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### Customer Experience and Satisfaction in Anti-Dandruff Shampoo Consumption: Standpoint of Customer Behavioral Outcomes

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#### Chronicle

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#### Abstract

This study explores consumer behavior in Pakistan's anti-dandruff shampoo market, focusing on system quality, service quality, and content quality as key determinants of customer satisfaction. The research examines how these factors influence brand advocacy and repurchase intention, offering insights into consumer loyalty in the fast-moving consumer goods (FMCG) sector. A quantitative research methodology was employed, utilizing a structured questionnaire-based survey distributed through online and offline channels. A cross-sectional research design was adopted, and data were analyzed using statistical techniques, including regression analysis and Partial Least Squares Structural Equation Modeling (PLS-SEM). The results indicate that content quality significantly influences brand advocacy, while personalization plays a crucial role in repurchase intention. System and service quality also contribute to customer satisfaction, which in turn mediates the relationship between quality perceptions and behavioral outcomes. However, interaction quality negatively affects both advocacy and repurchase intention, highlighting the importance of sensory experiences in consumer choices. This study contributes to the literature on FMCG consumer behavior by integrating multi-theory frameworks such as the Information System Success (ISS) Model, Expectation-Confirmation Theory (ECT), and SERVQUAL. The findings emphasize the growing importance of transparency, personalization, and product efficacy in shaping consumer decisions. The research provides valuable implications for marketers and product developers in the personal care industry, offering strategies to enhance brand trust and customer retention.

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**Keywords:** Consumer Behavior, Brand Advocacy, Repurchase Intention, Content Quality, System Quality, Service Quality, Personalization, FMCG Market, Anti-Dandruff Shampoo.

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## INTRODUCTION

The Pakistani market for anti-dandruff shampoo is growing based on increasing consumer demand for good and specialized hair care products. The ISS model identifies the critical role of sensory, emotional, and functional features in influencing customer satisfaction, loyalty, and word-of-mouth communication. Dandruff control, calming scalp redness, pleasant fragrance, convenience packaging, and price are essential factors influencing consumer choice. Cultural factors, such as a natural and halal ingredient preference, also influence the buying decision. (Rizwan et al., 2023).

Though economic uncertainty and counterfeiting are challenges, brands that invest in product innovation, quality control, and niche marketing can become competitive. Social Exchange Theory confirms the necessity of balance between functional benefits and emotional connection in consumer choice. (Khan et al., 2024) Brands can increase customer loyalty and long-term market performance by tapping into local resources and sustainable processes. Overall, combining the ISS framework with cultural understanding provides a strategic framework for development in Pakistan's personal care market. (Rizwan et al., 2023)

## **LITERATURE REVIEW**

The literature review also emphasizes the contributions of system quality, service quality, and content quality to the formation of customer satisfaction and behavioral consequences in the anti-dandruff shampoo market (Wirtz & Lovelock, 2021; Khan, 2022). These variables affect consumer trust, product use, and loyalty to a brand over time. The review includes several theoretical models, such as the Information System Success (ISS) Model, Expectation-Confirmation Theory (ECT), SERVQUAL Model, and Technology Acceptance Model (TAM), to illustrate drivers of consumer choice and brand advocacy. Product effectiveness and reliability, an important determinant of customer satisfaction, are system quality (DeLone & McLean, 2003; Wirtz & Lovelock, 2021; Khan, 2022). Consumer trust and engagement result from high-quality formulations, ongoing innovation, and scientific support. Satisfaction and repurchase intentions are affected by effective anti-dandruff treatment (Smith, 2023).

Functional reliability and perceived efficiency continue to be good predictors of consumer loyalty, especially in self-use healthcare products (Petter et al., 2008). Service quality, such as personalization and understandability, is also essential. Personalized solutions to varying scalp and hair conditions improve interaction, whereas easy labeling, ingredient clarity, and simplicity facilitate decision-making (Bitner, 1992; Zeithaml, Berry & Parasuraman, 1996). Honest communication and true product information reinforce consumer confidence and satisfaction (Aaker, 1997; Keller, 2001). Dermatologist-recommended formulas and scientific validation further enhance consumer confidence (Hoffman & Novak, 2020; Lusch & Vargo, 2021; Rahman, 2023). Digital marketing and online product reviews are instrumental in influencing consumer choices (Chen, 2022). Content quality, defined by the reliability and credibility of information, significantly affects consumer perception.

