

The Impact of Social Media Engagement on Brand Extension Performance: The Mediating Role of Brand Equity in FMCG Brands of Uttar Pradesh

Manish Tripathi¹ Dr. Mayank Raj²

¹Research Scholar, Faculty of Commerce and Management, United University, Prayagraj, Uttar Pradesh, India

²Assistant Professor, Faculty of Commerce and Management, United University, Prayagraj, Uttar Pradesh, India

Abstract

With the growth and rise of social media platforms, the way organizations interact with consumers and value their brands has changed. In the Fast-Moving Consumer Goods (FMCG) industry, social media engagement has become a key strategic priority, playing a vital role in building consumer-brand connections and improving market results. The present study explores the effects of social media involvement on the performance of brand extension and the possibility of the brand equity as a mediator between involvement with social media and brand extension performance for Uttar Pradesh based FMCG consumers in India. A quantitative research design was used and the primary data were gathered from 487 FMCG consumers, who were asked to fill a structured questionnaire. Partial Least-Square Structural Equation Modeling (PLS-SEM) using SmartPLS 4 was used for testing the proposed hypotheses. The results show that social media engagement has significant effects on brand equity ($\beta = 0.671$, $p < 0.001$) and brand extension performance ($\beta = 0.247$, $p < 0.001$) respectively. Moreover, brand equity has a positive and strong influence on the brand extension performance ($\beta = 0.548$, $p < 0.001$). Mediation analysis further showed that brand equity partially mediated the relationship between social media engagement to brand extension performance ($\beta = 0.368$, $p < 0.001$). The findings reflect the value of engaging social media in enhancing 'Brand Value' and in supporting successful brand extension programs. The study adds to the existing body of knowledge in the field of digital marketing and digital brand extension literature by developing and building a framework that combines social media engagement, brand equity and brand extension performance. Findings also offer some practical applications for FMCG managers who wish to use social media to build brand equity and to boost the effectiveness of brand extension strategies. This study found that the keywords Social Media Engagement, Brand Equity, Brand Extension Performance, FMCG Industry, Consumer Behaviour and PLS-SEM can be used to understand the consumer engagement in Social Media platform, brand equity, brand extension performance, the FMCG industry, consumer behaviour and PLS-SEM in Uttar Pradesh.

Keywords: Social Media Engagement; Brand Equity; Brand Extension Performance; FMCG Industry; Consumer Behaviour; PLS-SEM; Uttar Pradesh; Digital Marketing.

1. Introduction

Digital technologies and social media have revolutionized marketing in today's world. Social media has grown from a basic communication medium to a powerful marketing tool, allowing organizations to foster relationships with consumers, boost brand awareness, and generate value through ongoing engagement. By creating and sharing content, commenting on posts, rating content, and joining online communities, consumers actively interact with brands, shaping their attitudes, preferences, and buying decisions (Hollebeek et al., 2022; Dwivedi et al., 2024).

Social media engagement: the extent to which consumers cognitively, emotionally and behaviourally interact with the brand in social media activities. It's these highly engaged consumers who are more likely to engage with brand content, share experiences, recommend products, and form deeper psychologically on-brand connections. Consumer engagement results in increased consumer trust, consumer loyalty and consumer attachment, which improves a firm's competitive edge in a highly competitive market (Cheung et al., 2023; Hollebeek & Macky, 2023). One of the most dynamic and competitive industries is Fast-Moving Consumer Goods (FMCG) which is a category that is bought frequently, has low switching costs and high competition between brands. FMCG

companies are now turning to social media engagement to entertain customers and build brand relationships by interacting with customers via interactive campaigns, collaborating with influencers, communicating with customers, and creating online brand communities. These activities not only help in increasing the brand awareness but also help in building the relationship between consumer and brand and positive brand perception (Dwivedi et al., 2024).

Brand extension, which is the launch of new products under an existing brand name is one of the most common growth strategies adopted in the FMCG industry. Consumers' perceptions of the parent brand are crucial to the success of a brand extension. Powerful and trusted brands have the ability to communicate positive associations, trust and credibility to new product launches, enhancing market acceptance and performance. Brand equity – including brand awareness, perceived quality, brand associations, and brand loyalty – is an important factor in the success of brand extension strategies (Aaker, 1991; Keller, 1993).

In the digital environment, social media engagement has emerged as an important mechanism for developing brand equity. Regular engagement with consumers through social media can build brand familiarity, boost favourable perceptions, quality and loyalty. Therefore, consumers who are active in interacting with brands on social media are more inclined to have positive attitudes towards the brand and its extensions. Thus, social media engagement can have a direct and indirect impact on brand extensions performance by building brand equity.

