

# THE ROLE OF SOCIAL MEDIA ADVERTISEMENTS ON BRAND AWARENESS AND BRAND LOYALTY BASED ON S-O-R PARADIGM

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## ABSTRACT

In the apparel sector, where competition is intense, identifying the factors that drive brand loyalty is essential. Based on this, the primary aim of the study is to investigate the effects of social media advertisements and their subsequent effect on brand awareness to ensure brand loyalty in the apparel sector. The significant role of social media as a two-way communication tool in influencing consumer behavior has been revealed. Based on the Stimulus-Organism-Response framework, this research aims to examine the effects of social media advertisements on brand awareness and brand loyalty in the apparel sector. Data collected from 340 social media users via the survey method were analyzed using variance-based structural equation modeling (PLS-SEM) with SmartPLS (v.3.2.9) software. The findings reveal that both social media advertisements and brand awareness possess a noteworthy impact on the formation of loyalty to the apparel brands. These results not only confirm the proposed model but also support the identified mediating role. In this context, it has been established that brand awareness plays a mediating role in the effect of social media advertisements on brand loyalty. The research findings provide important theoretical and practical consequences as well as recommendations for further study.

## KEY WORDS

S-O-R paradigm, social media advertisements, brand awareness, brand loyalty

## CLASSIFICATION

JEL: M30, M31, M37

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## **INTRODUCTION**

Social media has grown in popularity, and marketing activities have shifted from traditional methods (brochures, television, newspapers, etc.) to digital media. This transformation, facilitated by internet marketing applications, is defined as a cumulative and gradual process [1]. According to [2], the advent of social media platforms (e.g., Twitter, Facebook) has radically changed the marketing environments. Today, the significance of social media marketing campaigns is increasing, and this topic has attracted significant attention in research and industry worldwide. Social media offers valuable opportunities for brand building, as it is among the fastest-growing marketing channels and is actively used by more than two-thirds of internet users [3].

Marketing promotions on social media enable consumers to reach businesses quickly and easily. The involvement of businesses with social media channels can be as effective as traditional advertising. Interactions established with both potential and existing customers help businesses create positive brand awareness [4]. Today, businesses and marketers can interact with customers, understand their needs, and effectively utilize social media marketing activities [1]. Thanks to the increase in social platforms, customers can learn more about brands and communicate with each other more quickly and easily. The body of research in the literature focuses on measuring customer reactions to social media advertisements, which have become a powerful marketing tool today [5, 6].

According to [7], as technology advances and market competition intensifies, companies in the apparel industry have come to understand the significance of branding. However, the sector faces various challenges, including low competitiveness, insufficient innovation and creativity in branding, and inadequate use of effective strategies to enhance brand value. In today's experience-driven market, how consumers perceive brands plays a crucial role in shaping brand awareness and loyalty. This review examines to examine the consequences of using social media on brand perception during purchase decision processes among social media users. Within the Stimulus-Organism-Response (S-O-R) model framework, this study seeks to examine the relationships between marketing activities through social media advertisements and brand awareness and brand loyalty in the apparel industry. In this regard, the study's primary focus is to address the gaps in the literature on social media advertisements and attitudes and behaviours towards the brand. Furthermore, this study presents a research model examining how social media advertisements can strengthen the connections among customers, marketers, and brands, and how these connections can enhance brand awareness and loyalty.

## **THEORETICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT**

### **STIMULUS-ORGANISM-RESPONSE (S-O-R) PARADIGM**

Within the framework of S-O-R, different environmental factors serve as external stimuli (S) that influence individuals' cognitive and emotional organism (O) and, as a result, direct their behavioural responses (R). This theory is used to systematically analyze how various stimuli—both internal and external, as well as concrete and abstract—affect individuals' characteristics such as attitudes, emotions, perceptions, and affiliations, and how these effects lead to responses such as intentions and behaviours [8]. Researchers [9] state that sensory variables in the environment influence emotional responses by considering the information ratio of the environment (a concept reflecting the level of uncertainty) and differences in individuals' emotional experiences. As a result, these effects encourage individuals to either engage with or evade the environment. This process is defined as the S-O-R sequence [10].

Within the framework developed by researchers [9], based on the S-O-R paradigm, the (S) element represents environmental stimuli, the (O) element represents emotional reactions (satisfaction and action), where the (R) element represents approach or avoidance behaviour. This model suggests that consumers' internal states determine their approach or avoidance behaviour [11]. Designed by researchers [9] to examine consumer behaviour, this model is widely utilized in marketing research [12, 13].

Studies show that customer reactions generally occur in the form of brand preference, readiness to spend more, customer loyalty, and purchase intention [3, 11, 14]. In addition, researchers [4], who examined customer reactions from behavioural and emotional perspectives, considered word-of-mouth communication as a behavioural reaction and customer loyalty as an emotional reaction. Researchers [14] used the S-O-R paradigm to investigate the behaviour of Generation Y in the retail sector. In this model, service quality is considered to be the 'stimulus', corporate image the 'organism', and customer loyalty the 'response'. The study results show that high levels of store service quality significantly enhance the integrity of the store image, thereby accelerating customer loyalty.