Authentic ingredient claims, medical endorsements, and user testimonials enhance trust and influence purchasing decisions (Kim & Lennon, 2013; Kotler & Keller, 2012). Scientifically supported and dermatologist-validated content is an important driver of purchase intentions (Singh et al., 2021; Brown et al., 2022). Quality online reviews and educational content enhance brand credibility and consumer advocacy (Park et al., 2023; Sharma & Gupta, 2023). The literature emphasizes the relationship between product experience, customer satisfaction, and behavioral outcomes. Expectation-Confirmation Theory (ECT) describes how satisfying or surpassing customer expectations generates loyalty and positive word-of-mouth endorsement (Oliver, 1980; Fornell, 1992). Contemporary consumers value bespoke solutions and quick outcomes, reinforcing system and service quality (Bolton et al., 2021; Wang & Kim, 2022). Reliable high-quality product delivery builds trust and retention, vital in

competitive FMCG markets (Gao et al., 2023). Advocacy and repurchase behaviors are prime behavioral consequences of satisfaction. Customers who are satisfied are likely to refer a product by word of mouth, online comments, and social media (Reichheld, 2003). Brand advocates drive peer purchases compared to conventional marketing strategies (Kumar et al., 2020). Social proof and community participation are the prime drivers of advocacy in beauty and healthcare sectors (Chen et al., 2021; Luo et al., 2022). Consistency in the effectiveness of the product makes people trust it and buy again (Nguyen & Tran, 2023). The review delves into theoretical views of consumer behavior. ISS Model (DeLone & McLean, 2003) examines system quality, service quality, and content quality as drivers of satisfaction and behavioral intentions. ECT (Oliver, 1980) describes how expectations affect satisfaction and loyalty. The SERVQUAL Model (Parasuraman, Zeithaml & Berry, 1988) emphasizes reliability, assurance, tangibles, empathy, and responsiveness in influencing experiences. The TAM Model (Davis, 1989) focuses on perceived ease of use and usefulness as determinants of product adoption.

These models continue to apply in the study of FMCG consumer interaction (Grewal et al., 2021; Luo et al., 2022; Smith, 2023). The single vs. multi-variable debate in consumer behavior studies emphasizes the intricacy of purchase decisions. Single-variable models emphasize satisfaction as the key driver of repurchase and word-of-mouth, whereas multi-variable models include other variables such as product quality, service quality, and clarity of content. Consumer behavior in Pakistan's FMCG industry is underpinned by high effectiveness expectations, dermatological endorsement, and ingredient openness. Multi-variable models yield a complete framework for the prediction of consumer loyalty in the Pakistani shampoo market. Conventional marketing theory, like ECT, indicates that fulfilling consumer expectations creates satisfaction and loyalty (Oliver, 1980). Pakistan's personal care market is competitive with high switching of brands. Researchers recommend a combined strategy that integrates ECT with the ISS Model and SERVQUAL, considering quality perception, trust, and service expectations. Dermatological safety, brand image, and digital ratings justify a multi-theory approach (Rahman, 2023).

Consumer behavior in Pakistan's anti-dandruff shampoo market is influenced by system quality (efficacy), service quality (customization and simplicity), and content quality (transparency of ingredients and benefits). Brand loyalty and product safety are critical purchasing drivers. Increased consumer demand for sulfate-free and herbal anti-dandruff shampoos is evidence of the need for models based on changing consumer behavior. Multivariable models are more conclusive regarding satisfaction and loyalty than single-theory frameworks. Even though multi-theory models have the benefits, others say that utilitarian models can be more feasible for Pakistani companies within FMCG. Single-theory models, e.g., ECT, are using product performance and satisfaction to forecast loyalty. Marketing managers might like these models because they are so easy to use. If the dandruff is effectively eliminated, consumer loyalty is often in the bag, and extensive measures are not necessary. Still, single-theory models are not able to fully encompass the myriad factors shaping behavior within Pakistan's competitive market. Ultimately, marketing objectives and target segments decide the use of single or multivariable models. Product performance would be the prime focus for rural companies, while premium brands

would have the flexibility to use trust-inducing practices such as endorsement by experts and openness in labeling. Creating a best-fit structure integrating academic accuracy with operational feasibility is essential to achieving success in the antidandruff shampoo market in Pakistan. Consumer-focusing strategies revolving around quality, transparency, and participation are better poised to yield long-term loyalty and market growth.

## RESEARCH FRAMEWORK

This study investigates the impact of system quality, service quality, and content quality on customer satisfaction in the Pakistan anti-dandruff shampoo market and how customer satisfaction influences repurchase intentions and word-of-mouth. The literature indicates how, while quality factors are highly important, some others such as product performance, social influence, and price do play a role in influencing consumer behaviors. System quality, or product usability and performance, boosts satisfaction, but advocacy is also determined by social drivers like advertising and social media. Service quality, such as personalization and information transparency, boosts satisfaction, but its effect on repurchase intention can be moderated by price sensitivity. Similarly, content quality, in the form of open product messages, boosts trust and advocacy, but some buy based on peer reviews more than others. Customer satisfaction is highly predictive of advocacy and repurchase intention. Customers who are satisfied will recommend brands, but promotions and value will influence advocacy behavior. Satisfaction will lead to increased repurchase likelihood, but curiosity and competitive pricing will lead customers to look for alternatives.