Although the literature on social media marketing and branding is rapidly increasing, the relationship between social media engagement and brand extension performance with the mediation of brand equity has not been studied extensively. Most of the research has dealt with the link between social media engagement and brand equity or the link between brand equity and brand performance. Additionally, there is a lack of empirical evidence in emerging markets, especially in the FMCG sector in India. With the fast adoption of digital technologies, the rising internet penetration and the growing consumer market in Uttar Pradesh, it is more important than ever before to understand these relations for both researchers and practitioners.

In this regard, the present study explores how the social media engagement affects the brand extension performance level of FMCG customers in Uttar Pradesh. Specifically, the study investigates the impact of social media engagement on brand equity, the impact of brand equity on brand extension performance, the direct impact of social media engagement on brand extension performance, and the mediation of the effects of social media engagement on brand extension performance.

The study is based on Consumer Engagement Theory and Consumer Based Brand Equity Theory, and proposes that the social media engagement will positively influence the brand equity, the brand equity will positively influence the brand extension performance, and the social media engagement will positively influence the brand extension performance. Moreover, it is expected that brand equity will partially mediate the relationship between social media engagement and the performance of brand extensions. Based on the study, four hypotheses have been developed: Social Media Engagement positively influences Brand Equity (H1), Brand Equity positively influences Brand Extension Performance (H2), Social Media Engagement positively influences Brand Extension Performance (H3), and Brand Equity partially mediates between Social Media Engagement and Brand Extension Performance (H4).

The study builds upon the previous research on digital marketing, consumer engagement and brand management by combining three concepts of social media engagement, brand equity and brand extension performance into one conceptual framework. The results will be useful for FMCG companies to gain insights into better brand extension success in a digital world and to reinforce brand equity.

1.1 Conceptual Framework

The conceptual framework of the study is developed to see the impact of social media engagement on brand extension performance using brand equity as a mediating variable. The consumer engagement theory and consumer-based brand equity theory suggest that the interactions that consumers have with a brand on the social media platform lead to consumers developing favourable perceptions and having positive behavioural outcomes.

Engagement with social media refers to consumers’ cognitive, affective, and behavioural connections with FMCG brands through activities such as liking, commenting, sharing content, engaging in discussion and also engaging in the brand community. The awareness, trust, loyalty and associations toward the brand get enhanced due to these interactions. As consumers become increasingly concerned about climate change and its associated effects, brands and marketers have launched sustainability campaigns to attract environmentally-conscious customers.

Also, the performance of brand extension can be influenced by social media engagement that enhances consumers’ familiarity and attitude towards the brand. As a result, the proposed framework contains both the direct and the indirect relationships.

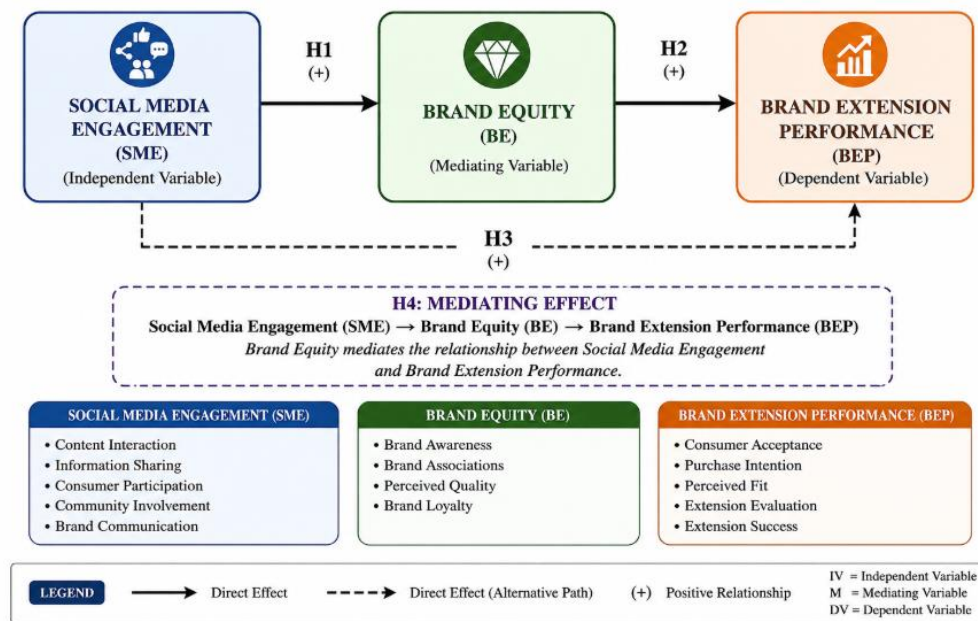


Figure 1: Proposed Conceptual Framework

Source: Developed by the Authors

2. Literature Review

Social media has changed the landscape of the brand-consumer interaction by allowing consumers to interact, share information and actively participate in activities related to the brand in real-time. While traditional forms of communication rely on channels such as social media provides consumers with the option of interacting with the brand by liking, commenting, reviewing, creating content and joining social networks. This engagement can boost consumer-brand relationships by building trust, commitment and emotional connection with consumers, which can positively impact consumer attitudes and behavioural outcomes (Brodie et al., 2013; Hollebeek et al., 2022). For FMCG companies, social media engagement has become a crucial component in the sector, with companies looking at various interactive campaigns, influencer marketing, personalized communication and community involvement to create closer links with consumers and enhance brand performance (Cheung et al., 2023; Dwivedi et al., 2024).

