

## Moderating effect of Demographic Variables on Promotional Effectiveness and Behavioural Outcomes of social media in Haryana

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### ABSTRACT

The main purpose of the research is to investigate the promotional effectiveness influencing the behavioural consequences of social media users. The relationship between promotional effectiveness and behavioural outcomes is stronger in the presence of demographic variables. The study's hypotheses were tested using MGA and MICOM in PLS-SEM software. A sample of 500 respondents was collected through a random stratified sampling technique across various districts of Haryana. The study's findings indicate that promotional effectiveness has a positive and significant impact on behavioural outcomes, except for residence, which shows insignificant results. This means there is no difference in the effects of promotional effectiveness on behavioural outcomes between rural and urban areas of Haryana. However, the study's conclusions provide practical advice for marketers by emphasizing the insights gained by several researchers in their investigations..

**Keywords:** Promotional Effectiveness, Behavioural Outcomes, Demographic Impact, Attractiveness, Emotion, Persuasion, Social domain, PLS-SEM, MGA, MICOM.

### INTRODUCTION:

E-commerce has gained popularity as internet technology advances. According to eMarketer (2021), global e-commerce and retail sales are projected to exceed \$7.385 trillion by 2025. Humans are social creatures; they share feelings, emotions, and information on social media platforms to influence one another. In addition to individuals, companies are working to engage potential audiences on social media using various promotional tools. Marketers derive their primary profit from return on investment, which stems from successful promotional activities. A successful promotional activity involves users adopting the tools and methods employed by companies on social media. Consequently, their attitudes, behaviors, and overall values are transformed. This process is referred to as social influence, a form of marketing that proves more effective than traditional advertising due to its credibility and persuasive power (Trusov et al., 2009; Berger, 2014; De Vries et al., 2017).

Cialdini (1993) researched persuasion, and social evidence (influence) is a powerful tool for obtaining compliance. Research suggests that online evaluations of movies and books can predict sales (Chevalier & Mayzlin, 2006; Dellarcas et al., 2007). The return on investment is not only in monetary form but also in non-monetary form. The non-monetary form can also be understood in terms of how a marketer can involve social media users emotionally and persuade them to buy goods. So, emotion plays an imperative role in the user's decision-making process. As per the study of Mishra et al. (2022), individuals classify emotions in

different groups, which signifies different colors of divergent emotions. Happy and joyous are blue, whereas excited and passionate are related to the orange color category. Personal information or profiles, reviews, suggestions, and ratings of other customers can all be found on social media sites (SNS). Thus, with its unique characteristics, social media significantly shapes consumer trust and behavior. This study aims to comprehend the aspects of social media that impact consumers' attitudes toward companies, their faith in online influencers, and their intent to make purchases. According to earlier studies, these elements affect consumer purchasing intentions and attitudes towards online commerce.

The article aims to strengthen the relationship between promotional effectiveness and behavioral outcomes. The relationship between promotional effectiveness and behavioural outcomes is examined by undertaking mediators called demographic variables. Promotional effectiveness is signified by four sub-variables: attractiveness, Emotion, Persuasion, and Social Domain.

### 2. Theoretical Framework

In today's competitive environment, it is difficult for marketers to attract customers and achieve a satisfactory investment return. As a result, marketers must critically judge promotional strategies to attract consumers to their products/brands. Promotional offerings can increase sales, build consumer loyalty, and persuade customers to buy things in the future. The efficacy of promotional methods can be measured by the extent to which the entire society accepts and purchases the product, regardless of price or quality. How do promotional methods impact consumers'

decision-making process? Grewal et al. (2001) developed a theoretical framework for understanding how promotional actions affect price, quality, value, and purchase intention. The suggested model provides a framework for bundling and framing perceptions of price, value, and buy intention. The effectiveness of a digital advertisement may be increased by stressing the medium (via email, social media, YouTube, etc.), web ad number of sections, banner advertisements, pop-up advertisements, cookies, blogs, number of times the advertisement flashed, and where to position an advertisement on the webpage, and so on Loiacono (2001).

According to Dehghani (2013), social media allows users to share their opinions and experiences about brands, which might impact purchasing decisions. According to Mangold and Faulds (2009), social media will enable brands to quickly share their thoughts and experiences with a larger audience than traditional marketing, which only reaches a small number of consumers. According to Jensen and Vatrappu (2014), multi-directional communication has proven successful for many social media platforms. As a result, many brands employ these interactive platforms to gain a competitive advantage. According to Walker (2006), social media platforms such as Facebook allow customers to easily connect with brands by sharing their videos, postings, pictures, and blogs. According to Kim and Ko (2012), social media has become a crucial medium for marketers as it facilitates client interaction and loyalty. Brand managers view social media (SNS) as more effective than traditional marketing tools for communicating with customers (Karakaya & Barnes, 2010; Smith et al. 2012). Unlike conventional marketing, social media marketing focuses on creating a brand image and loyalty through relationships (Gordhamer, 2009).

