



Social Media Addiction: The usage of Social Media Platforms and its Relationship with Self-Esteem and Depression

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Abstract

Research related to E-WoM on customer engagement and customer loyalty is common. However, there is a significant lack of research related to E-WoM related with Islamic Banks. Similarly, there is a substantial lacking of research that is based upon serial mediation analysis in order to predict the effect of E-WoM on customer satisfaction and customer loyalty. Hence, this study is one of the premier studies that highlight the effect of E-WoM on customer loyalty. Especially in the category of Islamic Banking this study is highly beneficial and has multi-level significance due to its ability to contribute in the academic and pragmatic domains. Hence, to compile this study the data have been collected through convenience sampling from the Generation Z customers of Islamic Banks operating in Karachi. The sample size of the study is 384, which is treated as the universal sample size. Analysis of the data has been conducted through SMART-PLS, which highlighted that the major aspects associated with the significance of the study are approved. Thus, this study may further be used by researchers, academics, and policy-makers for improvement in understanding, working, and relationship optimization.

Keywords: *Islamic Banking, Marketing, Artificial Intelligence (AI), Social Marketing, Social Issues, and Social Welfare*

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1. INTRODUCTION

Building customer relationships and fostering a level of customer loyalty are always included in the list of main objectives set by any business. Hence, the use of social media marketing is found to be significantly important in building customer relationships and increasing customer loyalty. Similar is the case of the banking industry, where banks are trying to increase their presence on social media like Facebook and Instagram, etc, in order to optimize the result of the marketing efforts and also to reduce the cost of customer acquisition and retention (Sarassina, 2023). However, before diving into the depths of social media marketing and its impact, there is a definite need to quote Ebrahim (2020), who mentioned five major activities of social media marketing i.e., entertainment, interaction, word of mouth communications, customization, and trendiness. However, most of the studies related with the use of social media and word of mouth promotions related with social media are either associated with the tourism industry or the luxury industry. 2020).

Islamic Banking follows Sharia principles and also offers a range of banking products (Ismail et al., 2024). Therefore, Islamic financial products are gaining significant popularity in the minds of Muslims due to the increase in the level of awareness related to the prohibition of debt-based financing. Hence, equity-based financing is gaining popularity due to its association with ethical practices and risk-minimization tools offered by Islamic Banking (Ismail et al., 2015). There are multiple studies that highlight the use and importance of social media marketing for banking and the Islamic Banking Industry (Apriantoro & Yuniarti, 2025). Similar is the case of Indonesia, where digital marketing was believed to be one of the most important tools to attract youth towards the Islamic Banking products. Similar is the case of Bangladesh, where the preference of the middle-income group was influenced by engagement activities rather than only religious considerations (Ismail et al., 2024).

Therefore, it is optimal to believe that Islamic Banks have the liberty to use social media as the vehicle to reach a mass audience at minimal cost. Moreover, social media platforms are also used to portray a strong brand image to influence consumer buying behavior in a positive manner (Nemati et al., 2022). In recent times, E-WoM through Facebook and Instagram etc, became so popular, and customers tends to rely more on E-WoM as compared to other activities of social media activities. This postulate seems to be true as research revealed that E-WoM is based upon perceived value and service quality (Luthfiyah & Wulandari, 2024).

1.1 Statement of Problem

E-WoM through social media has the tendency to initiate and influence the communication between customers and banks (Shafiq et al., 2024). Similarly, E-WoM is also found to be one of the most important predictors of customer loyalty,

especially in the banking sector, where trust in banking services is the key (Wei et al., 2021). However, according to Rumefi (2021), it is not mandatory that E-WoM always produces a positive impact on customers' loyalty. Hence, through upcoming studies, it is optimal to explore the relationship of different dimensions of social media marketing, e.g., informativeness, E-WoM & entertainment, etc, over social media behavior and loyalty (Sarassina, 2023). However, the focus of future research must be towards a specific population, i.e., Generation Z, etc (Luthfiyah & Wulandari, 2024). Hence, this study is conducted specifically in order to check the impact of E-WoM on customer loyalty of Generation-Z through serial and parallel mediation in order to counter and recheck the points mentioned by Rumefi (2021) and Luthfiyah and Wulandari (2024).

1.2 Significance of the Study

This study is one of the pervasive in nature, as it is not only a blend of multiple research studies but also because of its unique model that will motivate students, academicians, and researchers to conduct more studies to understand the dynamics of social media marketing by Islamic Banks. Moreover, this study will also be beneficial for the intrapreneurs working in marketing and digital marketing departments of Islamic Banks to create customer satisfaction through E-WoM and its linkage with customer satisfaction. Moreover, this study will also be beneficial for policy-making as it aids effective policy development for easy and efficient use of social media marketing.