Brand equity is one of the most significant intangible assets of an organization and is defined as the value that a brand brings to a product/service through brand awareness, associations, perceived quality and customer loyalty (Aaker, 1991; Keller, 1993). Having strong brand equity is beneficial to the brand in many ways, such as consumer confidence in the brand, the brand's perceived low risk, loyalty towards the brand, and resistance to competitive products (Aaker, 1996; Keller, 2016). Social media has become an effective tool in the digital world to create a compelling brand image by enabling a continuous dialogue between consumers and brands. There is a previous research that has found that a high level of engagement on social media is highly associated with brand awareness, loyalty, and positive brand perceptions, which in turn, boosts the overall value of the brand (Godey et al., 2016; Hollebeek & Macky, 2023).

A very common growth strategy is brand extension in which organisations launch new products in the marketplace using an existing brand name to leverage the existing consumer trust, familiarity and reputation (Keller & Aaker, 1992). Whether a brand extension is successful depends to a great degree on consumers' perceptions of the parent brand. When assessing new products, consumers' first impressions and existing knowledge of the parent brand can guide their evaluation. As a result, it is likely that brands with a high level of equity will be more successful in their extensions; they are seen as less risky and more credible and higher in quality (Martínez & Pina, 2003; Völckner & Sattler, 2006).

The literature presented so far indicates that strong correlation between social media engagements and brand equity. Brand-related content fosters consumers' awareness, associations, trust and loyalty towards brands through continuous interactions. Higher levels of engagement would lead to more positive brand attitudes and perceptions according to Consumer Engagement Theory (Brodie et al., 2013). Previous empirical findings have shown that social media marketing efforts have positive effects on different aspects of brand equity such as brand awareness, brand loyalty, and brand value (Godey et al., 2016; Cheung et al., 2023). As a result, a growing number of studies have shown that social media involvement is seen as one of the major drivers of brand equity construction.

Brand equity has been found to be an important factor to analyze the performance of brand extension. Consumer Based Brand Equity Theory suggests that customers' positive attitudes and perception towards the original brand will be transferred to the new brand, leading to better acceptance and willingness to buy extensions (Keller, 1993). High brand awareness and brand loyalty and perceived brand quality decrease the uncertainty of new products and makes consumers more willing to accept brand extensions (Martínez & Pina, 2003; Völckner & Sattler, 2006). Therefore, brands with more equity would have a greater chance to be successful when it comes to brand extension.

Social media engagement could have a direct impact on brand extension performance as well as an indirect impact via brand equity. When consumers are actively involved in the brand in social media, they are more likely to become familiar, trustful and emotionally connected with a brand. These good experiences make consumers more open to new products of the same brand name. Social media also helps organisations share information about new products and build awareness and interest before products are on the market. Consequently, consumers who are engaged are more likely to have positive evaluations of the brand extensions and intentions to adopt the new offerings (Hollebeek et al., 2022; Dwivedi et al., 2024).

While the relationships between social media engagement and brand equity, social media engagement and brand performance have been previously studied separately, little research has attempted to explore the integrated relationship between these variables, especially in the FMCG domain and emerging markets like India. Considering the existing evidence, social media engagement has an impact on the performance of a brand extension, and can also have an indirect impact on it through the creation of brand equity. Social media's positive impact on brand awareness, trust, loyalty, and associations further boosts consumer evaluations and brand acceptance, thereby strengthening brand equity, which positively affects consumers' evaluations and acceptance of brand extensions (Cheung et al., 2023; Hollebeek & Macky, 2023). It can thus be assumed that brand equity would play a significant mediating role between social media engagement and the successful performance of a brand extension and can provide a full account of the relationship between digital consumer engagement and favourable brand outcomes.

Table 2.1 Research Gap Analysis

Study	Focus	Findings	Gap
Godey et al. (2016)	Social Media Marketing	Brand equity improved	Brand extension performance ignored
Hollebeek et al. (2022)	Consumer Engagement	Engagement affects loyalty	Mediation mechanism absent

Cheung et al. (2023)	Social Media & Brand Equity	Positive relationship found	FMCG extension context absent
Present Study	Social Media Engagement, Brand Equity & Extension Performance	Integrated framework	Addresses contextual and theoretical gaps

3. Research Methodology

3.1 Research Philosophy

In the present study, the philosophy of research is positivist which states that social phenomena can be observed, studied and measured objectively. Positivism is suitable for quantitative research because it enables testing of hypotheses and analysis of causal relationship between the variables by using statistical methods (Saunders et al., 2023). The study aims to analyze relationships between social media engagement, brand equity and brand extension performance, so the positivist approach is appropriate for the study.