Sitawan and Syah (2017) have analyzed consumers' brain tendencies, which build up the relationship between promotional benefits and purchase intention. Premiums have a more positive and significant impact on consumers' purchase intentions than discounts. Hence, consumers tend to buy more products if they are premium on products provided by marketers.

In the 1990s, Simonson et al. (1994) found that unappealing promotional campaigns can harm brand image and consumer attitudes towards a product. Therefore, the level of attractiveness is a crucial factor in determining the success or failure of a promotion. An attractive premium is assumed to entice consumers to purchase the product. Consequently, more than a promotion is required because the promotion's attractiveness determines whether the action succeeds or fails. It is assumed that an attractive premium promotes purchasing goods and services when consumers are uncertain about which class of goods to choose, enhancing the previously established effect of discount promotion, impulsiveness, and hedonism and lowering risks (Santini et al., 2015). The promotional effectiveness can increase through spokespersons. How do spokespersons/influencers communicate messages on new products launched in the market? How the influencers persuade users to buy products and services.

Wang et al. (2012), the information provided by celebrity endorsements can impact the general perception that consumers have of the product due to the celebrities' popularity and their personal use of the product. Celebrity endorsement advertising is the most effective way to encourage consumers to purchase. Businesses want to use the celebrity's reputation as a selling point to get customers to buy their items by projecting that celebrity's image onto the product. Thus, selecting the ideal celebrity endorser is crucial to the success of any marketing plan.

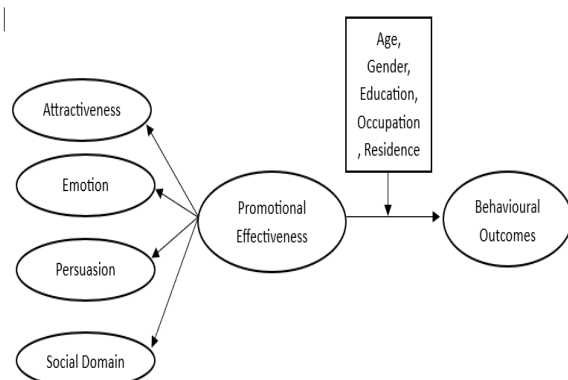
Since the advent of social media and advocate marketing (influencer marketing) (Gong, 2020; Teng et al. 2014; Sokolova & Kefi, 2020), the elaboration-like livelihood model (ELM) of persuasion (Petty & Cacioppo, 1986) has become a popular and widely used model in consumer research. It is assumed that high-involvement subjects will be motivated to follow central cues and be persuaded by message arguments (the central route). In contrast, low-involvement subjects will focus on and be more likely to be swayed by peripheral cues such as source characteristics (the peripheral route) (Cole et al., 1990). In addition, a person is said to be persuaded when their attitude, belief, and behavior are adopted in response to others. A great example is word-of-mouth, the most credible method of persuasion of consumers towards products/brands. The reason for being persuaded toward one's product is individual emotion. According to Salovey (1991), envy arises when a person perceives another's superior qualities, achievements, or possessions as reflecting negatively on oneself. However, jealousy is not caused by all social comparisons that are upward. Envy is largely induced by comparisons to those whom we think are similar.

The advertising value model, developed by Ducoffe (1996), is a method for evaluating the success of online advertising attitudes using advertising value. This often-used notion can help explain how advertising attitudes evolve. According to the advertising value model, three variables impact consumers' perceptions of advertisements: informativeness, enjoyment, and aggravation.

The influence of social networking is twofold. Furthermore, social networks may be useful tools for professionals. They achieve this by supporting young professionals in showcasing their abilities and identifying business prospects. Social networking platforms may also be utilized to network effectively. On the downside, online groups pose several concerns. One of the problems is cyberbullying, which refers to harassment via current technology. According to existing research, the four indicators under one construct are lacking; we included them in our study for analysis under promotional effectiveness since they had not been investigated together to assess the impact on user decision-making behaviour regulated by demographic characteristics.

### 2.1 Conceptual Model and Hypotheses Development

**Figure 1** Conceptual Model of the Study



Source: Author's Analysis

#### Research Hypotheses

The purpose of conducting the current study is to determine the main moderation factors that contribute to the link between promotional effectiveness and behavioural outcomes of social media users. The study intends to examine the age, gender, education, occupation, and residence location directly influence the promotional effectiveness on behavioural outcomes of social media users in Haryana. The main hypotheses of the study are:

Age, gender, education, occupation, and residential status moderate the relationship between attractiveness and behavioural outcomes positively and significantly.