1.3 Theoretical Framework

This study is based on the use of social E-WoM through social media on customer satisfaction and customer loyalty. Hence, the theory that we may initially associate with this study is the EBM model presented by Engel et al (1990), and according to this model, consumer behavior is divided into four sets, i.e., information input, information processing, and stages of decision making. However, the use of online media not only brings time and cost of processing the information but will also include perceived risk, product knowledge, and trustworthiness related to the product purchase (Jepsen, 2007 & Nemati et al., 2022).

1.4 Model of the Study

Sarassina, (2023) indicated that social Media Marketing is used as the predictor variable to affect trust, satisfaction, and commitment as the parallel mediators to assess the impact of Customer Loyalty in Islamic Banks of Malaysia. However, according to one of the major studies, the dynamics of social media behavior includes trust, love, and engagement (Yasin et al., 2025). However, loyalty is considered as the main outcome variable for assessing the impact of social media

marketing activities (Rianita & Fasa, 2025). Hence, linking the research model of this study with the research gap highlighted by Sarassina (2023), this study uses E-WoM as the main predictor variable and loyalty as the major outcome variable, while customers' trust, satisfaction, and commitment are the parallel mediating variables. However, considering the work of Qurrata et al (2021), it has been considered that social media initially affect customer's satisfaction, which may cause customer's loyalty. Thus, researcher replaced the customer satisfaction with brand love as the parallel mediating variable. This postulate is supported by Sari and Azhar, (2025) that E-WoM and Brand Love may work better together to cause customer engagement and loyalty.

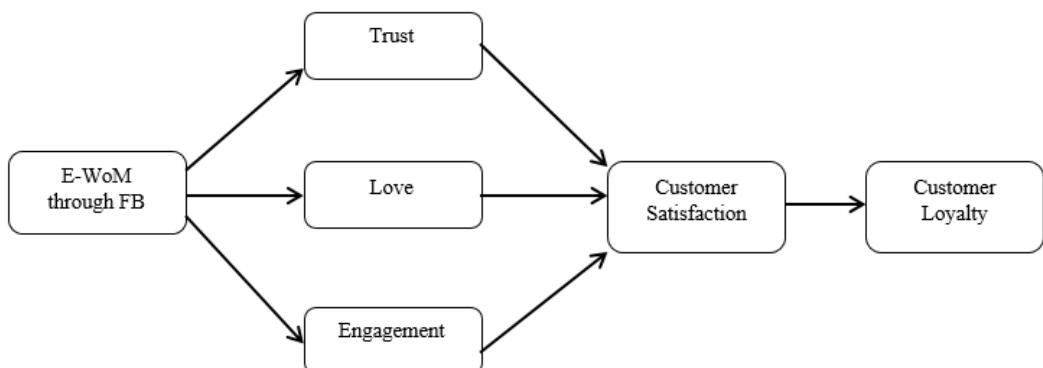


Figure 1: Research Model

Moreover, E-WoM also creates a direct impact over customer engagement, and customer engagement may also acts as a potent mediator between E-WoM and purchase intention (Setiyawami et al., 2025). Hence, in line with these points, the model of this study also includes serial mediation of social media behavior (i.e., trust, love, and engagement) will be associated to create an impact over customer's loyalty.

2. LITERATURE REVIEW

According to the definition provided by research, E-WoM is an example of an informal communication process activated by consumers. This form of communication is based upon consumer experience, product use, and the quality of products associated with a particular brand. Hence, some consumers will treat E-WoM as a referral that has the tendency to create exhortation by summing up all the experiences shared by others. Therefore, E-WoM causes a significant impact on the purchase decision, though the impact of E-WoM through interactive social media channels has a more rigorous impact on the consumer purchase decision (Wei et al., 2021).

2.1 E-WoM and Customer Trust

Social Media Marketing activities are used to provide value to the company's customers through information sharing, interaction, and personalization etc. Hence, customer trust in the firm's activities and offerings will be optimized (Sarassina, 2023). Similar points are posited by Anggraeni et al (2019) and Ebrahim (2020) that the use of social media marketing has the tendency to increase customer trust. According to research, when customer accepts the E-WoM, then they will not spend their time or energy over other resources (Yan et al., 2016). A similar point is also valid for Indonesian Islamic Banks, for whom E-WoM is found to be a valid source for building customer trust and preference (Anggraeni et al., 2019).

H_{1A}: There is a relationship between E-WoM generated on Facebook marketing of Islamic Banks and Customer's Trust.

2.2 E-WoM and Customer Love

Studies related with E-WoM and its impact over the preference of Islamic Banks indicated that recommendation from social network are perceived reliable tool to influence the decision and buying behavior of others (Luthfiyah et al., 2024). Tanamal et al (2022) mentioned that brand love has the tendency to create repeat purchase. The postulate is true as brand trust originates through trust in the religious compliance, ethical standards, and brand values.

Hence, consumers will be emotionally attached to those brands that address customers' religious, spiritual, and personal values, which ultimately results in an increase in loyalty and repeat purchase (Istiqomah & Setyawan, 2025).