3.2 Research Approach

The study uses a deductive research method. Deductive reasoning starts from theory and empirical facts to formulate hypotheses which are then tested with the data collected (Sekaran & Bougie, 2020). The hypotheses about the relationships between social media engagement, brand equity and brand extension performance are based on Consumer Engagement Theory and Consumer Based Brand Equity Theory.

3.3 Research Design

The research design used is quantitative, cross sectional and explanatory.

Quantitative Design helps in the statistical testing of hypotheses.

The cross-sectional design is a type of design in which information is gathered at only one point in time.

Explanatory design is used to research causal relationships between variables.

This design is commonly used in branding and digital marketing studies based on the Structural Equation Modelling (SEM).

3.4 Target Population

The target population are consumers of Uttar Pradesh who:

- Frequently use social media.
- Likes or follows FMCG brands on social media.
- Can have experience in buying FMCG products.

These respondents are chosen as appropriate as they are knowledgeable about how people have interacted with social media and how people perceive brands. Uttar Pradesh represents one of India's largest consumer markets with rapidly increasing internet penetration, social media adoption, and FMCG consumption. The state's diverse demographic profile provides an appropriate setting for examining consumer engagement and brand-related outcomes in a digitally evolving marketplace.

3.5 Sampling Technique

The study uses a mix of:

- Purposive Sampling
- Convenience Sampling

The purposed sampling aims at including only the respondents who satisfy the sampling criterion and convenience sampling aims at getting the data from the large volume of population, as it is easier and convenient.

3.6 Sample Size Determination

Regarding the minimum sample size for PLS-SEM models, Hair et al. (2022) suggest to use at least 10 times the largest number of structural paths leading to a latent construct. Given the complexity of the model, a minimum number of respondents is 300.

However, for better reliability and generalizability, the study aims at getting 450-500 valid response from FMCG consumers of Uttar Pradesh.

3.7 Instrument Development

The data will be gathered using a structured questionnaire with two sections. Section A collected demographic information of the respondents, including gender, age, education, occupation, monthly income, and frequency of social media usage. Section B measured the study constructs using a five-point Likert scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree.

Construct	Dimensions	No. of Items
Social Media Engagement	Content Interaction, Information Sharing, Participation, Community Involvement, Brand Communication	15–20
Brand Equity	Brand Awareness, Brand Associations, Perceived Quality, Brand Loyalty	12–16
Brand Extension Performance	Consumer Acceptance, Purchase Intention, Perceived Fit, Extension Evaluation, Extension Success	15–20

3.8 Data Collection Procedure

The primary data will be gathered using an online questionnaire that is made available via:

- Google Forms
- Facebook
- Instagram
- WhatsApp
- Telegram consumer groups

The respondents will be briefed on the purpose of the study and their confidentiality and anonymity assured.

3.9 Data Analysis Techniques

The collected data were analyzed using SmartPLS 4 software following a two-stage approach. In the first stage, the measurement model was assessed to evaluate the reliability and validity of the constructs. This included Indicator Reliability, Cronbach’s Alpha, Composite Reliability (CR), Average Variance Extracted (AVE), Fornell-Larcker Criterion, and Heterotrait-Monotrait Ratio (HTMT). In the second stage, the structural model was evaluated to examine the proposed relationships among the constructs. This assessment included Path Coefficients, Bootstrapping, Coefficient of Determination (R²), Effect Size (f²), Predictive Relevance (Q²), and Standardized Root Mean Square Residual (SRMR). These techniques were employed to assess the predictive power, explanatory capability, model fit, and significance of the hypothesized relationships.

3.10 Mediation Analysis

The bootstrapping procedures are used in SmartPLS 4 to test the mediating effect of brand equity. Bias corrected confidence intervals will be used to assess indirect effects. If the confidence intervals are not to include zero, then mediation will be deemed important (Hair et al., 2022).

3.11 Ethical Considerations

The study is conducted with respect to accepted ethical standards in the conduct of research. The participation will be voluntary, the identity of the respondents will be anonymous, and the information collected will be exclusively for academic purposes. Participants will be able to withdraw from the survey at any time without any repercussions.

3.12 Common Method Bias Assessment

Since data were collected from a single source through a structured questionnaire, Harman's Single Factor Test was conducted to assess Common Method Bias. The results indicated that the first factor accounted for 36.84% of the total variance, which is below the recommended threshold of 50%. Therefore, common method bias was not considered a significant issue in the present study.