This hypothesis is supported by the study of Goodrich (2011), which states that consumers' purchase intention is directly affected by the attractiveness of the visual characteristics of advertisements. It means the design elements in the advertisement on social media have made a special impact on the minds of social media users. As mentioned in the study of Ha and Janda (2014) the model shows that design features have a direct influence on advertising outcomes, such as click-through, recall, brand attitude, and buy intent. However, Wo et al. (2008) found no significant association between site design components and customer purchase behaviour. Of particular relevance to the current study, Ha and Janda (2014) and Beullens and Vandebosch (2015) proposed that attractiveness has a favorable and substantial influence on users' behavioural outcomes, as evaluated by purchase intention. Men and women have distinct thought and behaviour tendencies, as previously indicated. Gender differences may affect how men and women obtain and absorb online information, thereby influencing the effectiveness of web advertising, as proposed in earlier theories. The advertisement in terms of promotional tools adopted by marketers on social media can be attractive in the form of different colors, graphics, animation, types, styles, music, entertainment, etc. used to grab the attention of users towards the particular brand or product on social media platforms. Males and females both are perceived differently the all elements of advertisements on social networking platforms. In some research, females are fonder of text in ads while males are fonder of images on social platforms. The study of Goodrich (2014) emphasized

that females were more attracted to the text in web advertisements while males were attracted by images in ads. Moreover, male students are more attracted by animation and colors in advertisements. It is here in the previous literature also that animation is liked by men than women. That means males use online platforms for enjoyment purposes and females use them for shopping or buying purposes this is supported by Wolin & Korgaonkar, (2003) in their research. In some of the studies, it has been explained that females are more conscious about online information on advertisements than men. This has been confirmed by Park (2015) that females are more click on advertisement banners than males on online platforms. Thus, females have a positive and significant effect on brand attitude, brand advertisements, and purchase intention. Lee et al. (2015) found that service quality, including punctuality and location, had a favorable influence on consumer opinion. Age, gender, education, occupation, and residential status moderate the relationship between Emotion and behavioural outcomes positively and significantly.

Active social media use can enhance users' positive emotions, therefore enhancing their lives and perceived social support. Furthermore, pleasure in the long run, and feel happier, and more excited when they connect and communicate on social media, Kross et al. (2013); Oh et al., (2014); Zhang and Leung (2015). When users feel familiar with other users on social commerce are also terms of emotion. In addition, familiarity also means the understanding and awareness of each other on social platforms. Familiarity can lessen ambiguity and post-purchase discord while also eliminating user doubts in the mind of users, Hinds et al. (2000). intimacy is defined as the level of closeness that includes a wide range of intimate sentiments and emotional relationships, such as liking and spiritual support. In the previous literature, intimacy is defined as an emotional connection with family and friends, which includes the level of engagement and psychological support. Hence, intimacy can be expressed in terms of the emotions of users that can impact individuals buying intention, re-buying intention, long-term intention to use, and the number of services availed by users on social platforms supported in the research work of, Grayson and Ambler (1999); Brock and Zhou (2012); Lee and Ullah (2011). Wang (2014) explained that emotions and preferences towards website visuals varieties are different in males and females. Segal and Podoshen (2013) expound that the terms of gender, recent research has found that women have higher impulsive purchasing inclinations and are more likely to make impulse purchases than males. Also supported by Styven et al. (2017). Moreover, female users have a positive or negative emotional state than males thus, females have more impulsive buying tendencies than men, this is stated by Moksnes et al. (2010); Isabelle (2016). According to Jen-Hung and Yi-Chun (2010), women tend to focus on psychological emotions throughout the shopping process, whereas men prioritize efficiency and convenience. Although some studies have been conducted to investigate the significance of gender impacts on online buying, little was known about the effects of customer emotions on behavioural reactions

How to cite: Pooja Sabharwal , Tika Ram. Moderating effect of Demographic Variables on Promotional Effectiveness and Behavioural Outcomes of social media in Haryana. *Advances in Consumer Research*. 2025;2(6):282–293 based on gender.

Age, gender, education, occupation, and residential status moderate the relationship between persuasion and behavioural outcomes positively and significantly.

Allatafa R (2021) suggests that gender and education level can influence persuasion. The study examines the impact of buyer demographics, including gender and educational level, on the link between persuasion and perceived information quality. Millennials, regardless of gender or education level, have a stronger opinion of the quality of information offered by firms on social media. The study showed no direct or moderating link between reciprocity and perceived information quality. In addition, Cheung et al. (2008) conclude that traditional word-of-mouth has been an imperative tool for marketing researchers and practitioners. It has proven to play a major role in the decision-making process of consumers. While eWOM facilitates knowledge sharing, its impact varies amongst individuals. According to Chaiken and Eagly (1976), different recipients may react differently to the same message based on their perspectives, experiences, and sources.

Age, gender, education, occupation, and residential status moderate the relationship between social domain and behavioural outcomes positively and significantly.