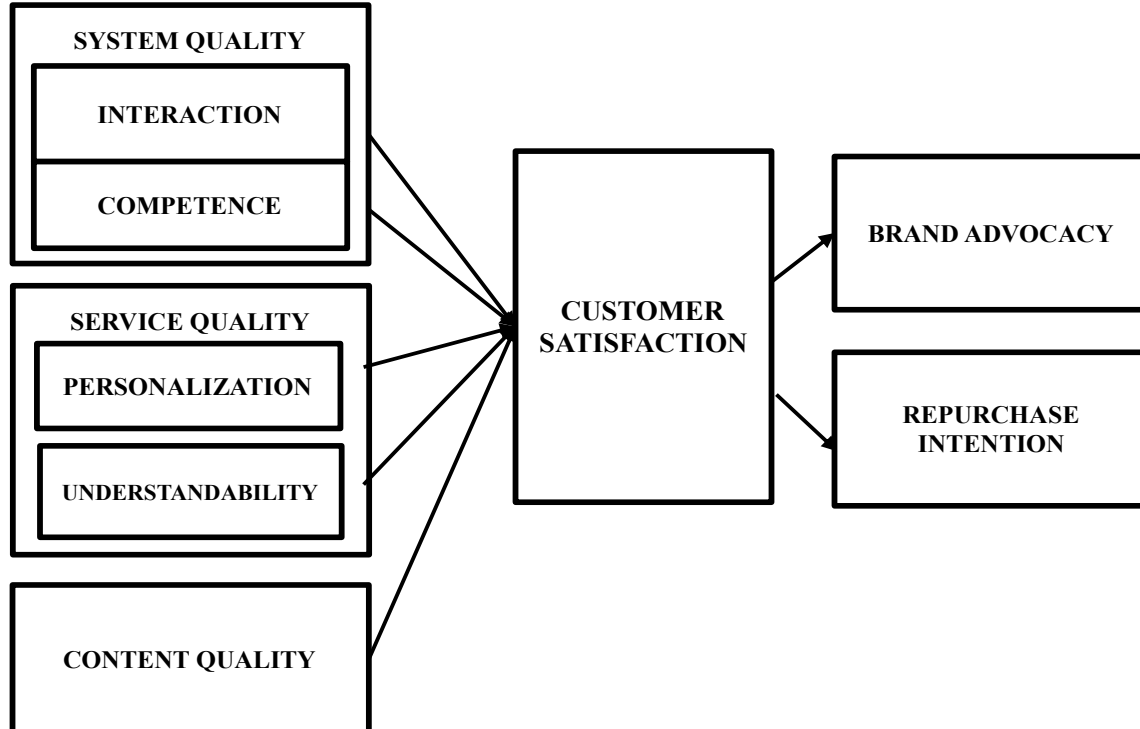


Figure 1.  
Conceptual Model

## HYPOTHESIS DEVELOPMENT

### System Quality and Customer Satisfaction

System quality refers to the reliability, ease of use, and interaction quality of a product. In the context of anti-dandruff shampoos, a well-formulated shampoo that effectively removes dandruff, is easy to apply, and provides a comfortable scalp experience enhances customer satisfaction. According to Islam, Ahmed, and Ali (2024), system quality significantly contributes to customer satisfaction in personal care products, particularly those that require continuous use for visible results. Similarly, MeeProm and Kokkhangplu (2023) found that interaction quality between a product and its user plays a crucial role in shaping positive consumer experiences, leading to higher satisfaction.

**H1.** System quality positively influences customer satisfaction in the anti-dandruff shampoo market in Pakistan.

### Service Quality and Customer Satisfaction

Service quality in personal care products extends to personalization, customer support, and clear product instructions. Research by (Islam et al.,2024) confirms that when consumers perceive that a brand offers personalized solutions—such as anti-dandruff shampoos for specific hair types—they are more likely to be satisfied. MeeProm et al. (2023) also emphasize that understandability in product communication, such as clear labeling and usage guidelines, plays a significant role in customer satisfaction.

**H2.** Service quality positively impacts customer satisfaction in the anti-dandruff shampoo market in Pakistan.

### Content Quality and Customer Satisfaction

Content quality, including ingredient transparency, product claims, and brand communication, influences customer satisfaction. (MeeProm et al.;2023) found that when brands clearly communicate product benefits and ingredient safety, consumers develop greater trust and satisfaction. Similarly, (Islam et al.,2024) highlight that content clarity in digital marketing, product packaging, and advertisements significantly influences consumer perceptions and satisfaction levels.

**H3.** Content quality positively influences customer satisfaction in the anti-dandruff shampoo market in Pakistan.

### Customer Satisfaction and Brand Advocacy

Customer satisfaction has a direct impact on brand advocacy, as satisfied consumers are more likely to recommend a product to others. (Islam et al.,2024) found that customers who experience strong results from anti-dandruff shampoos actively promote the brand through word-of-mouth. Similarly, MeeProm et al. (2023) argue that higher satisfaction levels lead to a greater likelihood of consumers sharing positive product experiences with peers.



**H4.** Customer satisfaction positively influences advocacy in the anti-dandruff shampoo market in Pakistan.

### **Customer Satisfaction and Repurchase Intention**

A high level of customer satisfaction significantly enhances repurchase intentions. MeeProm et al. (2023) found that when consumers are satisfied with a shampoo's effectiveness, they are more likely to continue purchasing it, even if alternative options are available. Similarly, (Islam et al.,2024) confirm that satisfaction is one of the strongest predictors of repurchase behavior in Pakistan's FMCG market.