4. Results and Analysis

This section presents the results of the empirical investigation examining the relationships among Social Media Engagement, Brand Equity, and Brand Extension Performance in the FMCG sector of Uttar Pradesh. The analysis was conducted using SmartPLS 4 following a two-step approach comprising measurement model assessment and structural model assessment.

4.1 Respondent Profile Analysis

A total of **487 valid responses** were collected from FMCG consumers across Uttar Pradesh. The demographic characteristics of the respondents are presented below.

Table 4.1 Demographic Profile of Respondents (N = 487)**Source: Survey Data (2025)**

Variable	Category	Frequency	Percentage (%)
Gender	Male	278	57.1
	Female	209	42.9
Age	18–25 Years	148	30.4
	26–35 Years	189	38.8
	36–45 Years	96	19.7
	Above 45 Years	54	11.1
Education	Undergraduate	123	25.3
	Postgraduate	276	56.7
	Doctorate	88	18.0
Occupation	Student	118	24.2
	Private Employee	196	40.2
	Government Employee	89	18.3
	Self-Employed	84	17.3
Social Media Usage	Less than 1 Hour	47	9.7
	1–3 Hours	168	34.5
	3–5 Hours	184	37.8
	More than 5 Hours	88	18.0

Interpretation

The majority of the respondents were male (57.1%) and females were 42.9% of the sample. The majority of the respondents were in the age group of 26-35 years (38.8%), which proves that the social media consumers are mostly of young adulthood. There was a relatively educated sample as more than half of the respondents had post graduate qualifications (56.7%). Moreover, 90.3% of the participants indicated that they use social media for more than an hour a day, thus indicating their fitness to assess constructs related to social media engagement and social media branding.

4.2 Descriptive Statistics

Descriptive statistics were calculated to understand respondents' perceptions regarding the study variables.

Table 4.2 Descriptive Statistics

Source: Survey Data (2025)

Construct	Mean	Standard Deviation
Social Media Engagement	4.08	0.71
Brand Equity	3.96	0.68
Brand Extension Performance	3.89	0.73

Interpretation

The findings show that respondents have a relatively high engagement with social media (Mean = 4.08). Likewise, the respondents had positive attitudes towards brand equity (Mean = 3.96) and brand extension performance (Mean = 3.89). The standard deviations are moderate, suggesting moderate variability in responses and consistency in consumer perceptions across the sample.

4.3 Reliability Analysis

Reliability analysis was performed using Cronbach's Alpha and Composite Reliability (CR).

Table 4.3 Reliability Assessment

Source: Survey Data (2025)

Construct	Cronbach's Alpha	Composite Reliability
Social Media Engagement	0.912	0.928
Brand Equity	0.896	0.921
Brand Extension Performance	0.905	0.926

Interpretation

All constructs demonstrated Cronbach's Alpha and Composite Reliability values exceeding the recommended threshold of 0.70 (Hair et al., 2022). Therefore, the measurement instrument exhibits excellent internal consistency and reliability.

4.4 Convergent Validity

Convergent validity was assessed using Average Variance Extracted (AVE) and Composite Reliability.

Table 4.4 Convergent Validity

Source: Survey Data (2025)

Construct	AVE	Composite Reliability
Social Media Engagement	0.684	0.928

Brand Equity	0.702	0.921
Brand Extension Performance	0.715	0.926

Interpretation

The AVE values for all constructs exceeded the recommended threshold of 0.50. Therefore, convergent validity was established, indicating that the indicators adequately explain their respective latent constructs.

4.5 Discriminant Validity

4.5.1 Fornell-Larcker Criterion

Table 4.5 Fornell-Larcker Criterion

Source: Survey Data (2025)

Constructs	SME	BE	BEP
SME	0.827		
BE	0.671	0.838	
BEP	0.614	0.734	0.846

Interpretation

The square root of AVE for each construct was greater than its correlation with other constructs, confirming satisfactory discriminant validity.

4.5.2 HTMT Ratio

Table 4.6 HTMT Assessment

Source: Survey Data (2025)

Relationship	HTMT
SME-BE	0.781
SME -BEP	0.722
BE- BEP	0.819

Interpretation

All HTMT values were below the recommended threshold of 0.85, confirming discriminant validity and indicating that the constructs are empirically distinct.

4.6 Structural Model Assessment

The structural model was evaluated through bootstrapping with 5,000 resamples.

Coefficient of Determination (R²)

Table 4.7 R² Values

Source: Survey Data (2025)

Endogenous Variable	R ²
Brand Equity	0.451
Brand Extension Performance	0.623

Interpretation

Social Media Engagement accounts for 45.1% of the variation in Brand Equity. In addition, together Social Media Engagement and Brand Equity account for 62.3% of the variance in Brand Extension Performance. The values of these indicate that the power of explanation of the proposed model is high.