Social Domain refers to how social media has affected society negatively as well as positively. One of the main advantages of social media allows users to compare options and share information, while also promoting brand recognition described by Akbarov S. (2020). While the negative impact of social networking sites on society is body shaming, cybercrime, psychological stress, isolation, suicides in the younger generation, etc. Social media have adversely impacted adolescents, on their mental health. They have become more addicted to social media which directly jeopardizes their physical health such as depression, anxiety, etc., as expressed by Keles et al. (2020). Research on social influence indicates that two psychological needs drive human conformity to others' expectations: the need for accuracy (informational social influence) and the need for acceptance (normative social influence), Deutsch and Gerard (1955).

## Research Methodology

### 3.1 Data Description

The data given in this paper are in raw data file format, with a supplementary SPSS file generated for further study. The data set consists of responses from Haryana's social media users. A stratified random method was used to achieve the research objective i.e. to assess the impact of promotional effectiveness on behavioural outcomes of social media in Haryana. The respondents were asked to judge the questionnaire indicators on promotional effectiveness on a five-point Likert scale. The measurements pertain to a model that seeks to explain the effect of promotional effectiveness, which is further measured by attractiveness, emotion, persuasion, and social domain. The measurement model of Promotional Effectiveness draws on reflective items—which is derived from previous research work. Attractiveness, Emotion, Persuasion, and Social Domain have been derived from the study of Ramalingam et al. (2006). We

extended the model by including potential moderators such as (Gender, Age, Education, Occupation, and Resident location) to investigate their role in promotional effectiveness and behavioural intention. These moderators were operationalized using categorical scales as follows gender (male, female), age (18 to 30 and above 30), education (college degree and University degree), and residence location (rural and urban) derived from Leonidas et al. (2013); Warsame and Ileri (2017); Singh et al. (2024).

**Table 1 Respondent's Profiles**

Variables		N out of 500	Out of 100%
Gender	Male	203	40.6
	Female	297	59.4
Age	18 to 30	291	58.2
	Above 30	209	41.8
Education	College degree	168	33.6
	University degree	332	66.4
Occupation	Student	389	77.8
	Service (govt & pvt.)	111	22.2
Residence	Urban	209	41.8
	Rural	291	58.2

Source: author's calculation.

According to Table 1, females accounted for 59.4 percent of the 500 respondents, while males accounted for 40.6 percent. In contrast, the majority of respondents (58.1 percent) are between the ages of 18 and 30, with 66.4 percent having completed a university degree and 77 percent being students. Respondents in rural regions used social media more frequently, accounting for around 58%.

### 3.2 CMV (Common Method Variance)

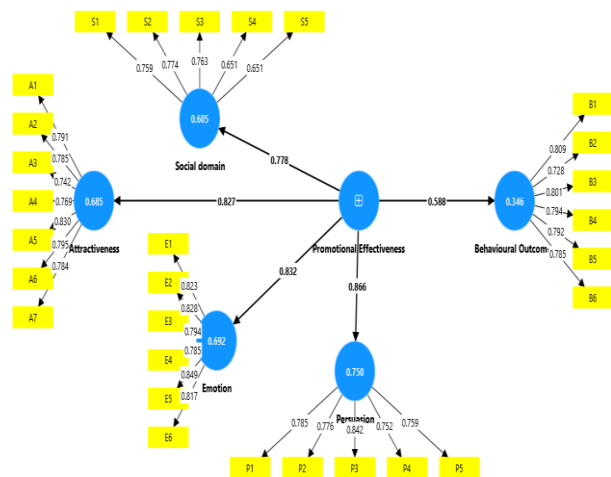
This study relied on respondents' self-reported judgments. Standard method variance (CMV) was identified as a possible problem (Podsakoff & Organ, 1986). According to Bagozzi et al. (1991), CMV may be problematic if constructs' correlations exceed 0.9. The absence of CMV was also statistically confirmed using the Harman single-factor test. The test found that the factors in the respondents' demographic profile explained less than half of the variation, providing a more profound indication that CMV was not a problem, Podsakoff et al. (2003).

### 3.3 Measurement Model

The measuring model was evaluated for its reliability, convergent, and discriminant validity. The constructs' reliability was assessed using Cronbach's alpha and composite reliability (C.R.). Cronbach's alphas for the constructs ranged from to with C.R. values beyond the 0.70 criterion established by Hair et al. (2014). The constructs utilized in this investigation demonstrated

adequate dependability. Next, the convergent and discriminant validity were examined. Convergent validity was tested by analyzing the factor loadings of each observed variable. Hair et al. (2014) found that all factor loadings were significant and surpassed the suggested 0.70 threshold. The average variance extracted (AVE) values were examined to determine convergent validity. Table II shows AVE values over 0.50, exceeding the threshold requirement (Hair et al. 2014). The values ranged from (>0.5 to <0.8). This showed fair convergent validity. We tested this using Fornell and Larcker's (1981) criteria, which states that the square roots of the AVE on the diagonal are more significant than the off-diagonal inter-construct correlations. Table IV indicates that the correlation between the two constructs was lower than the equivalent square root of AVEs (diagonal values). Thus, the notions utilized in this investigation demonstrated adequate validity.