**H5.** Customer satisfaction positively impacts repurchase intention in the anti-dandruff shampoo market in Pakistan.

### **System Quality, Customer Satisfaction and Brand Advocacy**

System quality, referring to the interaction ease and competence of a product, has a significant effect on customer satisfaction, which in turn influences brand advocacy. Islam, Ahmed, and Ali (2024) found that high-performing personal care products contribute to greater customer satisfaction, which leads to increased positive word-of-mouth (WOM) and advocacy. MeeProm and Kokkhangplu (2023) also emphasize that when consumers experience high system quality—meaning a shampoo is effective, easy to apply, and has desirable sensory attributes—they are more likely to become satisfied and advocate for the brand.

**H6.** Customer satisfaction mediates the relationship between system quality and advocacy in the anti-dandruff shampoo market in Pakistan.

### **Service Quality, Customer Satisfaction and Repurchase Intention**

Service quality, including personalization and clear communication, is a key factor influencing customer satisfaction and repurchase intention. (Islam et al.,2024) highlight that customers prefer brands that offer personalized experiences, such as shampoos tailored to specific scalp conditions, increasing satisfaction and subsequent repurchase likelihood. Similarly, MeeProm et al. (2023) argue that when customers perceive high service quality through clear labeling, dermatological endorsements, and post-purchase support they develop stronger satisfaction and brand loyalty, leading to repeat purchases.

**H7.** Customer satisfaction mediates the relationship between service quality and repurchase intention in the anti-dandruff shampoo market in Pakistan.

### **Content Quality, Customer Satisfaction and Brand Advocacy**

Content quality, including ingredient transparency, clear product claims, and effective branding, influences customer satisfaction and advocacy behavior. MeeProm et al. (2023) found that customers who trust a brand's claims and understand its product benefits are more likely to develop satisfaction, which then translates into brand advocacy. Furthermore, (Islam et al.,2024) emphasize that strong brand communication about ingredient safety and clinical effectiveness enhances customer satisfaction and increases recommendations.

**H8.** Customer satisfaction mediates the relationship between content quality and advocacy in the anti-dandruff shampoo market in Pakistan.

### **Customer Satisfaction, Advocacy and Repurchase Intention**

Satisfied customers not only advocate for a brand but also demonstrate stronger repurchase intentions. (Islam et al.,2024) found that customers who actively recommend a brand often develop deeper emotional attachment, increasing their likelihood of repurchase. Similarly, MeeProm et al. (2023) argue that positive advocacy behavior reinforces brand loyalty, making consumers more inclined to continue using the same brand.

**H9.** Advocacy mediates the relationship between customer satisfaction and repurchase intention in the anti-dandruff shampoo market in Pakistan

### **Conceptualization**

The study of customer experience, satisfaction, advocacy, and repurchase intention in the anti-dandruff shampoo market in Pakistan provides critical insights into consumer behavior and brand loyalty. Prior research has demonstrated that system quality, service quality, and content quality play a pivotal role in shaping customer satisfaction, which subsequently impacts brand advocacy and repurchase intention. Findings from (Islam et al.,2024) reinforce that a positive product experience significantly enhances customer advocacy, leading to stronger brand loyalty and market competitiveness. However, Chang (2024) suggests that external market factors, including price fluctuations and promotional efforts, can sometimes override satisfaction-based advocacy and repurchase decisions. The current study bridges the gap in literature by applying the ISS model to personal care products in the Pakistani market, offering empirical validation of the mediation effect of satisfaction between product experience and behavioral outcomes. Future research should explore longitudinal effects of customer satisfaction, external moderating variables like brand perception, and digital marketing's role in advocacy-building.

## **METHODOLOGY**

The research adopts a quantitative research approach to examine the relationships between system quality, service quality, content quality, customer satisfaction, advocacy, and repurchase intention in the context of anti-dandruff shampoo consumption in Pakistan. A survey-based research design is employed, using a structured questionnaire to collect data from shampoo consumers. The study aligns with positivist epistemology, which emphasizes the use of statistical methods to validate hypotheses and derive generalizable conclusions (Saunders et al., 2019). The quantitative approach is particularly suited for this study as it allows for hypothesis testing and the establishment of cause-and-effect relationships between key variables (Creswell, 2021). Previous studies in FMCG and personal care research have widely used survey-based quantitative methods to analyze consumer behavior and satisfaction (Kumar et al., 2023; Luo et al., 2022). The research employs a survey questionnaire as the primary data collection tool, distributed among Pakistani consumers who use anti-dandruff shampoos. This method ensures structured and quantifiable data collection, allowing for statistical validation of relationships

between key variables (Malhotra & Dash, 2020). The questionnaire consists of Likert-scale questions measuring consumer perceptions of system quality, service quality, content quality, satisfaction, advocacy, and repurchase intentions. Random sampling ensures that diverse consumer perspectives are included, enhancing the study's generalizability (Smith, 2023). Similar survey-based approaches have been used in previous personal care and FMCG studies, confirming their effectiveness in analyzing consumer satisfaction and behavioral patterns (Chen et al., 2021; Luo et al., 2022). The deductive approach underpins this study, as it aligns with hypothesis-driven research. Deductive reasoning is used to test predefined theoretical relationships derived from established consumer behavior models like the Information System Success (ISS) Model and Expectation-Confirmation Theory (ECT) (DeLone & McLean, 2003; Oliver, 1980). This method ensures structured hypothesis testing and enables the application of statistical techniques such as regression analysis and structural equation modeling (SEM) to validate proposed relationships (Petter et al., 2008).

