby et al., 1990; Wray et al., 1994; Bejou et al., 1996; Lin and Ding, 2005). Nevertheless, a significant number of authors also include the aspect of commitment. (De Wulf et al., 2001; Macintosh, 2007; Mcliner et al., 2007). Relationship quality might therefore be proposed as a predicate of relationship continuity (Lai et al., 2008) which is crucial for long-term corporate success. (Sheth and Palvatlyar, 1995). Relationship that exhibit high quality have the potential to yield positive financial results. (Palmatier et al., 2007). Establishing high quality relationships has the ability to create strong connections between buyers and suppliers, leading to mutual benefits that extend beyond the basic exchange of goods and services. (Jap, Manolis and Weitz, 1999., Macneil, 1980).

CONCEPTUAL FRAMEWORK OF THE STUDY

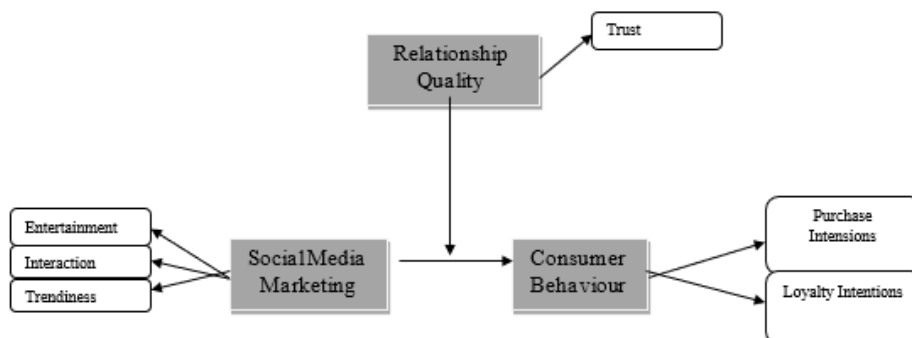


Fig: Developed by Researcher

2. Research Methodology

The current study follows the cross sectional descriptive research method in which a well known scale development procedure was followed which was established by Churchill (1979). The data further was collected through a structured questionnaire in order to test the model.

3. Scale Development

The current work used the well-known scale development procedure established by Churchill (1979), which has been supplemented by a number of distinguished researchers such as Anderson & Gerbing (1982); Bagozzi, Youjae, & Lyne, (1991); Nunnally & Bernstein (1994) and Hinkin (1995). The scale development approach (Bhat & Bashir, 2017) is illustrated in fig 1.

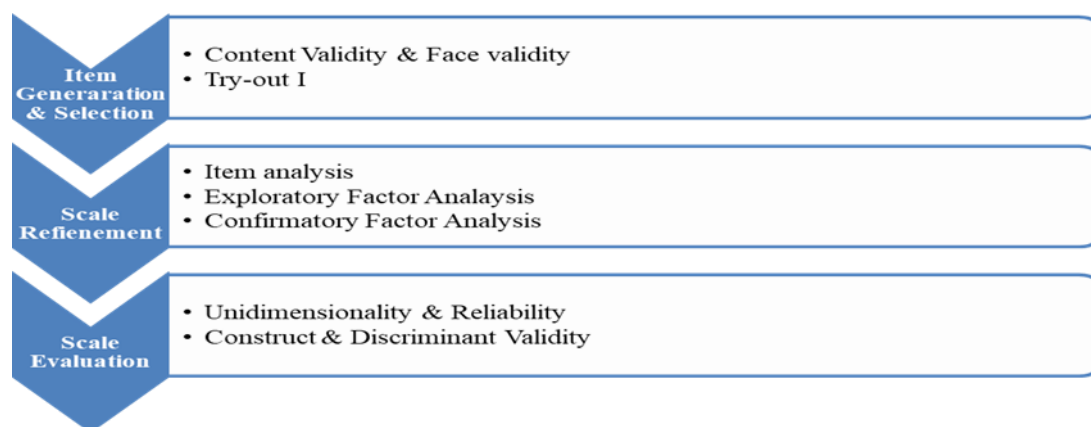


Fig. 1 Scale development approach. Source: Bhat & Bashir (2017).