4.7 Hypothesis Testing

Table 4.8 Direct Effects

Hypothesis	Path	B	t-value	p-value	Decision
H1	SME- BE	0.671	15.842	0.000	Supported
H2	BE- BEP	0.548	10.926	0.000	Supported
H3	SME- BEP	0.247	4.113	0.000	Supported

Interpretation

The results indicate that Social Media Engagement significantly influences the Brand Equity ($\beta = 0.671$, $p < 0.001$), thus supporting H1. The second hypothesis is supported by the results which show that Brand Equity has a significant effect on Brand Extension Performance ($\beta = 0.548$, $p < 0.001$). Furthermore, Social Media Engagement directly positively affects the Brand Extension Performance ($\beta = 0.247$, $p < 0.001$), thus supporting H3.

The highest correlation was seen between Social Media Engagement and Brand Equity, suggesting that high levels of consumer engagement in social media positively impact brand value perceptions.

4.8 Mediation Analysis

The mediating role of Brand Equity was examined through bootstrapping procedures.

Table 4.9 Indirect Effect Analysis

Hypothesis	Path	β	t-value	p-value	Decision
H4	SME - BE -BEP	0.368	8.744	0.000	Supported

Interpretation

Indirect effects of Social Media Engagement on Brand Extension Performance through Brand Equity were significant ($\beta = 0.368$, $p < 0.001$). Both direct and indirect pathways are still important, hence a partial mediation is shown via Brand Equity. So, H4 is accepted.

The results revealed that social media engagement has a direct and indirect effect on the brand extension performance by building brand equity.

4.9 Effect Size (f^2)

Table 4.10 Effect Size Assessment

Source: Survey Data (2025)

Relationship	f^2	Effect Size
SME-BE	0.818	Large
BE- BEP	0.421	Large
SME- BEP	0.092	Small

Interpretation

The effect size results indicate that Social Media Engagement exerts a large effect on Brand Equity, while Brand Equity demonstrates a large effect on Brand Extension Performance. The direct effect of Social Media Engagement on Brand Extension Performance is comparatively smaller but remains meaningful.

4.10 Predictive Relevance (Q²)

Table 4.11 Predictive Relevance

Source: Survey Data (2025)

Construct	Q ²
Brand Equity	0.298
Brand Extension Performance	0.427

Interpretation

All Q² values exceed zero, indicating that the model possesses adequate predictive relevance and forecasting capability.

4.11 Model Fit Assessment

Table 4.12 Model Fit Indices

Source: Survey Data (2025)

Index	Value	Recommended Threshold
SRMR	0.058	< 0.08
NFI	0.912	> 0.90

Interpretation

The SRMR value of 0.058 and NFI value of 0.912 indicate a satisfactory model fit, confirming that the proposed conceptual framework adequately represents the observed data.

4.12 Summary of Hypothesis Testing

Table 4.13 Summary of Results

Hypothesis	Relationship	Result
H1	Social Media Engagement - Brand Equity	Supported
H2	Brand Equity - Brand Extension Performance	Supported
H3	Social Media Engagement - Brand Extension Performance	Supported
H4	Brand Equity mediates the relationship between Social Media Engagement and Brand Extension Performance	Supported

The findings show that social media engagement has a significant impact on the brand equity and brand extension effectiveness in FMCG industry. Brand equity proved to be the best predictor of brand extension performance and was partial mediator between social media engagement and the brand extension outcomes. The results indicated that social media consumer engagement is a crucial strategic element in boosting brand value and making the brand extension activities successful.

5. Discussion of Findings

The present study tried to find out how social media engagement affects the performance of brand extension, and the underlying mechanism of the relationship between social media engagement and brand extension performance

was the brand equity of FMCG consumers in the state of Uttar Pradesh. The results offer a great deal of information on the importance of digital consumer engagement in driving brand outcomes.

The results showed that social media engagement had a significant positive effect on brand equity ($\beta = 0.671$, $p < 0.001$), which supported the H1 hypothesis. The results indicate that consumers with active engagement in social media towards the FMCG brands demonstrate a higher level of awareness, positive brand associations, expected quality, and brand loyalty. This finding aligns with earlier research that identified social media engagement as being a key factor in the development of consumer-based brand equity (Godey et al., 2016; Cheung et al., 2023). The discovery also backs up the theory of Consumer Engagement, which suggests that genuine communication among consumer and brand fosters psychological connection and promotes the value of the brand.

The study also revealed that there is significant positive correlation between brand equity and brand extension performance ($\beta = 0.548$, $p < 0.001$) which supported H2. The result shows that more successful brand extension outcomes are more likely to be obtained only for those brands with stronger equity. Consumers have the tendency to extend the positive attitudes they have formed toward the parent brand to the new products, which makes them more accepted and more likely to purchase the new product. The results are consistent with the Consumer Based Brand Equity Theory and earlier research on the significance of high level of brand equity for the success of brand extensions (Keller & Aaker, 1992; Völckner & Sattler, 2006).