This study aims to investigate how social media advertisements affect brand awareness and brand loyalty. The S-O-R framework the basis for this study. Within the framework of this theory, social media advertisements were evaluated as "stimuli" (that is, "Stimuli" or "S"), brand awareness as "organism" (that is, "Organism" or "O"), and brand loyalty as "response" (that is "Response" or "R"). Therefore, the study addresses consumer behaviour through the three basic elements of the S-O-R model. Based on the literature, the relationships between social media advertisements, brand awareness, and brand loyalty were tested using the research model developed within this framework.

## **SOCIAL MEDIA ADVERTISEMENTS**

Social media is a platform that uses web or mobile-based technologies, focusing on the processes of producing, sharing, and consuming information through public interaction that transcends geographical, social, political, and demographic boundaries [2]. Researchers [15] define social media as an important element that influences various aspects of consumer behaviour, including awareness-raising, information acquisition, purchasing behaviours, and post-purchase communication and evaluations. In the digital age, the increasing complexity of technology and communication, combined with the rise in marketing activities on social media, has made it a fundamental tool for information distribution [16].

Consumers trust that social media provides them with information more than the information they receive from advertisements. Thus, the tendency to trust different social media platforms that provide up-to-date information is higher [4]. Moreover, the rapid increase in smartphone usage and wireless devices has made social media sites the most suitable options for brand research [6]. Many individuals share their information to others via social. Therefore, social media is increasingly becoming a channel through which end users can obtain information about goods and services that inform their final purchase decisions [3].

In today's world, many people can be active online simultaneously. Social media has modernized traditional communication channels as well as, product information, and purchasing processes; new social and economic trends are emerging as a result. Social media plays an increasingly widespread and important role in international marketing advertisements, customer relationship management, and internal communication. Social media-based marketing attracts significant attention; studies indicate that such advertisements are 55% more effective than traditional advertisements due to their reminder effect [17]. By actively engaging with social media, desired content can be created regardless of time and location and consumed by consumers through active participation, creating a much wider impact area than traditional advertising methods [4].

Social media offers numerous advantages to brands, including protecting brand reputation, increasing sales, engaging consumers in branding, spreading brand awareness, developing more positive relationships, and enhancing consumer loyalty [2]. By changing the ways consumers access information and purchase products, social media creates new social and economic dynamics. As a result, many companies leverage social media as an internal channel for external promotions, marketing strategies, customer management, and communication with employees [4].

## **BRAND AWARENESS**

Brand awareness is the capacity of a customer to identify a brand under various conditions, and it has a significant relationship with how easily and likely the brand name is recalled [18]. The researcher [18] noted that brand awareness is closely associated with consumer performance regarding brand recall and recognition. Researchers [17] emphasized that brand awareness is a critical component of marketing strategies, facilitating the brand's recognition across different communities and social media environments. They evaluated it as an element that supports the brand's penetration into the consumer's mental landscape [17].

Brand awareness is created through any activity (advertising, promotion, public relations, etc.) that prompts consumers to interact with the brand. Brand awareness is important because consumers often struggle to try new products or services. Brand awareness is a major factor that may affect consumer choices, and therefore, has been regarded as a basic construct in marketing and consumer behaviour literature [19]. It functions as an important device within final data collection, which allows types to remain visitors' factors of consideration as they renegotiate brand-rescue decisions [20]. Researchers [19] demonstrated that brand awareness on social media platforms has a substantial impact on word-of-mouth communication.

## **BRAND LOYALTY**

The idea of loyalty has long been a focal point for marketing academics [21]. Loyalty is defined as a customer's commitment and emotional connection to a specific brand or business [21]. As consumer-brand interaction, loyalty involves the establishment of a strong connection [1]. In this regard, brand loyalty reflects of a connection between a customer and a brand, typically evidenced by repeated purchases [16].

Consumers who develop loyalty to a brand establish their relationship with that brand through the processes of awareness, purchase, use, and experience [4]. Building a strong brand fosters brand preference among consumers, which can facilitate the creation of brand loyalty over time [1]. In today's competitive global market, managers aim to boost marketing effectiveness by developing new marketing measures related to business success [21].

Researchers [22] defined brand loyalty as the customer's positive feelings toward the brand, a desire for continuous purchasing, and long-term use of that brand. There are two main ways of describing brand loyalty in the literature: behavioural and attitudinal. Behavioural loyalty metrics describe brand loyalty as actual purchases over time, whereas attitudinal loyalty measurements are based on expressed preferences, commitments, or purchase intentions [22].

Researcher [23] defines brand loyalty by comparing it with other brands that offer similar benefits and associates it with price premium and customer satisfaction, which are fundamental dimensions of brand value. The widely accepted view is that loyalty is a fundamental aspect of brand value [24]. In this context, corporations conduct numerous studies to capture customers' attention, boost memorability, generate a favourable brand image, and encourage brand loyalty by employing all communication channels to build or sustain brand value [25]. In summary, building and maintaining brand loyalty is one of the principal challenges for marketers [26].