Phase 1: Item Generation and Selection

I. Content Validity: The deductive approach of scale development was used in the current study in accordance with Hinkin's (1995) recommendations. To determine the recommended aspects of social media marketing, consumer behaviour and relationship quality in the FMCG sector, an exhaustive examination of literature dealing with various factors of social media marketing, consumer behaviour and relationship quality was carried out. Using a 5-point rating system, where 5 represents "Strongly Agree" and 1 represents "Strongly Disagree", each statement on social media marketing, consumer behaviour and relationship quality was framed using insights from the literature and the original set of 28 items. 9 experts (Professors) from three categories "Clearly Representatives", "Somewhat Representatives" and "Not Representatives" reviewed the initial pool of items after it was generated (Lin & Hsieh, 2011). The panel recommended removing 5 items from the first screening because they overlapped. After revision, the scale was sent to subject matter experts. The experts re-examined the scale multiple times and removed 3 additional items. The experts once again reviewed the final pool of 20 items, suggesting that common terms be used in place of phrases but no item was removed.

II. Try-out: To undertake pilot testing of social media marketing, consumer behaviour and relationship quality scale, a questionnaire consisting with 20 items rated on a five-point scale was utilized. The questionnaire was separated into two sections, the first section gathered demographic details from participants such as gender, designation and education level, while the second section had

20 statements assessing social media marketing, consumer behaviour and relationship quality. A sample of 200 participants from individuals residing in J&K were gathered for the scale pilot testing aligning with the approach of Karatepe, Yavas, & Babakus, (2005); Garg, Rahman & Qureshi, (2014); and Bhat & Bashir,(2017). The respondents involved in this research were chosen through convenience sampling, with a total of 300 surveys distributed; despite multiple reminders, only 200 were ultimately completed and returned.

Phase 2 Scale Refinements:

I. Item Analysis:

Churchill (1979) proposed the calculation of Cronbach’s Alpha as a fundamental aspect of scale refinement. The researcher employed SPSS 21 to determine Cronbach’s Alpha value for the dimensions of social media marketing, consumer behaviour and relationship quality, yielding a range of 8.49 to 9.32, but the satisfactory value alpha is 0.7 (Nunnally, 1978).

Item analysis through Cronbach Alpha

Reliability Statistics

Variables	Cronbach's Alpha	N of Items
Social Media Marketing	.849	7
Consumer behavior	.927	7
Relationship quality	.932	6

II. Exploratory Factor Analysis:

The next step in the refinement phase, following item analysis is Exploratory Factor Analysis. The researcher used SPSS 21 to conduct an exploratory factor analysis on 20 items. EFA determines the state of an instrument when there are uncertain connections between latent and observable variables in EFA the principal component matrix method along with varimax rotation was considered to extract the factors. Further the items having factor loadings less than .5 & communalities less than .30 were extracted. In order to go further in factor analysis the KMO test was conducted and was found significant with .876 which is greater than .60 which determined the appropriateness of analysis for EFA. After analyzing the EFA revealed 3 factors for social media marketing and 2 factors for consumer behavior and 1 factor for relationship quality having Eigen values greater than 1 with 69.3 % variance which is significant. During the EFA process none of the items were deleted as they all qualify the minimum criteria as shown in table:

Exploratory factor analysis of social media marketing

Items	Entertainment	Interaction	Trendiness
SMM1	.655		
SMM2	.747		
SMM3		.765	
SMM4		.733	
SMM5		.689	
SMM6			.678
SMM7			.843

Exploratory factor analysis of consumer behavior

Items	Purchase Intention	Loyalty intention
CB1	.731	
CB2	.667	
CB3	.660	
CB4	.746	
CB5		.765
CB6		.760
CB7		.719