In addition, the results revealed that social media engagement had a direct positive effect on brand extension performance ($\beta = 0.247$, $p < 0.001$), thus supporting H3. The discovery indicates that those who interact with the brand regularly on social media are more open to hearing about new products marketed under that brand, as well. Consumers become familiar and trustful with brands due to their constant exposure to brand-related content, leading them to form favorable attitudes towards brand extensions. The outcome confirms the increasing role of social media in terms of brand extension as an important strategic platform.

The mediation analysis showed that brand equity played a significant role as a mediator between social media engagement and brand extension performance ($\beta = 0.368$, $p < 0.001$), thus supporting H4. The findings reveal that in addition to direct impacts, social media engagement also plays an indirect role in effective brand extensions by improving the level of brand equity. Partial mediation was confirmed as both direct effects and indirect effects were present. The discovery underscores the importance of brand equity as one of the most important mechanisms by which digital engagement activities lead to positive consumer reactions to brand extensions.

Overall, the findings indicate that social media engagement can be used as a strategic tool for FMCG companies to create value in their brand and to ensure the success of their brand extension efforts. The study validates that social media marketing efforts can lead to significant branding gains in terms of building consumer perceptions and improving uptake of new product offerings.

6. Theoretical Implications

The study is important in the following ways: It is an extension of current branding and digital marketing studies since it brings together social media engagement, brand equity and brand extension performance in a single conceptual framework. Secondly, the study offers empirical evidence to support the Consumer Engagement Theory and Consumer Based Brand Equity Theory for FMCG consumers. Thirdly, it is the discovery of the role of brand equity as an important mediation between social media engagement and the performance of brand extensions. Lastly, this study adds to the scarce amount of research done in the emerging markets especially in the FMCG industry in India.

7. Managerial Implications

The results have several value-laden applications to FMCG managers and marketing practitioners. Social media engagement strategies that bring consumers into the fold, allow for interaction and sharing content should be placed at the top of the list. Influencer partnerships, interactive campaigns, online communities and UGC programs can be very effective in building brand equity.

The other dimensions that are important for successful brand extension outcomes are also those of promoting good brand awareness, positive brand associations, perceived quality and customer loyalty, all of which are

directly related to the outcomes. Firms should invest in building parent brand equity first, before introducing new products, by communicating regularly and engaging customers in activities.

Moreover, social media is a great way to build awareness and favorable consumer perceptions about new product or service introductions. Digital interactions can help overcome consumer uncertainty and improve brand extension acceptance.

8. Conclusion

The present study aimed to explore the effect of social media engagement on brand extension performance and analyzed the mediation of brand equity between the FMCG consumers in Uttar Pradesh. Its findings showed that there was a strong relationship between social media engagement and brand equity as well as brand extension performance. In addition, the study revealed that brand equity had a positive effect on brand extension performance and partially mediated the effect of social media engagement on brand extension outcomes.

The study underscores the critical role of social media interaction to create a strong brand asset and the potential for effective brand extension. In a digital-driven marketplace, companies which can successfully leverage social media to communicate to consumers have a better chance of reinforcing brand equity and gaining a sustainable competitive edge. The findings offer important theoretical and managerial implications for both researchers and practitioners interested in understanding the mechanism by which digital engagement can play role in the success of a brand in the FMCG industry.

9. Limitations and Future Research Directions

While the study makes its contribution, it does have some limitations. First, the study was cross-sectional, and thus time-series relationships were not established. Longitudinal studies could be used in future to explore change in consumer perceptions. Second, the study was exclusively conducted on FMCG consumers in Uttar Pradesh, which may not be representative of other regions and sectors. Third, the role of only brand equity was studied as a mediator variable.

Other mediator variables like brand trust, brand love, customer satisfaction, and brand loyalty can be investigated in future studies. The researchers can also look at the moderating variables like influencer credibility, consumer involvement, and digital literacy. Further consideration of comparative studies across industry and geographical region would deepen the understanding of the social media engagement and branding outcomes.