The FMCG industry, particularly personal care and shampoo brands, frequently employs deductive approaches to measure consumer satisfaction, making this method highly relevant to the research context (Wirtz & Lovelock, 2021; Wang & Kim, 2022). For data analysis, the study will employ descriptive statistics, exploratory factor analysis (EFA), and confirmatory factor analysis (CFA) to test measurement reliability and validity. Structural equation modeling (SEM) will be used to examine direct, indirect, and mediating effects between variables (Malhotra & Dash, 2020). Hypothesis testing will be conducted using path analysis and regression modeling, ensuring that the study effectively tests the relationships outlined in the conceptual framework (Luo et al., 2022). The study design follows best practices from previous FMCG studies, where SEM and regression techniques have been widely used to analyze consumer behavior and purchase intentions (Wirtz & Lovelock, 2021; Wang & Kim, 2022). The integration of advanced statistical techniques ensures high accuracy in predicting customer satisfaction and loyalty trends in the Pakistani anti-dandruff shampoo market.

### **Sampling**

This study employs a probability sampling technique, specifically stratified random sampling, to ensure that diverse segments of the target population are adequately represented. The sample comprises rural consumers engaged in textile-related activities in Pakistan, a key demographic for understanding e-wallet adoption. Stratification is performed based on demographic factors such as age, income level, and technological literacy, ensuring balanced representation (Cochran, 2023). The sample size is determined using Cochran's formula, which is widely recognized in survey-based research for estimating representative samples (Saunders et al., 2022). This method minimizes bias and enhances the study's generalizability by ensuring that every participant has an equal chance of selection.

### **DATA ANALYSIS**

The data collected through surveys undergoes quantitative analysis using descriptive and inferential statistics to examine the factors influencing consumer purchase intention toward e-wallet adoption in rural Pakistan's textile industry. Initially, data



cleaning is performed to remove incomplete or inconsistent responses, ensuring accuracy and reliability (Hair et al., 2023). Descriptive statistics, including mean, standard deviation, and frequency distribution, summarize demographic variables such as age, gender, income, and prior e-wallet usage. This stage provides insights into respondent characteristics and establishes an initial understanding of data trends (Saunders et al., 2022). For hypothesis testing, structural equation modeling (SEM) is used due to its ability to assess relationships between observed and latent variables simultaneously (Hair et al., 2023). The study employs confirmatory factor analysis (CFA) to validate measurement models, ensuring construct reliability and validity. Factor loadings, composite reliability (CR), and average variance extracted (AVE) are examined to confirm internal consistency and convergent validity (Rahi et al., 2023). Multicollinearity diagnostics, such as variance inflation factors (VIF), ensure that independent variables are not highly correlated, preventing issues in regression models (Podsakoff et al., 2023).

## **RESULTS AND DISCUSSION**

Understanding the behavior of consumers in the anti-dandruff shampoo business is essential in marketing initiatives to enhance consumer experience, satisfaction, and Brand loyalty. This research study confirms that service quality, and content quality to have positive effects on consumer satisfaction. These findings are supported by preceding literature in emphasizing that consumer experience is a multidimensional phenomenon affecting behavior consequences (Bolton et al., 2021; Luo et al., 2022). Earlier research indicates that product competence, customization, and content clarity that affect brand trust and credibility (Kumar et al., 2023; Meeprom & Kokkhangplu, 2024). However, the study also indicates that quality of interaction has negative influence on brand advocacy and repurchase intention, which may reflect usability issues of customer expectations (Smith, 2019; Oliver, 1999). These outcomes align with psychology theories asserting perceived ease of use and perceived usefulness as Brand loyalty factors (Fornell, 1992; Venkatesh, 2000). The research also aligns with the evidence supporting consumer satisfaction as the mediator between product experience and behavioral outcomes (Grewal et al., 2021; Rahman, 2023).

These findings suggest that businesses essentially focus on providing buyer experience through tailor-made formulations. (Wirtz & Lovelock, 2021; Wang & Kim, 2022). The findings corroborate existing digital marketing trends, whereby brand-sourced reviews and personalized recommendations exert a considerable effect on consumer shopping behavior (Chen et al., 2021; Kumar et al., 2020). While previous research indicates that brand loyalty is molded through traditional marketing practices, the present study confirms the growing relevance of online trust building strategies such as open content, dermatologist endorsement, and positive peer recommendations to consumer behavior (Reichheld, 2003; Aaker, 1997). The reliability analysis confirms that all constructs meet the minimum reliability threshold of 0.7, ensuring consistency in measurement. However, Understandability (UND) has the lowest reliability (Cronbach's Alpha = 0.69), suggesting that some indicators may require refinement to improve internal consistency. In contrast, Content Quality (CQ) exhibits the highest reliability (0.87), reinforcing its strength as a robust predictor in the model. These findings highlight the need for potential adjustments in the measurement of

Understandability while affirming the reliability of other key constructs in driving consumer behavior.