H_{2A}: There is a relationship between E-WoM generated on Facebook marketing of Islamic Banks and Customer's Love.

2.3 E-WoM and Customer Engagement

Studies define customer satisfaction as behavioral manifestation of expression towards the brand. Hence, it has the ability to affect the brand in more holistic manner rather than purchase (Van Doorn et al., 2010). Customer Engagement is one of the most important elements in recommending particular brand or product. Therefore, there is no question regarding the significance of customer's engagement on social media platforms (Vinerean & Opreana, 2021).

H_{3A}: There is a relationship between E-WoM generated on Facebook marketing of Islamic Banks and Customer's Engagement.

2.4 E-WoM, Customer's Trust and Customer Satisfaction

Customers' Trust is found to be an efficient mediator in the telecom industry. However, the assessment of its mediation is still required for other industries like

Banking etc. According to research, the importance of trust for the relationship of E-WoM is substantial, as without having trust in the E-WoM promotions, there is no sense of customer loyalty (Sarassina, 2023).

H_{4A}: Customer's Trust mediates the relationship between E-WoM and Customer Satisfaction.

2.5 E-WoM, Brand Love and Customer Satisfaction

E-WoM is one of the significant predictors of customer satisfaction. According to research credibility of the information in this regard is the key to influence customer satisfaction (Joudeh et al., 2024). These postulates are also supported by Yasin et al (2025), which mention that the relationship of E-WoM, Brand Love, and Customer Satisfaction has significant importance in the domain of social media marketing. However, customers' social media engagement is very important for shaping this relationship in an adequate manner.

H_{5A}: Brand Love mediates the relationship between E-WoM and Customer Satisfaction.

2.6 E-WoM, Customer Engagement and Customer Satisfaction

The relationship between E-WoM and customer satisfaction is multifaceted, as E-WoM has the tendency to directly affect customer satisfaction. However, the direct link between E-WoM and customer satisfaction is not discussed as compared to the indirect link of E-WoM over customer satisfaction that has been shaped through customer satisfaction (Srivastava & Sivaramakrishnan, 2021).

Joudeh et al. (2024) also supported this point by mentioning that customer satisfaction acts as a mediator between E-WoM and purchasing decisions, which also elaborates on the link between E-WoM and customer satisfaction and loyalty.

H_{6A}: Customer Engagement mediates the relationship between E-WoM and Customer Satisfaction.

2.7 Customer Trust, Customer Satisfaction and Customer Loyalty

Customer Trust is found to be positively associated with customers' loyalty. According to research, the relationship between customer trust and customer loyalty may take a direct or indirect path through customer satisfaction (Fitriani et al., 2024). However, the indirect association has also been highlighted by the latest studies, i.e., Sya'bana and Sugiharto (2024) and Susanti et al (2018). Similar is the case in the category of E-Commerce, where service quality increases the level of customer satisfaction that ultimately leads to an increase in the level of customer loyalty (Susanti et al., 2018).

H_{7A}: Customer Satisfaction mediates the relationship between Customer's Trust and Customer Loyalty.

2.8 Brand Love, Customer Satisfaction and Customer Loyalty

Tijjang et al (2023) indicated that brand love is developed due to the emotional connection with the brand, and brand love has a definite association with customer loyalty that remains persistent even with the fluctuation in customer's satisfaction. This direct and indirect relationship of brand love with customer loyalty is clear for the retail fashion industry (Ferreira et al., 2019). Similar relationships are also valid for air line services (Çakiroğlu et al., 2020), where emotional attachment with the brand is mandatory even for the satisfied customer for fostering their level of loyalty (Wardani & Wiyadi, 2023).

H_{8A}: Customer Satisfaction mediates the relationship between Brand Love and Customer Loyalty.

2.9 Customer Engagement, Customer Satisfaction and Customer Loyalty

Reitz (2012) studied online consumer engagement and the behavioral process of consumers in comprehending features of companies on social networking sites and how it leads them to loyalty and repurchase of products. Latest studies also affirm these points that customer satisfaction is directly associated with customer loyalty (Fauziyah et al., 2023), but customer satisfaction may not always result in customer loyalty. Hence, it is also required to believe that other factors, e.g., customer trust, etc, also have the tendency to shape customer loyalty (Hernando & Sugiyanto, 2024).

H_{9A}: Customer Satisfaction mediates the relationship between Customer's Engagement and Customer Loyalty.

2.10 E-WoM, Customer Trust, Customer Satisfaction and Customer Loyalty

Nawaztuti and Irmawati, (2023) indicated that customer loyalty bridges e-WoM with customer satisfaction. However, the study is more inclined towards the effect of positive e-WoM and highlighted that a satisfied customer is more engaged with positive e-WoM. Similar points are also indicated by Velnadar et al (2024) that trust in firm offerings and information provided is the key to develop a strong association between e-WoM and customer satisfaction that would finally result in the increase of customer loyalty.