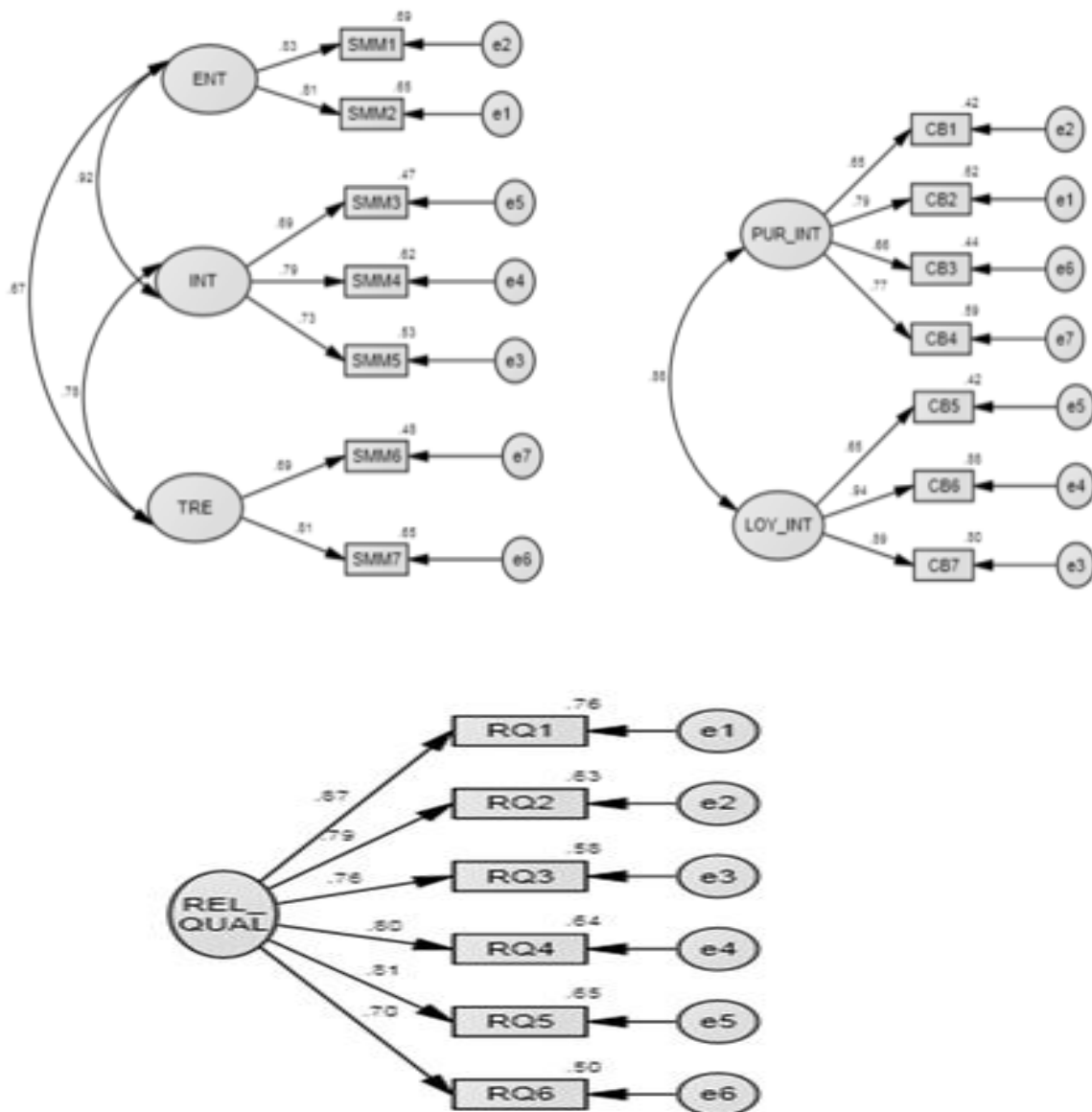
Exploratory factor analysis of Relationship quality

Items	Trust
RQ1	.755
RQ2	.831
RQ3	.818
RQ4	.767
RQ5	.776
RQ6	.686

III. Confirmatory Factor Analysis:

Once the factor structure has been confirmed, the next step in scale purification is to use confirmatory factor analysis to purify the items. CFA is a unique instance of SEM, claim Joreskog & Sorbom (2014). The covariance structure model is another name for it. In order to determine the CFA, a second pilot survey was carried out on a new sample of 398 citizens of J&K. Using the convenience sampling method, 500 questionnaires were sent out; only 418 of the 600 were returned, 20 responses were eliminated after the responses were thoroughly examined for errors and missing information. With 398 in the final data set, the response rate was 66%. 51% of the 398 responders were male and 49% were female.

It is eminent by various researchers that the perfection of an instrument depends upon various model indices (Bagozzi,1980) ; (Arnold & Reynolds, 2003). In order to test the instrument having 20 items, 6 factors Amos 19.0 was used. After so many iterations the final indices of the model were CMIN/DF =2.843, RMR= 0.83, GFI= .853, AGFI= .849, CFI= .906 & RMSEA=.064



Phase 3: Scale Evaluation:

Unidimensionality and Reliability: The results validated the constructs Unidimensionality, as each assertion or statement is associated with a single fundamental construct. The composite reliability value varies from .90 to .92. Table 3 shows that the Cronbach alpha value varies from .80 to .91 indicating that strong internal consistency and reliability.

Construct and Discriminant Validity: According to hair et.al (1998), calculating the average variance derived from each factor of the measurement model can be used to determine the construct validity of an instrument. The average variance extraction score for all the factors in this study that measure social

media marketing, consumer behaviour and relationship quality is higher than .50, which offers adequate proof of construct validity.