## **HYPOTHESIS DEVELOPMENT**

Today's consumers are more likely to use social networks to easily find information about the brands they are interested in than traditional marketing communication tools. The availability of product details on social media platforms makes it much easier to follow brands [27]. Social media has become important for businesses seeking brand awareness. With the widespread social media usage, businesses and brands can no longer afford to operate independently of this environment [5].

Social media marketing is a strategy that targets social networks and their users to advance brand awareness or promote a specific product. Marketers view social media marketing as a more targeted approach to advertising. Thus, it is thought that social media is actually effective in creating brand awareness [5]. Effective social media advertisements significantly contribute to businesses in building a positive image and, consequently, increasing perceived customer value [28]. While social media advertisements constitute one aspect of social media marketing, researchers [5] argue that "content is king" in another asserting that engaging content is extremely important.

In this context, as brands acquire a privileged, positive, and prominent position consumer's minds, consumers, they become irreplaceable and cultivate consumer loyalty. Brand loyalty helps businesses grow or, at the very least, remain competitive by providing sales revenue, market share, and profitability [26]. According to researcher [26], businesses conducting successful social media campaigns should focus on the positive outcomes, values, and advantages they give to customers, as well as the elements that enhance the likelihood of consumer loyalty to their brands. It is believed that consumers seek unique aspects in order to engage with brands on social media.

Researchers [27] examined the effects of brands' social media activities in the clothing fashion sector on cognitive, affective, and conative brand loyalty through brand love, brand awareness, and value awareness. Their findings indicate that social media activities play a significant role in strengthening loyalty, particularly on an affective level. Researchers [24] revealed that online marketing communications, particularly electronic word of mouth, online communities, and online advertising, are beneficial for promoting companies and products via business websites and social media platforms, and they also impact brand loyalty and purchase intentions. In their study, they noted that consumers are interested in engaging with the product and providing feedback about it within the social media marketing environment to enhance their purchase intentions. Similarly, researchers [22] found that the social media marketing activities of hotels, particularly on their own websites, significantly affect brand loyalty and brand trust.

Social media networks assist businesses in fostering strong relationships with their existing customers and converting them into loyal patrons [21]. In his research, [1] indicated that brands in the telecommunications sector should invest more in social media marketing activities to enhance their loyalty. He argues that social media marketing activities are fundamental strategies in the sector for boosting brand loyalty. Additionally, researcher [25] analysed social media marketing activities regarding entertainment, interaction, trendiness, advertising, and customization dimensions, revealing that these activities positively impact brand image and brand loyalty, with the most significant effect observed on brand awareness. Furthermore, researchers [17] found that social media activities affect brand awareness and brand image, which, in turn, enhance brand loyalty. They emphasized that marketing managers should strive to establish a unique attribute in consumers' minds that encourages them to purchase the brand upon hearing about the product.

Considering the conversations above and the S-O-R theory, the following hypotheses are proposed:

- H<sub>1</sub>:** Social media advertisements positively affect brand awareness.
- H<sub>2</sub>:** Brand awareness positively affects brand loyalty.
- H<sub>3</sub>:** Social media advertisements positively affect brand loyalty.
- H<sub>4</sub>:** Brand awareness has a mediating effect on the impact of social media advertisements on brand loyalty.

Based on the hypotheses, this study explores the connections among social media advertising, brand awareness, and brand loyalty, all framed within the S-O-R paradigm. The conceptual model for this investigation is shown in Figure 1 and summarizes the four hypotheses derived from the literature review. Accordingly, the S-O-R paradigm posits that environmental factors (stimulus) can trigger an individual's emotional states (organism), ultimately leading to approach or avoidance behaviours (response), as depicted in Figure 1. The research model to be tested in alignment with the hypotheses is presented in Figure 1.

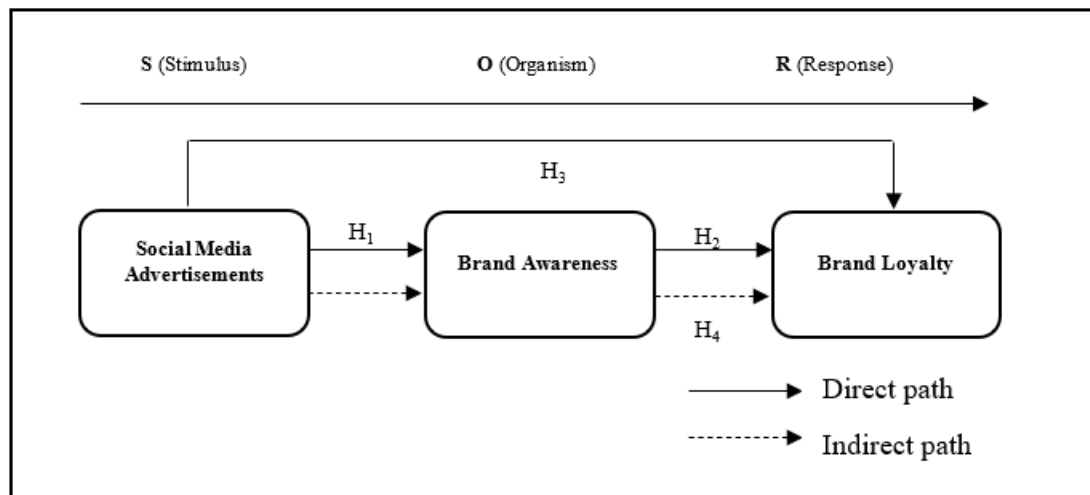


Figure 1. Research Model (adapted from [9]).