**Figure 2**



Source: PLS-SEM Analysis

**Table 2 Internal Consistency and Reliability, AVE**

Constructs	Cronbach's alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)	Average Variance Extracted (AVE)
Attractiveness	0.896	0.898	0.919	0.617
Behavioural Outcomes	0.876	0.878	0.906	0.617
Emotion	0.900	0.900	0.923	0.666
Persuasion	0.843	0.846	0.888	0.614
Social Domain	0.769	0.779	0.844	0.521

**Table 3 Factor Loadings of Constructs**

Constructs	Attractiveness	Behavioural Outcomes	Emotion	Persuasion	Social Domain
A1	0.791				
A2	0.785				
A3	0.742				
A4	0.769				
A5	0.830				
A6	0.795				
A7	0.784				
B1		0.809			
B2		0.728			
B3		0.801			
B4		0.794			
B5		0.792			
B6		0.785			
E1			0.823		
E2			0.828		
E3			0.794		
E4			0.785		
E5			0.849		
E6			0.817		
P1				0.785	
P2				0.776	
P3				0.842	
P4				0.752	
P5				0.759	
S1					0.759
S2					0.774
S3					0.763
S4					0.651

As per Hair et al. (2014), the factor loadings of constructs should be greater than 0.7. Table 3 shows that the factor loadings are above 0.7 for all constructs. Note: A (attractiveness), E(emotion), P(persuasion), and S (social domain).

**Table 4 Discriminants Validity HTMT (Heterotrait-Monotrait Matrix)**

Constructs	Attractiveness	Behavioural Outcomes	Emotion	Persuasion	Social Domain
Attractiveness					
Behavioural Outcomes	0.560				
Emotion	0.596	0.499			
Persuasion	0.633	0.562	0.783		
Social Domain	0.676	0.652	0.559	0.827	

Table 4 states that the research models' HTMT values are below the crucial value of 0.9, indicating high discriminant validity.

**Table 5** Fornell-Larcker Criteria

Constructs	Attractiveness	Behavioural Outcomes	Emotion	Persuasion	Social Domain
Attractiveness	<b>0.786</b>				
Behavioural Outcomes	0.497	<b>0.785</b>			
Emotion	0.536	0.444	<b>0.816</b>		
Persuasion	0.554	0.488	0.688	<b>0.784</b>	
Social Domain	0.566	0.533	0.471	0.673	<b>0.722</b>

The values on the diagonal are the square root of the Average Variance Extracted (AVE). According to Fornell and Larcker (1981), the AVE of a construct should exceed its greatest squared correlation with another latent construct. Table 5 states the higher AVE values with another latent variable.

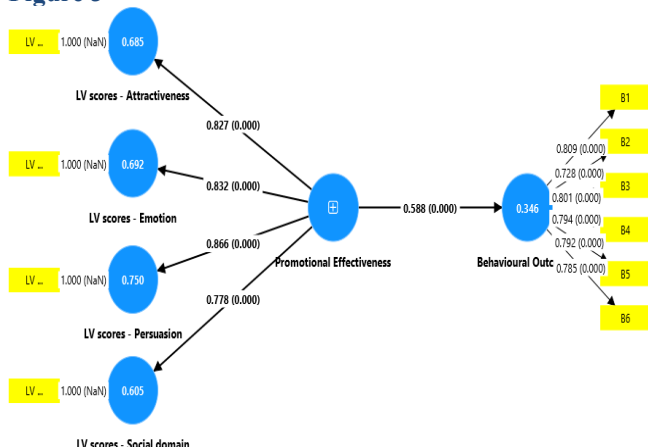
### 3.4 Multicollinearity

Hair et al. (2019) define multicollinearity as a correlation between many constructs, which can lead to unexpected reactions. The variance inflation factor (VIF) measurements evaluate the risk of collinearity. VIF values should be < 3.33 (Hair et al., 2019). In this study, the inner VIF values range from 1.350 to 2.287, presenting no collinearity problem in this model.

### 3.5 Structural Model (inner model)

Figure 3 displays the study's findings from 5000 random samplings and operations utilizing the self-help approach. In addition, the  $R^2$  value measures the extent to which external factors explain variance in the endogenous variable (dependent variable), indicating the model's overall predictive strength. When adding additional predictors to a multiple regression model,  $R^2$  grows or remains constant, even if the predictors are not correlated with the target variable and do not increase the model's prediction abilities. Adjusted  $R^2$  overcomes the downside of  $R^2$ . It only grows when the additional predictor enhances the model's predictive capability.