Fornell & Larcker 1981 and Bove et al. , 2009 state that discriminant validity of a construct can be established by comparing maximum shared variances MSV which is basically the square of correlation between two constructs with average variance extracted AVE of each construct. The values of MSV in current study was found less than AVE of different factors which is a positive sign of good discriminant validity

Table 3: Factor loadings of items along with composite reliability and average variance experienced.

Latent	Domains	Factor Loading	Composite Reliability	Average variance Extracted
Social media marketing	Entertainment	.834	.91	.62
		.816		
	Interaction	.697	.92	.63
		.794		
Trendiness	.732	.90	.61	
	.698			
	.813			
Consumer Behaviour	Purchase Intentions	.651	.90	.65
		.797		
		.660		
	Loyalty Intentions	.775	.91	.63
.654				
Relationship Quality	Trust	.940	.92	.62
		.892		
		.878		
		.793		
		.760		
	.804			
	.814			
	.709			

4. Results and Discussion

The present study employs a widely recognized and highly validated scale development process, as suggested by Churchill (1979), Hinkin (1995), and Zaid (2019). This research developed a 20-item scale encompassing six factors to measure social media marketing, consumer behavior, and relationship quality, as illustrated in Figure 1. The analysis of data across various samples revealed high internal consistency. Additionally, the instrument demonstrated strong discriminant validity, composite reliability, and factor loadings, confirming its robustness and reliability.

Among the three dimensions of social media marketing, interaction emerged as the most significant factor, followed by entertainment. In terms of consumer behavior, loyalty intentions were identified as the most critical factor, followed by purchase intentions. Both factors exhibited significant interrelated correlations, underscoring their importance. Moreover, relationship quality showed strong composite reliability, emphasizing its role in fostering durable consumer relationships.

Previous studies have identified similar variables in the context of e-retailers (Chen & Barnes, 2007; Constantinides, 2004; Dennis, Merrilees, & Jayawardhena, 2009). These studies explored consumer behavior through various lenses, such as web atmosphere, e-retailer image, attitude, trust, and cultural and social factors, which are conceptually linked to this research. The current study builds upon these insights by examining the interplay between social media marketing, consumer behavior, and relationship quality, specifically in the context of online FMCG purchases.

The findings serve as a valuable foundation for FMCG organizations to understand the interrelationships among these constructs. This knowledge can guide businesses in developing strategies to enhance consumer engagement, foster loyalty, and build trust-based relationships, thereby optimizing their online sales performance.

5. Managerial Implications

The current study offers valuable insights for managers and researchers. At the managerial level, the validated 20-item scale encompassing six factors provides a reliable framework to assess and enhance marketing strategies. Social media marketing factors like interaction and entertainment play pivotal roles, with interaction being the most influential. Managers should design engaging and interactive campaigns, such as live sessions and polls, to boost consumer engagement. Entertainment-focused content can further enhance brand recall and consumer connection.

Loyalty intentions and purchase intentions were identified as critical consumer behaviour factors. Managers can leverage loyalty programs and exclusive offers to retain customers while simultaneously driving purchase decisions. Relationship quality, characterized by trust, commitment, and emotional connection, demonstrated strong reliability, underscoring its importance in long-term consumer relationships. For FMCG organizations, these insights are particularly beneficial for optimizing online purchase strategies by integrating social media marketing and consumer behaviour insights.

From a research perspective, the study's robust methodology, based on established scale development processes (Churchill, 1979; Hinkin, 1995; Zaid, 2019), offers a validated model that future researchers can adapt and extend. The findings provide a foundation for exploring the interplay of these factors across different industries and cultural contexts, opening avenues for comparative studies.

In summary, this research equips managers and researchers with actionable strategies and a validated framework to explore and enhance the interrelationships between social media marketing, consumer behaviour, and relationship quality, driving both practical applications and academic advancements.

6. Limitations & Scope for future Research

The current study is limited to UT of Jammu and Kashmir, This study focuses on social media marketing, consumer behaviour, and relationship quality in the context of FMCG online purchases, which may limit its generalizability to other Places & industries. The data was collected from specific samples, potentially introducing demographic biases. Future research could expand the study to diverse industries and cultural contexts for broader applicability. Additionally, longitudinal studies can explore the dynamic evolution of these constructs over time. Incorporating emerging technologies like AI-driven marketing or analyzing the impact of newer social media platforms can further enrich understanding and provide deeper insights into consumer behaviour and relationship quality.

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