## RESEARCH METHODOLOGY

### DATA COLLECTION METHOD

The purpose of this study is to evaluate the impact of social media advertisements in the apparel sector on consumer brand loyalty and to examine the mediating role of brand awareness in the relationship between these two variables. The apparel sector is widely regarded as a market segment in which consumers respond frequently and rapidly to visual, product-centered content. In this context, a high degree of product variety, price flexibility, and the intensive use of seasonal campaigns together create a natural laboratory for testing the effectiveness of social media advertising. Furthermore, the short product life cycles in apparel and the tendency for campaign effects to be quickly reflected in performance outcomes provide a suitable setting for examining how advertising actors influence brand awareness and purchasing decisions. A survey was employed as a quantitative method and administered to participants via the “Google Forms” online platform, between July and September of 2024. The survey statements were developed using the translation back-translation technique to ensure accuracy and clarity. To further validate the items, expert opinions were sought. Subsequently, a preliminary test was carried out with 30 participants to evaluate the clarity of the statements. Based on the feedback from the pre-test, the statements were finalized and prepared for the main study.

The survey administered to participants included demographic questions, filter questions, and statements related to the relevant concepts. Participants were selected from social media users

aged 18 and over who had previously noticed a ready-made clothing product through social media advertisements and had made a purchase at least once. Two filter questions were used to determine eligibility for participation in the study. The first question asked whether participants followed their favorite the apparel brands on social media, while the second inquired whether they had been influenced by social media advertisements to make apparel purchases. Only participants who answered positively to both filter questions were incorporated into the study.

The data for this study were collected from 340 social media users selected using convenience sampling methods via an online survey. In a multivariate study, it is recommended that the sample size be at least ten times the number of items related to the variables being analyzed. It has also been suggested that this number should not fall below 200 [29]. Based on this rationale, for the 13 items related to the three variables, a sample of 130 participants ( $13 \cdot 10$ ) is necessary. Therefore, the 340 participants selected for this study represent a sufficient sample size, enhancing the reliability of the statistical analyses.

## MEASUREMENTS

In this study, all constructs in the proposed conceptual model are based on previously tested statements for validity and reliability. Six statements proposed by [28] were used to measure the impact of social media advertisements. Brand awareness was assessed using three statements developed by [25]. Finally, a scale composed of four statements proposed by researchers [30] was utilized to measure brand loyalty.

Additionally, a back-translation method was employed to prevent translation errors [31]. All scale items were adapted based on relevant literature, and during this process, approval was obtained from faculty members who were experts in the field. Translation and the precision of maintaining the meaning of the original were carried out with due care. 5-point Likert-type scale was used to measure all variables, with responses ranging from 1 (Strongly disagree) to 5 (Strongly agree). In this context, participants were asked to rate their agreement with the questionnaire statements on a scale of 1 to 5. The questionnaire items are included in the Appendix.

## EMPIRICAL FINDINGS

### Sample

Table 1 displays the analytical findings derived from the research participants' demographic data.

### Common Method Bias

Common method bias is the possible distortion of relationships between variables that may arise when both dependent and independent variables are measured concurrently in a single survey [32]. As noted by researchers [33], common method bias manifests when responses are influenced in a systematic way due to the utilization of a common scaling approach, particularly when measurements originate from a single data source.

The aforementioned confluence of social media advertisements, brand awareness (attitude), and brand loyalty within the same unit of analysis in this study may engender common method bias. To avoid this type of issue, an option is to perform Harman's single factor test [32]. This test aims to examine whether the common method variance is a problem for this research result. The result of single factor test of Harman indicates that the total variance accounted by a single factor in the data set was 45,132% ( $KMO = 0,900$ ,  $p < 0,000$ ). Importantly, this proportion is below the critical value of 50%, indicating that common method bias should not pose a serious issue in the study [32]. The data shows that the study do not have a common method bias.

**Table 1.** Respondents' profile,  $N = 340$ .

Attributes	Details	Frequency	%
Gender	Female	192	56,5
	Male	148	43,5
Age	18-28	168	49,41
	29-38	107	31,5
	39-48	51	15
	49-58	12	3,5
	58 and above	2	0,59
Marital Status	Single	216	63,53
	Married	124	36,47
Education	Primary school	-	-
	Secondary school	3	0,88
	High school	88	25,88
	Associate degree	36	10,59
	Bachelor's degree	138	40,59
	Postgraduate	75	22,06
Monthly Income (TL)	15,000 and below	52	15,29
	15,001-30,000	72	21,18
	30,001-45,000	104	30,59
	45,001-60,000	45	13,24
	60,001-75,000	40	11,76
	75,001 and above	27	7,94
Which social media platform(s) do you use more often? (It is possible to choose multiple)	Instagram	136	40
	Instagram+Youtube	46	13,5
	Instagram +Twitter+Youtube	34	10
	Instagram +Twitter	26	7,6
	Other	98	28,9
	Please mark the brands whose advertisements you have encountered on social media. (It is possible to choose multiple)	Lc Waikiki	38
Mavi		35	10,29
Mavi+Lc		32	
Waikiki+DeFacto			9,41
Zara		21	6,18
H&M		18	5,29
Zara+ H&M+Mavi		12	3,52
Lc Waikiki+		10	
DeFacto+Koton			2,9
Koton+U.S. Polo Assn.		8	2,39
Other		166	48,83
<b>Total</b>		<b>340</b>	<b>100</b>