H_{10A}: There is a serial mediation of customer's trust and customer satisfaction between E-WoM and Customer Loyalty.

2.11 E-WoM, Brand Love, Customer Satisfaction and Customer Loyalty

Positive E-WoM is beneficial to foster brand love (Velnadar et al., 2024). Wayan Suartina et al (2011) emphasized the mediating role of brand love that is required to connect marketing strategies with customer loyalty. Moreover, positive e-WoM also resulted in an increase in emotional attachment that is required for customer

advocacy and repeat purchase. The impact of positive e-WoM is found to be significant in the hospitality sector, where the positive e-WoM is found to be positively correlated with brand reputation and loyalty (Salvi, 2015).

H_{11A}: There is a serial mediation of brand love and customer satisfaction between E-WoM and Customer Loyalty.

2.12 E-WoM, Customer Engagement, Customer Satisfaction and Customer Loyalty

Customer Satisfaction is one of the most common mediators between e-WoM and customer loyalty (Nawastuti & Irmawati, 2023). According to research, customer experience is the premier factor to influence customer satisfaction and customer satisfaction (Jahroh & Saptono, 2023). Similar points are found to be valid for the mediating role of customer satisfaction for a TikTok shop where customer loyalty has been indirectly influenced by e-WoM, and customer satisfaction plays a mediating role of mediator (Nawastuti & Irmawati, 2023).

H_{12A}: There is a serial mediation of customer engagement and customer satisfaction between E-WoM and Customer Loyalty.

2.13 Customer Satisfaction and Customer Loyalty

The dawn of E-Commerce fostered the importance of customer satisfaction. Customer Satisfaction is one of the most important and strong predictors of customer loyalty. Through effective use of customer satisfaction, companies may build online communities through which customers can compare themselves with other group members, which ultimately increases the level of loyalty. Similar is the case of Islamic Banks, where satisfaction with the core service optimizes the chances of repurchase (Qurrata et al., 2021).

H_{13A}: There is a relationship between customer satisfaction and customer loyalty.

3. METHODOLOGY

Research Methodology is the part of the research work that is used to highlight the formulation of the study. According to research, in order to compile research through the scientific method, there is a need to prefer some methods, means, and elements over other. Research methodology is used to highlight the preferred methods, means, and elements in addition to the reason for their preference (Kothari, 2004). In recent times, research methodology is required to be divided into two different parts, i.e., Research Design and Sampling Design, as this division will be significantly helpful in the understanding of research (Sekaran & Bougie, 2016).

3.1 Research Design

Amini and Mohammad Khan (2016) indicated that there is a need to conduct more rigorous studies on E-WoM in order to develop sound methodologies and scales for measuring the antecedents and determinants of E-WoM. Hence, this study has been conducted purposively to understand the impact of E-WoM through Facebook on customers' loyalty. However, the formulation of the study is backed by multiple contextual gaps and knowledge gaps that are used to increase knowledge and understanding for future researchers. Thus, the philosophy of this research is epistemology, which is supposed to be a philosophy of knowledge (Saunders et al., 2007). Similar points are also mentioned by Shaaban et al (2021), who conducted a study on customer advocacy of personal luxury brands. However, unlike De Silva and Wijesundara (2023), this study uses a post-positivist approach introduced by Saudners et al (2015) and can be used to assess complex models and research designs (Panhwar et al., 2017).

In line with the points and parameters associated with the research model and design, this study is correlational in nature, that is, conducted in a non-contrived study setting with moderate researcher interference and cross-sectional time horizon (Sekaran & Bougie, 2016). The approach of this research is deductive, methodological choices are mono-method, and the research strategy is survey (Saunders et al., 2015).

3.2 Sampling Design

Yan et al (2016) collected the sample from 289 respondents through convenience sampling. The study of Ebrahim (2020) indicated that a sample of 200 is appropriate for statistical testing through SMART-PLS, but in order to increase the rigor, the sample size of the study was extended up to 289, that were collected through convenience sampling. However, one of the latest studies, Sarassina (2023), was conducted through the analysis pattern popular for assessment through SMART-PLS, on the base of which at least five responses must be taken for every indicator used in the research model. The total sample size of the study was 138 responses collected through convenience sampling. Hence, in line with the indications of Sarassina (2023) the minimum sample size for this study would be $5*24 = 120$. However, in order to match with rigor and points of Ebrahim (2020) and Yan et al (2016), the sample size for this study has been extended up to 300, which were collected through convenience sampling. Hence, 350 questionnaires were circulated in the Generation-Z customers of Islamic Banks, out of which 50 questionnaire were answered inappropriately. Thus, the response rate for this study is 86%. Out of 300 respondents, 175 (58.33%) were males, and 125 (41.66%) were females.