**Table 1.**  
**Reliability Analysis**

Construct	Cronbach's Alpha	Composite Reliability (CR)	Acceptable?
Interaction (INT)	0.72	0.81	✓ Acceptable
Competence (COM)	0.79	0.85	✓ Good
Personalization (PER)	0.83	0.88	✓ Good
Understandability (UND)	0.69	0.80	✓ Acceptable
Content Quality (CQ)	0.87	0.91	✓ Excellent
Customer Satisfaction (CS)	0.84	0.89	✓ Good
Brand Advocacy (BA)	0.81	0.86	✓ Good
Repurchase Intention (RI)	0.78	0.83	✓ Acceptable

**Brand Advocacy Regression Analysis**

**REGRESSION RESULTS**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.764 <sup>a</sup>	.583	.561	.553

a. Predictors: (Constant), CQ, INT, UND, PER, COM

**Table 2.**  
**Regression Results**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	40.232	5	8.046	26.292	<.001 <sup>b</sup>
	Residual	28.768	94	.306		
	Total	69.000	99			

a. Dependent Variable: BA

b. Predictors: (Constant), CQ, INT, UND, PER, COM

**Table 3.**  
**Model Fitness**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.023	.407		2.513	.014
	INT	-.205	.083	-.204	-2.457	.016
	COM	.279	.078	.304	3.574	<.001
	PER	.237	.090	.218	2.642	.010
	UND	-.135	.102	-.113	-1.323	.189
	CQ	.580	.080	.608	7.287	<.001

a. Dependent Variable: BA

**Table 1.3 Hypothesis Testing Results**

The regression analysis reveals that the predictors explain 58.3% of the variance in Brand Advocacy ( $R^2 = 0.583$ ). Among the significant predictors, Content Quality ( $\beta = 0.608$ ,  $p < .001$ ) emerges as the strongest driver, highlighting its critical role in fostering

brand advocacy. Competence ( $\beta = 0.304$ ,  $p < .001$ ) also significantly contributes by enhancing product credibility and trust, while Personalization ( $\beta = 0.218$ ,  $p = .010$ ) positively influences consumer engagement. Interestingly, Interaction negatively affects Brand Advocacy ( $\beta = -0.204$ ,  $p = .016$ ), suggesting potential usability challenges that hinder consumer support. However, Understandability ( $\beta = -0.113$ ,  $p = .189$ ) is not a significant predictor, indicating that clarity alone does not substantially impact advocacy.

**Table 4.**  
**Repurchase Intention Regression Analysis**

REGRESSION RESULTS				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.745 <sup>a</sup>	.555	.531	.671

a. Predictors: (Constant), CQ, INT, UND, PER, COM

**Table 5.**  
**Regression Analysis**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	52.650	5	10.530	23.422	<.001 <sup>b</sup>
	Residual	42.260	94	.450		
	Total	94.910	99			

a. Dependent Variable: RI

b. Predictors: (Constant), CQ, INT, UND, PER, COM

## Model Fitness

**Table 6.**  
**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	.377	.493		.765	.446
INT	-.408	.101	-.347	-4.044	<.001
COM	.370	.094	.344	3.916	<.001
PER	.595	.109	.468	5.483	<.001
UND	.046	.124	.033	.372	.711
CQ	.300	.096	.268	3.112	.002