### Testing Validity and Reliability

Structural Equation Modeling (SEM) is a widely used statistical method in the social sciences. The ability to describe latent variables, account for multiple types of measurement error, and test all constructs simultaneously have rendered this method useful for numerous research questions. There are two primary types of Structural Equation Modeling (SEM): covariance-based (CB-SEM) and variance-based (PLS-SEM) [34, 35]. In this study, variance-based Partial Least Squares Structural Equation Modeling (PLS-SEM) was used to examine for both the measurement and structural models associated with the research framework. The analysis was conducted using SmartPLS software v.3.2.9. The advantages of the PLS method, including superior estimation compared to the covariance-based method, influenced the selection of this

approach [36]. PLS-SEM is an innovative statistical technique for structural modeling that marketing researchers should explore when conducting studies with a limited sample size [37].

PLS-SEM analysis consists of two phases: the measurement model and the structural model [34, 35]. Validity and reliability are assessed by examining the relations among the items in the measurement model, while the hypotheses proposed within the research framework are tested in the structural model [38]. Initially, construct validity and reliability were assessed through the confirmatory factor analysis conducted as part of the measurement model assessment. The values of Cronbach's  $\alpha$ , Dijkstra-Henseler's  $\rho_A$ , and Composite Reliability (CR) scores were used to measure the internal consistency for construct reliability, respectively, while the convergent and discriminant validity findings of all constructs was evaluated by using construct validity. Results of the measurement model are shown in Table 2.

**Table 2.** Results of the measurement model.

	Item	Factor Loading	Cronbach's $\alpha$	$\rho_A$	CR	AVE
<b>Social Media Advertisements</b>	SMA1	0,714	0,807	0,809	0,862	0,510
	SMA2	0,688				
	SMA3	0,773				
	SMA4	0,704				
	SMA5	0,671				
	SMA6	0,731				
<b>Brand Awareness</b>	BA1	0,804	0,720	0,723	0,842	0,671
	BA2	0,821				
	BA3	0,775				
<b>Brand Loyalty</b>	BI1	0,857	0,834	0,848	0,890	0,641
	BI2	0,884				
	BI3	0,701				
	BL4	0,822				

When the resulting data were evaluated, it was discovered that the factor loadings ranged from 0,671 to 0,884. Researchers [39] recommend that factor loadings should be no less than 0,708. If AVE and CR values are below the threshold limit, all items with factor loadings between 0,40 and 0,70 should be eliminated from the model. Researcher [40] states that the items which had factor loading lower than 0,708 were not deleted from the scale since AVE, and CR values calculated higher than the acceptable numbers required.

The important limits for structural reliability were identified as Cronbach's  $\alpha$  ( $\alpha > 0,70$ ),  $\rho_A$  ( $\rho_A > 0,70$ ), and Composite Reliability (CR  $> 0,70$ ). Thus, structural reliability was achieved in accordance with internal consistency and composite reliability [36]. When construct validity findings were examined, AVE  $> 0,50$  was determined to be the essential requirement for convergent validity [34]. In terms of discriminant validity, cross-loadings, the HTMT criterion, and the Fornell-Larcker criterion were evaluated. The acquired values are shown in Tables 3, 4, and 5.

Each item has been designed to have the highest possible factor loading on its related variable while there is more than 0.1 difference between its factor loading and the factor loadings of other variables. Researcher [40] defines 'overlapping items' as those with a difference of 0,1 or less. From Table 2, it is evident that there are no overlapping items.

Those who argue in favor of the Heterotrait-Monotrait (HTMT) criteria submit that there is discrimination validity: if HTMT values go below the 0,85 or 0,90 thresholds [34].

The Fornell-Larcker criterion states the presence of validity and states that in order for validity to be proclaimed, the square roots of the Average Variance Extracted (AVE) must be greater

**Table 3.** Cross-loadings.

	Social Media Advertisements	Brand Awareness	Brand Loyalty
SMA1	<b>0,714</b>	0,513	0,389
SMA2	<b>0,688</b>	0,472	0,455
SMA3	<b>0,773</b>	0,443	0,456
SMA4	<b>0,704</b>	0,427	0,400
SMA5	<b>0,671</b>	0,399	0,376
SMA6	<b>0,731</b>	0,507	0,442
BA1	0,533	<b>0,804</b>	0,540
BA2	0,524	<b>0,821</b>	0,566
BA3	0,496	<b>0,775</b>	0,511
BL1	0,472	0,620	<b>0,857</b>
BL2	0,480	0,655	<b>0,884</b>
BL3	0,463	0,449	<b>0,701</b>
BL4	0,522	0,609	<b>0,822</b>

**Table 4.** HTMT criterion values for variables.

	Social Media Advertisements	Brand Awareness	Brand Loyalty
<b>Social Media Advertisements</b>			
<b>Brand Awareness</b>	0,845		
<b>Brand Loyalty</b>	0,720	0,836	

**Table 5.** Fornell-Larcker criterion values for variables. Values in parentheses are the square roots of the AVE value.