**Figure 3**



Source: PLS-SEM Analysis Bootstrap results

**Table 6**  $R^2$  and  $F^2$

Constructs	Adjusted $R^2$	$F^2$
Attractiveness	0.684	2.171
Behavioural Outcomes	0.344	0.528
Emotion	0.692	2.250
Persuasion	0.750	3.004
Social Domain	0.605	1.534

$R^2$  measures the model's explanatory and predictive capacity, with higher values indicating greater explanatory power.  $R^2$  values of 0.75, 0.50, and 0.25 indicate significant, moderate, and weak relationships, respectively explained by (Henseler et al., 2010; Hair et al., 2011). Generally, values over 0.02, 0.15, and 0.35 indicate small, medium, or big  $F^2$  (Cohen, 1988). Our analysis shows big  $F^2$  values in Table 6.

### 3.6 Predictive Power Assessment PLS Predict $Q^2$

This measure uses the blindfolding technique to eliminate single points from a data matrix, replace them with the mean, and estimate model parameters. According to Shmueli et al. (2016) and Sarstedt et al. (2017a),  $Q^2$  combines out-of-sample prediction with within-sample explanatory capability.

**Table 7** PLS Predict Results

Measured Variables	Prediction Error Comparison				
	$Q^2$ Predict	PLS-SEM RAMSE	PLS-SEM MAE	LM-RAMSE	LM-MAE
B1	0.214	0.737	0.555	0.743	0.557
B2	0.147	0.767	0.554	0.783	0.571
B3	0.215	0.759	0.567	0.773	0.578
B4	0.199	0.786	0.582	0.786	0.589
B5	0.199	0.757	0.557	0.772	0.578
B6	0.251	0.756	0.581	0.774	0.583
Latent Variables				$Q^2$	
Attractiveness				0.683	
Emotion				0.69	
Persuasion				0.749	
Social Domain				0.602	

Note: B1 (Behavioural Outcomes), LM, linear model; RMSE, root-mean-square error.

Comparing the RAMSE (or MAE) value to the LM value of each indicator. Compare the PLS-SEM analysis to the linear model to see if it produces lesser prediction errors in terms of RMSE for all, the majority (high

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predictive power), the minority (low predictive control), or none of the constructs (lack of predictive power). Table 7 explains that PLS-SEM results are less than the LM results for most indicators yield smaller prediction errors than the LM, which indicates a medium predictive power.

**Table 8** Predictive model assessment.

Constructs	CVPAT	
	IA average loss difference (p-value)	LM average loss difference (p-value)
Behavioural Outcomes	-0.149(0.000)	-0.018(0.119)
Attractiveness	-0.685(0.000)	0.319(0.000)
Emotion	-0.693(0.000)	0.311(0.000)
Persuasion	-0.752(0.000)	0.252(0.000)
Social Domain	-0.605(0.000)	0.400(0.000)
Overall	-0.363(0.000)	0.118(0.000)

Note: CVPAT, cross-validated predictive ability test; IA, indicator average; LM, linear model

Table 8 shows that the model does not have strong predictive power but it has medium predictive power because the IA average loss for behavioural outcomes is negative and the LM average loss difference is also negative, LM difference should be positive for the high predictive power of the model.

### 3.7 MICOM (Measurement Invariance of Composite)

MICOM was utilized to assess heterogeneity in the research. MICOM ensures measurement invariance in data through three steps: configurational invariance, compositional invariance, and equality of composite mean values and variances (Henseler et al. 2016). Step 1 ensures that all composites are specified uniformly across groups, including equivalent indicators, data handling, and algorithm settings/optimization criteria. Thus, the configural invariance is established in the current study. In Step 2, we employed the permutation procedure to ensure that the initial correlation was larger than or equal to the 5% quantile (Henseler et al. 2016). Table 8 demonstrates that all original correlation values are above the 5% quantile, indicating compositional and partial measurement invariance (Matthews, 2017). Step 3 was divided into two portions, 3(a) and 3(b), to compare variance and composite mean results. Henseler et al. (2016) define full measurement invariance as equal values for both components (see Tables 9, and 10).