3.3 Research Instrument

The research instrument used in this study is a closed-ended questionnaire that was based upon a five-point Likert scale. A similar instrument was used by Ebrahim (2020) to gauge the impact of social media marketing activities on customer loyalty. Hence, the elements used in this study for the computation of social media marketing activities, brand love, customer loyalty, etc, are also used in the questionnaire of this study. However, the questionnaire used in this study is not adopted from a single study, and in order to make the questionnaire error-free and applicative elements from Sarassina (2023) and Yan et al (2016) are used.

4. RESULTS

Structural Equation Modeling (SEM) is the most preferred technique that is used by multiple studies related to E-WoM and its effect on customers. Especially important are those studies that are supplemented with higher order models, e.g., Ebrahim (2019), Sarassina (2023), and Yan et al (2016) etc.

SEM is one of the most rigorous and efficient tools that is used by several researchers, and it is also perceived as the better tool in comparison to the regression (Gunzeler, 2013). However, with SMART-PLS use of SEM would become more effective and preferred by statisticians for thorough quantitative analysis through primary data (Wong, 2017). Functioning of SMART-PLS is associated with two models, i.e., outer (structural) model and inner (measurement) model (Ab Haimd et al., 2017). Outer Model is the way to assess the relationship of latent variable with its observed indicators, while the inner model is used to reflect the relationship between the variables of interest (Wong, 2013).

Table 4.1: Construct Reliability and Convergent Validity

Variable	Outer Loading	Cronbach's Alpha	Goldstein rho	Composite Reliability	AVE
E-WoM Through FB	0.866	0.912	0.914	0.938	0.792
	0.931				
	0.895				
	0.867				
Trust	0.866	0.858	0.871	0.903	0.701
	0.867				
	0.834				
	0.779				
Love	0.878	0.931	0.940	0.951	0.828
	0.908				
	0.931				
	0.923				
Engagement	0.817	0.889	0.903	0.924	0.752
	0.928				

	0.915				
	0.802				
Customer Satisfaction	0.852	0.855	0.874	0.902	0.699
	0.866				
	0.884				
	0.773				
Customer Loyalty	0.867	0.883	0.901	0.921	0.745
	0.936				
	0.910				
	0.725				

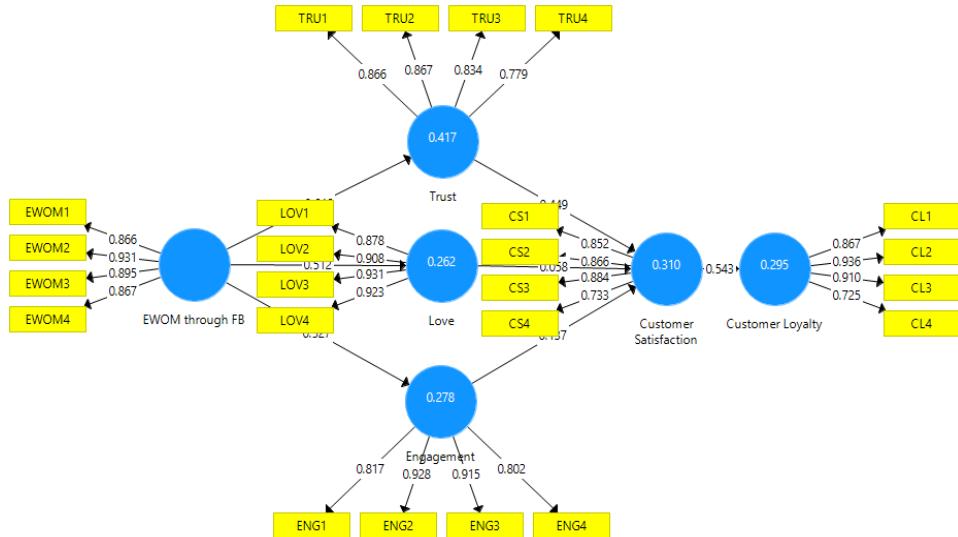


Figure 4.1: Structural Model

Table 4.1 is indicating construct reliability, composite reliability, and convergent validity in order to highlight the construct reliability and internal consistency. The table is a part of descriptive statistical measures, e.g., construct reliability (Outer Loading, Cornbach's alpha, and Goldstein rho) and Convergent Validity (Outer Loading, Composite Reliability, and Average Variance Extracted). The range of values for outer loading ranges from 0 to 1, although preference is given to values that are greater than 0.70 and close to 1 (Ab Hamid et al., 2013). Hence, in line with Afthanorhan (2013), it is optimal to delete indicators that have outer loading in between 0.60 and 0.70; perhaps the deletion aids positively to the AVE. The same criteria are also valid for the evaluation of Cronbach's alpha and Goldstein rho, and the preferred values for AVE are 0.50 or above. With these high values, AVE does not need any other indicator like outer loading and composite reliability (Ab Hamid et al., 2017 & Adeleke et al., 2015). Therefore, it is optimal to believe that Table 4.1 is sufficient for fulfilling construct reliability and convergent validity.