	Social Media Advertisements	Brand Awareness	Brand Loyalty
<b>Social Media Advertisements</b>	<b>(0,714)</b>		
<b>Brand Awareness</b>	0,648	<b>(0,800)</b>	
<b>Brand Loyalty</b>	0,590	0,719	<b>(0,819)</b>

The Fornell-Larcker criterion states the presence of validity and states that in order for validity to be proclaimed, the square roots of the Average Variance Extracted (AVE) must be greater than the correlations of the variables with other variables. It states that discriminant validity exists where the squares of the correlations between the variables do not exceed their [39]. Following a careful examination of the differential validity, it has been confirmed that the attributes in the model meet the requirements outlined in Tables 3, 4, and 5.

### Testing of Model Fit Indices

After performing the validity and reliability analysis, three model fit parameters were evaluated to assess the model proposed by one of them. These include the Standardized Root Mean Square Residual (SRMR), the Normed Fit Index (NFI), and the Chi-Square statistic. These parameters were incorporated into the SmartPLS program before proceeding with the model test.

**Table 6.** Model fit indices.

SRMR	Chi-Square	NFI
0,075	372,603	0,906

As shown in Table 6, the model fit indices indicate that the SRMR is 0,075, which is below the acceptable fit criterion of 0,08. The Normed Fit Index is 0,906, well above the threshold 0,9 to suggest a good model fit. Besides, the Chi-Square statistic is not significant [35, 41]. Based on these facts, it could be derived that a suitable fit is obtained for the proposed model. Thus, further analysis was done.

## TESTING THE HYPOTHESIS

The advantages of PLS-SEM, in general, lie in its ability to estimate path models that include multiple structures, structural path relationships, and a couple of indicators for each structure. Moreover, before testing the hypotheses, the structural model was analyzed, and internal Variance Inflation Factor (VIF) values were checked to identify potential multicollinearity in the research model. The investigation was done through calculating the effect size ( $f^2$ ), coefficient of determination ( $R^2$ ), and predictive relevance ( $Q^2$ ), whose results are shown in Table 7.

**Table 7.** Coefficients of the structural model.

	VIF	$f^2$	$R^2$	$Q^2$
SMA → BA	1,000	0,722	0,419	0,265
BA → BL	1,722	0,429	0,543	0,360
SMA → BL	1,722	0,158		

The VIF values within the model between the internal variables all meet the criteria threshold ( $VIF < 3$ ). It is therefore concluded that there is no multicollinearity problem. The  $R^2$  coefficient is the reflective indicator of the explanatory capability of the research model, in which the weak level is below 0,25, the medium level falls between 0,50 and 0,75, and the strong level is greater than 0,75, as expressed by researchers [36]. In this case, social media advertising for brand awareness has an  $R^2$  value of 0,419, demonstrating weak explanatory power, while the combined explanatory power of social media advertising with brand awareness on brand loyalty is at a medium level with an  $R^2$  value of 0,543. After assessing the value of  $R^2$ , the  $f^2$  coefficient represents the effect size of the structural model [34]. And researchers [41] use criteria on how to classify  $f^2$  values as low, medium, or high. The results indicate that the effect size is classified as moderate to high.

The  $Q^2$  value is important in the assessment of a structural model, since it illustrates whether the indicators within the endogenous structure's reflecting measurement model can be reliably predicted [37]. The blindfolding approach was used to assess the model's predictive power in the current study. Researchers [39] explained that the  $Q^2$  value of the structural model was considered low at 0,02 and above, medium at 0,15 and above, and high when it reached a value of 0,35 and above. The results showed that the predictive power of the model is from medium to high order. Based on these assessments, the hypotheses of the research model were evaluated to determine direct impact coefficients. Table 8 displays the acquired values.

**Table 8.** Coefficients of direct effects of the structural model.

Path	Std.β	Std.D.	$t$	$p$	Result
SMA → BA	0,648	0,039	16,679	0,000	Supported
BA → BL	0,581	0,046	12,610	0,000	Supported
SMA → BL	0,214	0,054	3,933	0,000	Supported

Table 8 shows that hypotheses  $H_1$ ,  $H_2$ , and  $H_3$  are supported by statistical results, demonstrating that social media advertisements have a positive and significant effect on brand awareness ( $\beta = 0,648$ ,  $p < 0,01$ ,  $t > 2,576$ ), that brand awareness positively influences brand loyalty ( $\beta = 0,581$ ,  $p < 0,01$ ,  $t > 2,576$ ), and that social media advertisements also directly impact brand loyalty ( $\beta = 0,214$ ,  $p < 0,01$ ,  $t > 2,576$ ).