**Table 9** MICOM (Steps 1 and 2)

Gender	Configural Invariance (Step 1)	Original Correlation	5.00%	Permutation p-value	Compositional Invariance (Step 2)
B.O	Yes	0.999	0.9	0.567	Yes

			98		
P.E	Yes	0.997	0.996	0.075	Yes
Age					
B.O	Yes	0.999	0.998	0.227	Yes
P.E	Yes	0.998	0.996	0.366	Yes
Educational					
B.O	Yes	0.998	0.997	0.172	Yes
P.E	Yes	0.997	0.995	0.176	Yes
Occupation					
B.O	Yes	0.999	0.996	0.642	Yes
P.E	Yes	0.999	0.992	0.806	Yes
Residence					
B.O	Yes	0.999	0.998	0.648	Yes
P.E	Yes	0.996	0.996	0.071	Yes

Note: B.O (behavioural outcomes), P.E (promotional effectiveness)

**Table 10** MICOM (Step 3)

Gender	Step-3a (Mean)			Step-3b (Variance)		
	Permutation Mean difference	Confidence interval	Permutation p-value	Permutation variance difference	Confidence interval	Permutation p-value
B.O	-0.002	-0.182	0.002	0.026	-0.523	0.097
P.E	-0.005	-0.179	0.003	0.020	-0.495	0.105
Age						
B.O	0.002	-0.181	0.345	0.005	-0.564	0.895
P.E	0.002	-0.171	0.686	-0.002	-0.479	0.541
Educational						
B.O	-0.005	-0.194	0.517	0.001	-0.641	0.987
P.E	-0.001	-0.183	0.333	-0.012	-0.591	0.127
Occupation						
B.O	0.000	-0.199	0.184	0.044	-0.544	0.256
P.E	0.001	-0.196	0.139	0.035	-0.532	0.295
Residence						
B.O	0.005	-0.175	0.977	-0.007	-0.562	0.907
P.E	0.001	-0.167	0.724	0.000	-0.506	0.599

### 3.8 MGA (Multigroup Analysis Gender Moderation)

MGA measures a specific observable variable to determine significant differences in factor estimations. Mishra et al. (2018) used a bias-corrected and bootstrapped MGA approach with 5,000 sub-samples to assess gender's moderating influence. To conduct MGA data was divided into two groups based on gender (male

and female). This approach directly calculates the route coefficients of male and female results for promotional effectiveness, which influences the behavioural consequences of social media users. To investigate the difference in findings between the two groups, a parametric test called the Welch-Satterthwaite test was employed. This approach uses bootstrapping to directly quantify the difference in path coefficients across groups. If the p-value is less than 0.05, it indicates that the male and female route coefficients are significant. Table 11 illustrates that the link between promotional effectiveness and behavioural outcomes is statistically significant in gender, age, education, and occupation and insignificant in residence since the p-value is larger than 0.05. This suggests that the link between promotional effectiveness and behavioural results is unaffected by social media users' gender.

Table 11 MGA Results for gender, age, education, occupation, and residence

Hypotheses	Gender (Female-Male)	Age (18 to 30, above 30)	Education (College degree, University degree)	Occupation (Student, Service govt&priv)	Residence (Urban, Rural)
P.E->B.O	0.170 (0.016)	0.236 (0.04)	0.289 (0.01)	0.69 (0.01)	-0.166 (0.16)

Notes: P.E(promotional Effectiveness), B.O (behavioural outcomes), path differences and p-value are significant if  $p < 0.05$ .

The above table of MGA states the results of moderation on the relationship between promotional effectiveness and behavioural outcomes. The above table shows the path differences and the p-values of the demographic variables that we have taken as a moderator. The results show that females are more inclined to promotional activities on social media which directly impact their buying decisions than males. The decision was also supported in the study of Leonidou et al., (2013). The users who lied between the 18 to 30 years of age group had more effect of promotional activities that decide their buying behaviour on social media. Users who passed their college degree and pursuing their master's degree are more influenced by the promotional tools on social media. In addition, students are more use of social media which directly affects their buying behaviour of social media users than the service holder. The reason is that they are busier in their office work which cannot be related to social media. Maybe they are not engaged in the marketing activities of companies. They are more engaged in public dealing rather the technology. The one variable is residence which shows an insignificant result as the p-value of the P.E->B.O is  $> 0.05$ . That means the usage or marketing activities like attractiveness, emotions, persuasion, and social domain have the same

effect on urban as well as rural areas of social media users. Lastly, gender, age, education, and occupation have significant results on behavioural outcomes.