Table 4.2: Discriminant Validity through HTMT

	Customer Loyalty	Customer Satisfaction	EWOM through FB	Engagement	Love	Trust
Customer Loyalty						
Customer Satisfaction	0.618					
EWOM through FB	0.813	0.379				
Engagement	0.616	0.397	0.576			
Love	0.453	0.407	0.544	0.702		
Trust	0.532	0.595	0.730	0.457	0.561	

Table 4.2 is the reflection of discriminant validity through the Heterotrait-Monotrait (HTMT) ratio. According to research, HTMT is perceived as the most important tool to assess discriminant validity (Malik et al., 2021). Similar are the indications of Hair et al (2019) about the significance of discriminant validity obtained through HTMT. However, to ensure discriminant validity, there is a need for a benchmark value, and above these values, no other value can reflect discriminant validity. Therefore, considering the tool and its use, most of the studies highlight that 0.85 is the maximum value that can be achieved at the junction of two variables, and above this value, no other value can assure discriminant validity (Shaffer et al., 2016).

Table 4.3: Predicative Accuracy (Coefficient of Determination)

	R Square	R Square Adjusted
Customer Loyalty	0.585	0.584
Customer Satisfaction	0.560	0.556
Engagement	0.618	0.612
Love	0.607	0.604
Trust	0.601	0.592

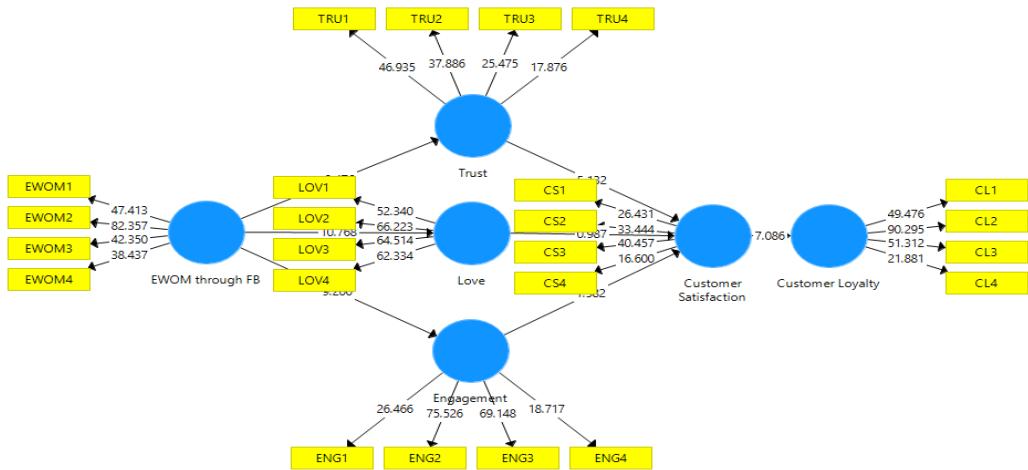


Figure 4.2: Measurement Model

Table 4.4: Path Coefficient

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Customer Satisfaction -> Customer Loyalty	0.543	0.546	0.077	7.086	0.000
EWOM through FB -> Engagement	0.527	0.527	0.057	9.200	0.000
EWOM through FB -> Love	0.512	0.514	0.048	10.768	0.000
EWOM through FB -> Trust	0.646	0.650	0.068	9.476	0.000
Engagement -> Customer Satisfaction	0.137	0.139	0.087	1.582	0.114
Love -> Customer Satisfaction	0.058	0.060	0.058	0.987	0.324
Trust -> Customer Satisfaction	0.449	0.447	0.087	5.132	0.000

Table 4.3 is used to indicate predictive accuracy that is based on the change in the dependent variable based on 1% change in the independent variable. It is also termed as the coefficient of determination, and it's a very important tool related to

the inferential statistical model of the research (Hahn, 1973). Research also provided the benchmark values to assess the impact that has been created by the 1% change of the independent variables, i.e., 0.25-0.49 (minimal); 0.50-0.74 (moderate) & 0.75-1.00 (substantial) change in the dependent variable (Sansui et al., 2022). Here, according to Table 4.3, there is no value of R-Square that is less than 0.560, but there is also no value that is equal to or greater than 0.75. Hence, it is optimal to declare that all the dependent variables are moderately affected by the change in the independent variable(s).

Table 4.4 is one of the most important parts of the inferential statistical part of the research model. The purpose of the path coefficient is to highlight the relationship among the variables of interest. The criteria to evaluate the associations are provided by Hair et al (2017) and Hair et al (2019) in the form of t-statistical values and p-values. However, there are two criteria, and both of the criteria are required to be fulfilled to satisfy the relationship (Silaparasetti et al., 2017). Hence, in light of the results highlighted by Table 4.4, it has been observed that customer engagement and love do not have any association with customer satisfaction. However, other than these two, all the other relationships are found to be true. Hence, it is appropriate to reject H1O, H2O, H3O & H13O.