References

1. Aaker, D. A. (1991). *Managing brand equity: Capitalizing on the value of a brand name*. Free Press.
2. Aaker, D. A. (1996). *Building strong brands*. Free Press.
3. Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
4. Brodie, R. J., Hollebeek, L. D., Juric, B., & Ilic, A. (2013). Customer engagement in a virtual brand community: An exploratory analysis. *Journal of Business Research*, 66(1), 105–114.
5. Cheung, M. L., Pires, G. D., Rosenberger III, P. J., Leung, W. K. S., & Ting, H. (2023). Social media marketing, customer engagement and brand equity. *Journal of Retailing and Consumer Services*, 73, 103347.
6. Dessart, L., Veloutsou, C., & Morgan-Thomas, A. (2015). Consumer engagement in online brand communities. *Journal of Product & Brand Management*, 24(1), 28–42.
7. Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., Carlson, J., Filieri, R., Jacobson, J., Jain, V., Karjaluoto, H., Kefi, H., Krishen, A. S., Kumar, V., Rahman, M. M., Raman, R., Rauschnabel, P. A., Rowley, J., Salo, J., Tran, G. A., & Wang, Y. (2024). Setting the future of digital and social media marketing research. *International Journal of Information Management*, 74, 102705.
8. Ebrahim, R. S. (2020). The role of trust in understanding the impact of social media marketing on brand equity and brand loyalty. *Journal of Relationship Marketing*, 19(4), 287–308.
9. Fournier, S. (1998). Consumers and their brands: Developing relationship theory in consumer research. *Journal of Consumer Research*, 24(4), 343–373.

10. Godey, B., Manthiou, A., Pederzoli, D., Rokka, J., Aiello, G., Donvito, R., & Singh, R. (2016). Social media marketing efforts and brand equity creation. *Journal of Business Research*, 69(12), 5833–5841.
11. Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A primer on partial least squares structural equation modeling (PLS-SEM)* (4th ed.). Sage.
12. Hollebeek, L. D., Glynn, M. S., & Brodie, R. J. (2014). Consumer brand engagement in social media. *Journal of Interactive Marketing*, 28(2), 149–165.
13. Hollebeek, L. D., & Macky, K. (2023). Digital customer engagement: Contemporary developments and future directions. *Journal of Service Management*, 34(3), 421–440.
14. Hollebeek, L. D., Srivastava, R. K., & Chen, T. (2022). Consumer engagement and digital marketing effectiveness. *Journal of Marketing Management*, 38(15–16), 1451–1475.
15. Ismagilova, E., Dwivedi, Y. K., Slade, E., & Williams, M. (2020). Electronic word of mouth and social media marketing. *International Journal of Information Management*, 53, 102122.
16. Keller, K. L. (1993). Conceptualizing, measuring and managing customer-based brand equity. *Journal of Marketing*, 57(1), 1–22.
17. Keller, K. L. (2016). Reflections on customer-based brand equity. *AMS Review*, 6(1–2), 1–16.
18. Keller, K. L., & Aaker, D. A. (1992). The effects of sequential introduction of brand extensions. *Journal of Marketing Research*, 29(1), 35–50.
19. Kim, A. J., & Ko, E. (2012). Do social media marketing activities enhance customer equity? *Journal of Business Research*, 65(10), 1480–1486.
20. Kumar, V., & Pansari, A. (2016). Competitive advantage through engagement. *Journal of Marketing Research*, 53(4), 497–514.
21. Martínez, E., & Pina, J. M. (2003). The negative impact of brand extensions on parent brand image. *Journal of Product & Brand Management*, 12(7), 432–446.
22. Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing*, 63(4), 33–44.
23. Pappu, R., Quester, P. G., & Cooksey, R. W. (2005). Consumer-based brand equity. *European Journal of Marketing*, 39(11/12), 1432–1448.
24. Ringle, C. M., Wende, S., & Becker, J. M. (2022). *SmartPLS 4*. SmartPLS GmbH.
25. Saunders, M., Lewis, P., & Thornhill, A. (2023). *Research methods for business students* (9th ed.). Pearson.
26. Schivinski, B., & Dabrowski, D. (2016). The effect of social media communication on consumer perceptions of brands. *Journal of Marketing Communications*, 22(2), 189–214.
27. Sekaran, U., & Bougie, R. (2020). *Research methods for business: A skill-building approach* (8th ed.). Wiley.
28. Sharma, R., Singh, G., & Verma, S. (2022). Social media engagement and consumer brand relationships in the FMCG sector. *Journal of Retailing and Consumer Services*, 68, 103015.
29. Tsimonis, G., & Dimitriadis, S. (2014). Brand strategies in social media. *Marketing Intelligence & Planning*, 32(3), 328–344.
30. Vivek, S. D., Beatty, S. E., & Morgan, R. M. (2012). Customer engagement. *Journal of Marketing Theory and Practice*, 20(2), 122–146.
31. Völckner, F., & Sattler, H. (2006). Drivers of brand extension success. *Journal of Marketing*, 70(2), 18–34.
32. Yoo, B., Donthu, N., & Lee, S. (2000). An examination of selected marketing mix elements and brand equity. *Journal of the Academy of Marketing Science*, 28(2), 195–211.
33. Zarantonello, L., Schmitt, B. H., & Jedidi, K. (2014). How to measure brand equity. *Journal of Brand Management*, 21(7–8), 586–603.