Furthermore, within the research model, an analysis was conducted to determine the indirect effect coefficient of brand awareness on the relationship between social media advertisements and brand loyalty. These results are shown in Table 9.

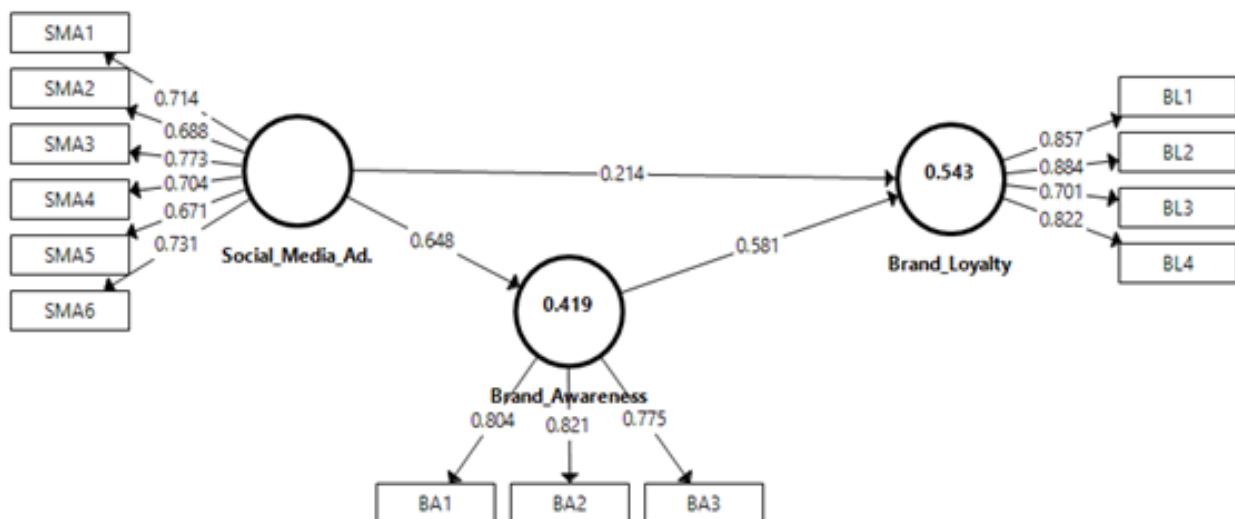
**Table 9.** Coefficients of indirect effects of the structural model.

Path	Std.β	Std.D.	$t$	$p$	Result
SMA → BA → BL	0,376	0,036	10,425	0,000	Supported

The model proposed in this research predicts that brand awareness mediates the relationship between social media advertisements and brand loyalty. Table 9 shows the statistically significant indirect effect of brand awareness on brand loyalty through social media advertisements ( $\beta = 0,376, p < 0,01, t > 2,576$ ) is statistically significant. This finding indicates that brand awareness acts as a mediator, strengthening the effect of social media advertisements on brand loyalty.

Mediating effects refer to how an antecedent structure influences a target structure through one or more mediators [42]. In the PLS path model, alterations in the exogenous structure affect the mediating variable, which, in turn, affects the endogenous structure. Thus, a mediating variable moderates the relationship between two constructs, revealing the underlying mechanisms [34].

To determine the presence of the mediating effect, the procedure proposed by researchers [43] was employed. According to their framework, for a mediating effect to be considered significant, the indirect effects must also be significant. Given that the analyses confirm this, the mediating effect was investigated using the researchers' [43] decision tree for types of mediating effects. It was determined that brand awareness exhibits a partial mediating effect (complementary type) on the relationship between social media advertisements and brand loyalty. Therefore, Hypothesis **H<sub>4</sub>**, which represents this mediating effect, is supported.



**Figure 2.** Structural model.

Table 10 presents the hypothesis testing findings, which show that all proposed hypotheses within the research model were supported.

**Table 10.** Test results of all hypotheses.

Hypothesis	Result
H <sub>1</sub> : Social media advertisements positively affect brand awareness.	Supported
H <sub>2</sub> : Brand awareness positively affects brand loyalty.	Supported
H <sub>3</sub> : Social media advertisements positively affect brand loyalty.	Supported
H <sub>4</sub> : Brand awareness has a mediating effect on the effect of social media advertisements on brand loyalty.	Supported

## **DISCUSSIONS AND CONCLUSION**

### **THEORETICAL CONTRIBUTIONS**

The research investigates the impacts of social media ads regarding brand awareness and brand loyalty from the perspective of the consumers. In this empirical analytical study, the purpose was to investigate the relationship among social media ads, brand awareness, and brand loyalty using structural equation modeling. This study is therefore expected to add significantly to the existing literature in this area, since no prior study in the literature has considered social media advertisements, brand awareness, and brand loyalty together based on the S-O-R paradigm.