Table 4.5: Specific Indirect Effect (Mediation Analysis)

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Engagement -> Customer Satisfaction -> Customer Loyalty	0.075	0.079	0.037	2.207	0.001
EWOM through FB -> Engagement -> Customer Satisfaction -> Customer Loyalty	0.049	0.150	0.024	2.041	0.002
Love -> Customer Satisfaction -> Customer Loyalty	0.031	0.033	0.033	0.946	0.345
EWOM through FB -> Love -> Customer Satisfaction -> Customer Loyalty	0.016	0.017	0.018	0.904	0.367
Trust -> Customer Satisfaction -> Customer Loyalty	0.244	0.241	0.045	5.470	0.000
EWOM through FB -> Trust -> Customer Satisfaction -> Customer Loyalty	0.158	0.158	0.039	4.082	0.000
EWOM through FB -> Engagement -> Customer Satisfaction	0.072	0.154	0.036	2.000	0.005
EWOM through FB -> Love -> Customer Satisfaction	0.029	0.031	0.031	0.951	0.342

EWOM through FB -> Trust -> Customer Satisfaction	0.290	0.290	0.063	4.609	0.000
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Table 4.6: Total Effects

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Customer Satisfaction -> Customer Loyalty	0.543	0.546	0.077	7.086	0.000
EWOM through FB -> Customer Loyalty	0.213	0.217	0.046	4.614	0.000
EWOM through FB -> Customer Satisfaction	0.392	0.394	0.050	7.808	0.000
EWOM through FB -> Engagement	0.527	0.527	0.057	9.200	0.000
EWOM through FB -> Love	0.512	0.514	0.048	10.768	0.000
EWOM through FB -> Trust	0.646	0.650	0.068	9.476	0.000
Engagement -> Customer Loyalty	0.075	0.169	0.037	2.207	0.001
Engagement -> Customer Satisfaction	0.177	0.139	0.071	2.492	0.000
Love -> Customer Loyalty	0.031	0.033	0.033	0.946	0.345
Love -> Customer Satisfaction	0.058	0.060	0.058	0.987	0.324
Trust -> Customer Loyalty	0.244	0.241	0.045	5.470	0.000
Trust -> Customer Satisfaction	0.449	0.447	0.087	5.132	0.000

Table 4.5 indicates a specific indirect effect that is required to highlight the mediation analysis and serial mediation analysis. However, the rules to evaluate the mediation or serial mediation are the same as indicated for the path coefficient analysis (Hair et al., 2017 & Hair et al., 2019). Therefore, using the citation of Silaparssetti et al (2021), it is appropriate to declare that mediation and serial mediation are not found to be true for multiple relationships except the five. Hence, in line with the results, it is appropriate to reject H10O & H12O. However, on the basis of statistical results, there is no serial mediation of brand love and customer satisfaction between E-WoM and Customer Loyalty. Therefore, researchers are forced to accept H11O.

Table 4.6 is reflecting total effects and its purpose is to understand the holistic impact for all the relationships and variables used in the study (Ariyanto et al., 2024 & Saftari & Sinta, 2022). Hence, it will also contribute to advanced decision making (Ariyanto et al., 2024) in order to relate research work with real-world implications and practices (James et al., 2024). However, the parameters used to understand the relationship are same that are used in path-coefficient and specific

indirect effect, that are highlighted by Hair et al (2017) and Hair et al (2019) that are, t-statistical values and p-values. Hence, in light of the results related to Table 4.6, it is optimal to reject H4O, H6O, H7O, H8O & H9O and accept H5O.

5. DISCUSSION

Initially, this study tries to check the outcomes of E-WoM for the Islamic Banks. Hence, a stochastic and structured research model has been developed through using the indications of Anggraeni et al (2019); Ebrahim (2020); Istiqomah and Setyawan (2025); Luthfiyah et al (2024), Tanamal et al (2022); Van Doorn et al (2010); Vinerean and Opreana (2021), and Yan et al (2016). The findings of the study also affirm that the E-WoM is fruitful in increasing customers' trust, which means findings are consistent with Anggraeni et al (2019), Ebrahim (2020), and Yan et al. (2016). Similarly, E-WoM through Facebook may also create love that aligns findings of the study with Istiqomah and Setyawan (2025); Luthfiyah et al. (2024), and Tanamal et al (2022). Lastly, it has also been found that E-WoM through Facebook will also cause customers' engagement, which means findings are also aligned with the theoretical framework, research questions, and research hypotheses. Discussing the mediating role of customers' trust, love, and customers' engagement, it has been found that love does not create any mediating role between E-WoM and customers' satisfaction. Hence, the findings of the study are consistent with Sarassina (2023), who highlighted the mediating role of customers' trust, and also with Joudeh et al. (2024) and Srivastava and Sivaramakrishnan (2021), who highlighted the mediating role of customers' engagement. However, findings of this study are not consistent with Joudeh et al (2024) and Yasin et al (2025), who posited the mediating role of brand love.