## Discussion and Implications

The study aims to contribute to the literature on the promotional effectiveness of social media by using empirical data. The study's major goal is to investigate the impact of promotional effectiveness on behavioural outcomes based on demographic variables in Haryana (India). The research findings of the study after an overall analysis of the grouped sample based on gender, that females are more affected by the promotional activities on social media that directly impact their behavioural intention. These results are expressed in the MICOM tables 9 and 10. This demonstrates the mean difference between females and males, in which the mean value of females is greater than males. Promotional activities are expressed in terms of attractiveness, emotion, persuasion, and social domain. As per the results, females are more attracted to social media platforms the various reasons would be that advertisements and other promotional activities on social media platforms target the female gender more in comparison to the males. Females are attracted to social media platforms because they find their content as they want as well as a convenient source of information. Females are more emotionally connected to the source that is available on social media platforms. They trust social media information provided by marketers. Feedback and testimonials persuade Females more in comparison to females. Social media is a great platform for sharing various societal issues and helps in maintaining relationships between people in society. Hence, promotional effectiveness is more positive and significant in females that direct the behavioural outcomes on social media than in females. Marketers can cater to males for promotional activities on social media for products/brands. For example, beauty products, sports products, clothing brands, health-related products, and others. In this, they can hire social media influencers. Influencers easily persuade users towards products and services on social media platforms, by sharing reels and daily vlogs or meeting up with followers, etc. Social media influencers have also used many promotional techniques such as give-away of expensive products free of cost to their followers to increase awareness of new products and brands in the market. There is no significant difference in urban and rural areas on the effectiveness of promotions on social media that decide their final purchasing decision. Young age population mostly students more attracted to social media promotional activities than the older generation. Hence, we can say that demographic variables excluding residence have a significant and positive effect on behavioural outcomes. The reason can be internet services are now available in rural areas and social media is used by people whether for entertainment purposes, watching YouTube videos making food, etc. Some of the studies that have supported the moderation results are Gundala et al., (2022); Cooli et al. (2007); Homburg and Giering (2001); Ndubisi (2005); Qayyum et al., (2013); Raza and Zaman (2021); Warsame and

Irerer (2017); Leonidas et al. (2012); Singh et al. (2024); Teeroovengadum (2020); Glass and Li, 2010; Kim et al. 2011; Wong et al. 2011; Genfen and Ridings, 2005; Hwang, (2010).

#### 4.1 Research Implications

Büyükdag et al. (2020) stated that pricing is a crucial marketing technique influencing consumer attitudes, perceptions, and behaviours. Consumer reactions to price promotions play a significant role in pricing. Pricing strategies that align with consumers' cognitive and emotional impressions are crucial for the long-term success of products and businesses. Thus, price attractiveness positively impacts customer's purchase intentions. In addition, in the study of Trivedi and findings show that the backdrop aesthetic complexity of the live stream room increases customers' purchase intention favorably through elicited emotional states (pleasure and arousal). Furthermore, the data indicate that gender significantly moderates the relationship between background visual complexity and purchase intention. When presented with complexity, women have an inverted U-shaped impact on mood and purchase intention, but men show a positive linear relationship (Kapoor and Munjal 2019). The emotional response to an advertisement has a considerably more significant effect on a consumer's expressed intention to acquire a product or service than the substance of the commercial.

Research indicates that emotions can impact the effectiveness of persuasion tactics (Griskevicius et al. 2010). Verhagen and vanDolen (2011) state that user persuasion is linked to information processing and arousal. High arousal levels might lead to spontaneous judgments made using cognitive shortcuts. Previous research on the impact of persuasion on decision-making behavior has focused on results rather than persuasion, indicating that persuasion as a direct indicator requires additional examination.

Researchers have hypothesized a new condition known as "Facebook depression," which happens when people spend too much time on social media sites like Facebook and exhibit typical signs of depression. Maintaining connections with peers is crucial for a fulfilling social life. The internet world's continual participation might increase self-awareness and lead to sadness for specific individuals. Facebook depression,

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Teichert (2019), advertisement's effectiveness is accessed through smiling on purchase intention. The emotional impact is a significant factor in emotional transmission. It occurs when one person impacts another's behaviour by conscious or unconscious induction of emotions. The connection between smiling and model gender suggests marketers should use a smiling female model to persuade female consumers. Furthermore, the study of Tang et al. (2022) found that using the stimulus-organism-response hypothesis, The study looks at the relationship between live background visual complexity, emotional states, and purchase intention. The

like offline sadness, can lead to social isolation and a search for 'help' on dangerous websites and blogs. These sites may advocate substance misuse, unsafe sexual practices, and violent or self-destructive activities. Depression is one of the unintended outcomes of social media usage, Amedi J. (2015). The impact of social media on individuals is positive as well as harmful. Rao et al. (2022) explained the pros and cons of social media usage in society. The cons of social media are creating awareness and motivating users on education and other matters. The disadvantages of social media are privacy concerns and physical and mental hazards—Another adverse effect of social media is the FOMO effect on individuals. FOMO means fear of missing out on something. As a result of this, they spend more hours on social media, seeing blogs and videos. Hence, social media impacts users' decision-making process.

#### 4.2 Limitations and Suggestions

From the above gist of the analysis, there are various limitations in this article. The drawbacks of the study are such as this article is based on five demographic variables which are used as moderators. No mediation study has been conducted based on the moderation mediation study conducted. Moderators can be other than demographic variables such as social media platforms and another continuous variable. The geographical location can be different other than Haryana state. For data analysis PLS-SEM software has been used, in the future we can use other software like SPSS AMOS, etc. We can apply these results to a bigger sample size for better generalization

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