In the study, social media advertisements were evaluated as the “stimulus”, brand awareness as the “organism”, and brand loyalty as the “response” through the three fundamental elements of the S-O-R model. The findings revealed that brand awareness and brand loyalty are significantly influenced by social media advertisements. The concept of social media activities, as researched by [25] and [17], was specified in this study and examined in relation to social media advertisements. Significant correlations were identified among the variables, consistent with the relevant studies.

The research’s theoretical contribution is to establish a conceptual framework for apparel brands to create brand awareness and brand loyalty through social media advertisements. The findings reveal how social media advertisements positively affect brand awareness, how brand awareness influences brand loyalty, and how social media advertisements, through the mediating role of brand awareness, impact brand loyalty. Social media advertisements significantly affect both brand awareness and brand loyalty, helping consumers become loyal customers and continue purchasing the brand’s products. Findings of the research indicate that consumers’ awareness of the brand significantly influences the link between social media marketing and brand loyalty. The higher the brand awareness among consumers created through social media advertisements, the more willing they are to repurchase the business’ products.

Aimed at examining the effects of social media advertisements on brands, the model reveals that social media advertisements are a powerful tool for increasing brand awareness and brand loyalty. With targeted and engagement, brands can increase brand awareness by reaching potential customers through social media advertisements. Additionally, social media platforms help firms to cultivate a loyal customer base. Therefore, the effective use of social media advertisements by brands is a critical component for enhancing brand awareness and brand loyalty.

### **MANAGERIAL IMPLICATIONS**

In the research prepared based on the S-O-R theory, in which the stimulus represents social media advertisements, the organism represents brand awareness, and the response represents brand loyalty, practical suggestions for businesses are presented alongside theoretical findings. Based on this, it is anticipated that the research will be of significant importance in providing various tactics to practitioners for ensuring brand loyalty.

Social media is regarded as an influential instrument for communication. In the apparel sector, where social media advertisements are actively used, findings have revealed that a brand has a higher chance of being remembered, recognized, and identified compared to other brands. Social media advertisements, which are becoming increasingly widespread, have significant effects on brand awareness, making them memorable for customers, which is positively reflected in brand loyalty. The increase in brand awareness, which is expressed as reminding the customer of themselves by creating awareness, positively affects consumers’ purchasing decisions.

The findings indicate that businesses should focus on social media advertising and develop specific strategies to promote brand awareness and to establish brand loyalty. In this context, it is recommended that investments in social media advertising be increased. To maximize customer interactions, content should be personalized for individuals, and campaigns should be created with self-congruence. Creative marketing methods might be used by the managers for marketing, in order to involve the customer in the value chain of the business. For instance, they can enhance brand loyalty by enriching customers' product or service experiences through social media and big data applications. Loyal consumers not only increase the business's current success, but they also help it compete more effectively.

## **RESEARCH LIMITATION AND RECOMMENDATION**

Although the study aims to advance theory and practice, it also has certain limitations. The primary issue is the inability to generalize the findings. Similarly, focusing on a single sector prevents the findings from being interpreted more broadly. Additionally, while this study is conducted in the apparel sector, its insights can be applied to other sectors. In this respect, the findings of this study can be examined in other sectors such as banking and telecommunications. Comparative findings could be obtained by applying the research to multiple sectors simultaneously. Further studies could also focus on distinguishing between the consumer and industrial markets. Moreover, it may be possible to test hypotheses in different cultural contexts in future research.

Another factor limiting generalizability is that the research model was tested on a single sample. These constraints can be tackled in subsequent research. Additional variables that may improve the explanatory strength of the model, such as self-identity, self-image congruence, and brand identity, could be incorporated into the research model. Additionally, factors such as education level, gender, usage duration, and type of social media platform are considered control variables in future studies. Possible moderator and mediator variables, such as brand category and cultural differences between countries, could be evaluated in future research. Future studies can focus on more detailed data collection methods using qualitative or mixed-method research techniques. Based on this research on social media advertisements, future studies could explore the effects of mobile app notifications on brand awareness and brand loyalty. Furthermore, the redesign of brand loyalty in line with trust in peer interactions on social media could also be investigated.

## **APPENDIX: MEASUREMENT SCALES**

### **SOCIAL MEDIA ADVERTISEMENTS (SMA) [28]**

**SMA1** I frequently encounter social media advertisements for this apparel brand.

**SMA2** The level of social media advertisements for this apparel brand meets my expectations.

**SMA3** The social media advertisements prepared for this apparel brand are very attractive.

**SMA4** The social media advertisements of this apparel brand perform better compared to other brands.

**SMA5** This apparel brand offers comprehensive advertisements on social media.

**SMA6** The social media advertisements of this apparel brand are easily remembered.

### **BRAND AWARENESS (BA) [25]**

**BA1** This apparel brand often attracts my attention.

**BA2** I am aware of the characteristics of this apparel brand.

**BA3** I always remember this apparel brand's logo.

## BRAND LOYALTY (BL) [30]

**BL1** I would say positively about this apparel brand to those around me.

**BL2** I would recommend this apparel brand to someone who seeks my advice.

**BL3** I would encourage my friends and relatives to buy this apparel brand.

**BL4** I will buy this apparel brand again in the future.

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