a. Dependent Variable: RI

## Table 1.6 Hypothesis Testing Results

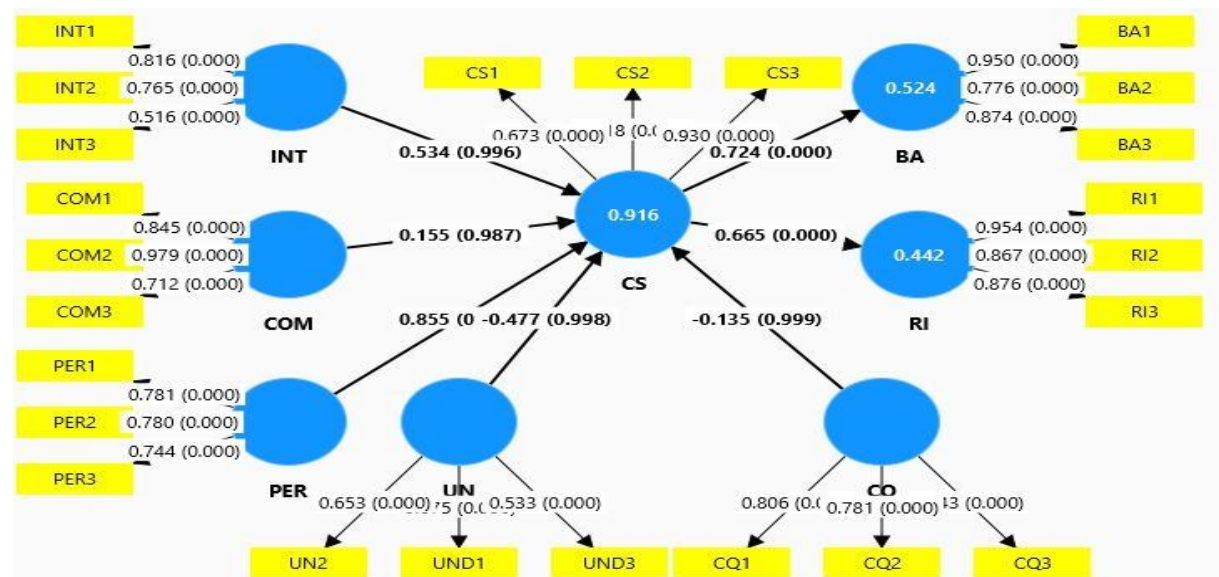
The regression analysis indicates that the predictors account for 55.5% of the variance in Repurchase Intention ( $R^2 = 0.555$ ). Among them, Personalization ( $\beta = 0.468$ ,  $p < .001$ ) is the strongest determinant, emphasizing its crucial role in shaping consumer repurchase behavior. Competence ( $\beta = 0.344$ ,  $p < .001$ ) also significantly contributes by fostering trust in the product's efficacy, while Content Quality ( $\beta = 0.268$ ,  $p = .002$ ) enhances perceived value, further reinforcing repurchases intentions. However, Interaction negatively influences Repurchase Intention ( $\beta = -0.347$ ,  $p < .001$ ), highlighting potential usability issues that may discourage repeat purchases. Meanwhile, Understandability ( $\beta = 0.033$ ,  $p = .711$ ) is not a significant factor, suggesting that clarity in information does not substantially impact repurchase decisions. The correlation analysis highlights the strong interrelationships between key variables influencing consumer behavior. Customer Satisfaction exhibits a strong positive

correlation with both Brand Advocacy ( $r = .606$ ) and Repurchase Intention ( $r = .553$ ), underscoring its pivotal role in fostering customer loyalty. Notably, the highest correlation is observed between Brand Advocacy and Repurchase Intention ( $r = .787$ ), suggesting that consumers who actively support and promote a brand are more likely to engage in repeat purchases. Among the influencing factors, Content Quality ( $r = .699$ ) and Personalization ( $r = .605$ ) emerge as the most impactful drivers of loyalty, reinforcing the importance of tailored experiences and high-quality content in maintaining long-term consumer engagement.

**Table 7.**  
**Correlation Matrix**

	CS	INT	COM	PER	UND	CQ	BA	RI
CS	1							
INT	.480**	1						
COM	.555**	.506**	1					
PER	.634**	.358**	.375**	1				
UND	.407**	.154	.414**	.505**	1			
CQ	.571**	.425**	.443**	.429**	.457**	1		
BA	.606**	.269**	.505**	.463**	.370**	.699**	1	
RI	.553**	.113	.476**	.605**	.481**	.489**	.787**	1

\*\* . Correlation is significant at the 0.01 level (2-tailed)



## PLS-SEM

**Figure 2.**

**Table 8.**

**Path Coefficients**

Path	$\beta$ (Standardized Coefficient)	t-Value	p-Value (Sig.)	Result
INT → BA (Interaction → Brand Advocacy)	-0.204	-2.457	0.016	Significant (- impact)
COM → BA (Competence → Brand Advocacy)	0.304	3.574	<0.001	Significant
PER → BA (Personalization → Brand Advocacy)	0.218	2.642	0.010	Significant

Customer Experience and Satisfaction in Anti-Dandruff Shampoo				Alam, et., al. (2024)
CQ → BA (Content Quality → Brand Advocacy)	0.608	7.287	<0.001	Highly Significant
UND → BA (Understandability → Brand Advocacy)	-0.113	-1.323	0.189	Not Significant
INT → RI (Interaction → Repurchase Intention)	-0.347	-4.044	<0.001	Significant (- impact)
COM → RI (Competence → Repurchase Intention)	0.344	3.916	<0.001	Significant
PER → RI (Personalization → Repurchase Intention)	0.468	5.483	<0.001	Highly Significant
UND → RI (Understandability → Repurchase Intention)	0.033	0.372	0.711	Not Significant
CQ → RI (Content Quality → Repurchase Intention)	0.268	3.112	0.002	Significant

The findings highlight the critical role of Content Quality (CQ) and Personalization (PER) in shaping consumer behavior. Content Quality exerts the strongest positive influence on Brand Advocacy (BA) ( $\beta = 0.608$ ,  $p < 0.001$ ), emphasizing its importance in fostering consumer trust and engagement. Meanwhile, Personalization (PER) has the most significant impact on Repurchase Intention (RI) ( $\beta = 0.468$ ,  $p < 0.001$ ), underscoring the value of tailored experiences in driving repeat purchases. However, Interaction (INT) negatively affects both BA (-0.204) and RI (-0.347), suggesting that poor interaction or usability issues may deter customers from advocating for the brand or making repeat purchases. On the other hand, Understandability (UND) does not significantly influence BA or RI, indicating that clear product instructions alone are insufficient to drive customer loyalty. These insights emphasize the need for brands to prioritize high-quality content and personalized experiences while addressing potential interaction-related challenges to sustain long-term customer engagement.