Extending the linkage of study findings with to customer loyalty, it has been found that customer satisfaction play a significant mediation role between customer trust and customer loyalty as indicated by Fitriani et al (2024); Sya'bana and Sugiharto (2024), and Susanti et al (2018). Moreover, customer satisfaction was also found to be a valid mediator between customer engagement and customer loyalty. However, findings of the study could not trace any mediation of customer's satisfaction between brand love and customer's loyalty. Therefore, the findings of this study are a bit different from Çakiroğlu et al (2020), Ferreira et al (2019), Tijjang et al (2023), and Wardani and Wiyadi (2023). Now there is also a need to relate the findings of this study with the serial mediation; therefore, initially, this study highlights that other than the serial mediation of brand love and customer satisfaction, all the other serial mediations, i.e., customer's trust and customer satisfaction, and customer's engagement and customer's satisfaction, are true. Therefore, it is optimal to indicate that only one of the major claims does not come true, which makes this study different from the indications of Salvi (2015) and Velnadar et al. (2024), and Wayan Suartina et al (2011). However, due to the

acceptance of two of the other major claims related to serial mediations, it is optimal to relate findings of this study with Nawastuti and Irmawati (2023) and Velnadar et al (2024) for customers' trust and with Nawastuti and Irmawati (2023) and Jahroh and Saptono (2023) for customers' engagement. The findings of the study are not found true for brand love either for its connection with customer satisfaction, nor for its mediating relationship and nor for its serial mediation with customer satisfaction. However, it is not an issue for significance testing as most of the studies conducted previously was related with particular brands, country or industry, and these sort of findings cannot be generalized for every brand, location, or industry (Cahyo et al., 2025). Similar points were also raised by Putra and Hayuningtias (2024) that brand love may be a valid and important mediator for some of the conditions, but it was not found to be a valid mediator for customer delight and loyalty. Therefore, it is not unnatural that there is no mediation of customer's trust with customer's satisfaction or with customer's loyalty.

6. CONCLUSION

This study is one of the detailed and comprehensive studies that are based upon E-WoM over Facebook on customer satisfaction and customer loyalty. The study is based upon the EBM model presented by Engel et al (1990) and covers multiple forms of research gaps. In order to increase the rigor and significance of the study model has been developed through considering the working, strengths, and weaknesses of multiple studies, e.g., Qurrata et al (2021); Rianita and Fasa (2025); Sarassina (2023), and Yasin et al (2025). However, the detailed statistical testing of the study highlighted that the significance testing of the study is partially efficient as the result of the study does not affirm the relationship between customer love with customer satisfaction, and customer loyalty. Similarly, there is no relationship found for customer engagement and customer satisfaction.

Similarly, the mediation and serial mediation of customer love with customer satisfaction does not found to be true for the indirect association between E-WoM and customer loyalty. Hence, over all two out of twelve hypotheses are rejected, which contributes around 20% of the claims. This means 75% of the claims made through this study are accepted, which proves the rigor, authenticity, and practical implications of this study with reference to the Islamic Banking sector and Pakistan. However, there is also a reason for the rejection of 25% of the claims, as the use of e-marketing or social media marketing is different for every industry and its outcomes are based upon the practices of social media marketing adopted in the industry (Sheih et al., 2017). Islamic Banks are also not exploiting social media platform (Naeem, 2019), which is why the outcomes of social media marketing practices might be different from those in other industries e.g. conventional banks etc (Naeem, 2020).

6.1 Policy implications

A study of Amini and Mohammad Khan (2016) was conducted in India to help policymakers devise better policies through a better understanding of market segmentation. Similarly, this study may also be used for better policy-making for e-WoM polices of Islamic Banks. Hence, the outcomes of this study can be used to evaluate the significance of genuine comments (not through AI) for Islamic Banks in Pakistan. Especially in the context of Facebook, this study can be used to assess the impact of e-WoM for Islamic Banks. Hence, policy-making may become effective for e-WoM over Facebook campaigns of Islamic Banks.

6.2 Need for Future Research

This research highlights the linkage of e-WoM for Islamic Banks, but some of the claims do not come true. Hence, the model can also be tested with reference to the Islamic Banking Sector of other countries. Similarly, the model can further be tested for Micro Islamic Banks and other Micro Islamic Financial Institutions (MIFBs). Similarly, the model can be assessed more rigorously through collecting longitudinal data or through conducting a comparative study on Islamic Financial Institutions and MFIBs through the use of control variables.

Conflict of Interest

The authors declare no conflict of interest.

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