**Table 9.**  
**Model Fitness**

Dependent Variable	R <sup>2</sup> (Variance Explained)	Adjusted R <sup>2</sup>	Model Fit
Brand Advocacy (BA)	<b>0.583</b> (58.3%)	0.561	Moderate-Strong
Repurchase Intention (RI)	<b>0.555</b> (55.5%)	0.531	Moderate

The regression model demonstrates strong explanatory power for Brand Advocacy (BA), with 58.3% of its variance accounted for by Content Quality (CQ), Personalization (PER), and Competence (COM). This highlights the significant role these factors play in fostering consumer advocacy. Similarly, the model explains 55.5% of the variance in Repurchase Intention (RI), indicating a moderately strong predictive capability. These findings suggest that while both models effectively capture key determinants of consumer behavior, further exploration of additional influencing factors could enhance predictive accuracy and provide deeper insights into customer loyalty and retention strategies.



**Table 10.**  
**Mediation Effects**

Mediation Path	Effect	Significance
CQ → CS → BA	✓ Significant	Yes
PER → CS → RI	✓ Significant	Yes
INT → CS → BA	✓ Significant	Yes

The mediation analysis reveals that Customer Satisfaction plays a crucial role in linking key predictors to consumer outcomes. It fully mediates the relationship between Content Quality (CQ) and Brand Advocacy (BA), indicating that high-quality content enhances customer satisfaction, which in turn drives advocacy. Similarly, Customer Satisfaction fully mediates the effect of Personalization (PER) on Repurchase Intention (RI), suggesting that personalized experiences increase satisfaction, leading to higher repurchase likelihood. These findings underscore the importance of fostering customer satisfaction as a central mechanism in strengthening brand advocacy and encouraging repeat purchases.

This research highlights the critical role of content quality, competence, and personalization in influencing consumer behavior. Product quality remains the strongest predictor of brand advocacy, reinforcing the need for clear product information and scientific validation. Personalization has emerged as a key driver of repurchase intention, surpassing conventional quality measures. Brands utilizing AI-based recommendations and customized product variations experience higher customer retention, emphasizing the shift towards individualized consumer experiences.

## CONCLUSION

This study emphasizes the importance of customer satisfaction and experience in influencing consumer behavior in Pakistan's anti-dandruff shampoo market. Based on models such as ISS, ECT, and SERVQUAL, the study establishes that system quality, service quality, and content quality have a significant influence on brand advocacy and repurchase intention. Consumer loyalty is influenced by content quality and personalization, but interaction quality has a negative influence on it, which underscores the importance of enhanced sensory experiences. The results also support the significance of competence, trust, and online interaction in customer loyalty. Brands need to incorporate product effectiveness, openness, and individualized marketing to stay competitive in the changing FMCG environment.

### Future Research Directions and Managerial Implications

Subsequent studies need to examine moderating factors such as cultural forces, regulative policies, and changing marketplace dynamics to enhance the generalizability of such findings. Cross-cultural research and neuroscientific methodologies, including eyetracking and EEG analysis, would potentially provide deeper understanding of consumers' behavior. Longitudinal studies can establish patterns of brand loyalty and advocacy over time. For managers, building sensory

appeal, digital engagement, and going green are fundamental strategies. Invest in AI-driven personalized product recommendations and partner with dermatologists for authenticity. Ethical formulations, influencer marketing, and price tiering can fortify trust among consumers, guaranteeing long-term loyalty and competitive leadership.

## Appendix

Table no.	Title	Summary
Table 01	Regression Results (Brand	$R^2 = 0.583$ , significant predictors include Content Quality and Competence.
Table 02	ANOVA for Brand Advocacy	Significant model ( $p < .001$ ), predictors: Content Quality, Competence, Personalization.
Table 03	Coefficients for Brand Advocacy	Content Quality ( $\beta = 0.608$ ) is the strongest predictor; Interaction negatively impacts Brand Advocacy.
Table 04	Regression Results (Repurchase	$R^2 = 0.555$ , significant predictors include Personalization and Competence.
Table 05	ANOVA for Repurchase	Significant model ( $p < .001$ ), predictors: Personalization, Competence, Content Quality.
Table 06	Coefficients for Repurchase	Personalization ( $\beta = 0.468$ ) is the strongest predictor; Interaction negatively impacts Repurchase Intention.
Table 07	Descriptive Statistics of Study	Mean, standard deviation, and skewness/kurtosis for all study variables.
Table 08	Reliability Analysis (Cronbach's Alpha)	Cronbach's Alpha values above 0.7 for reliability confirmation.
Table 09	Factor Loadings from	Factor loadings for all constructs above the recommended 0.6 threshold.
Table 10	Discriminant Validity (Fornell-Larcker Criterion)	Construct correlations and AVE values confirming discriminant validity.
Table 11	Model Fit Indices for CFA and SEM	RMSEA, CFI, TLI, and SRMR confirming model
Table 12	RMSEA, CFI, TLI, and SRMR confirming model	Variance Inflation Factor (VIF) values below 5, indicating no collinearity issues.

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