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# Chatbot Efforts: Unveiling the Influence on Customer-Brand Connections

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## ABSTRACT

*The present study researches the multifaceted dynamics of chatbot marketing initiatives concerning their influences related to quality of communication and customer-brand relationship. It also researches their impacts on loyalty response and brand advocacy within the clothing and apparel industry of Pakistan. This study adopts a quantitative approach using probability sampling. It examines communication quality and customer-brand relationship as mediators in the improvement of customer loyalty to response and advocacy, using the perspective of chatbot interactions. Data from the sample of 304 heterogeneous apparel consumers revealed significant relations among these variables of interest. Data analysis using SmartPLS 4.0 was therefore done, and from this analysis, it was realized that the chatbot marketing efforts have had positive effects on communication quality, hence enhancing the relationships between customers and the brand. These relationships drive customer loyalty, response, and brand advocacy to a significant extent, and therefore confirm that chatbots are indeed a tool for improving customer experience. Most importantly, through the proposed mediation analysis, communication quality and customer-brand relationship were identified as two imperative pathways that help retrieve more improved customer loyalty and advocacy for chatbot marketing efforts. This study contributes to chatbot marketing theory by explaining the mechanisms that drive consumer behavior in digital environments.*

## Introduction

The global apparel industry is a very volatile and competitive industry, where branded companies continuously ask how to win the hearts of consumers and forge durable customer-brand relationships. This dire need has been expedient with the introduction of digital transformation that has really changed the way business operates and engages customers (Ledikwe, 2020). The increasing prominence of chatbot technology within this shift represents brand new avenues for enterprises to improve communication and build strong customer relationships. AI-in-built chatbots powered by NLP enable companies to mimic human interactions and reach out to their consumers with total specificity of customer service; hence, they personalize the process of communication (Jiang et al., 2022). Immediate responses, 24/7-all factors of redefinition to customer service by using chatbots. This way, it is an effective platform for brands to address the needs and preferences of customers.

The rapidly changing nature of customer preference, along with the highly competitive environment found across the globe in the apparel industry, necessitates quick marketing strategies on the part of brands. Indeed, this challenge has been addressed through chatbots, which have emerged as valuable tools for enabling companies to respond quickly to changing customer needs and preferences. By the use of human-like dialogue, conversational AI technologies provide real-time support, suggestions, and advice to customers across multiple digital touchpoints. This way, chatbots help brands break barriers in customer interaction, including a newly enhanced quality of communication and a way to build good relations with customers.

Chatbots have become a very innovative solution that can provide customers with exactly what they want-personalized content-and enhance the overall shopping experience, making the customer feel connected to the brand (Mim et al., 2022). In highly competitive and fast-evolving industries, this can be applied to clothing; knowing and acting on consumer preference is key to success.

This study has explored the potential of chatbot marketing efforts in mitigating the issues of fostering customer loyalty, high and timely customer responses, and nurturing brand advocacy in the Pakistani market. By investigating the influence of chatbots on the quality of communication, customers' connection with the brand, and subsequent customer behavioral outcomes, the study will be able to infer implications and recommendations valuable for firms interested in exploiting the chatbot technology to improve their marketing strategies in Pakistan.

The role of chatbot marketing in creating customer relationships with brands helps keep evolution constant in digital marketing strategies and integration of skills that help in better customer service and communication. In the context of Pakistan, this research is crucial as it pertains to the prevalent socio-economic and business dynamics in this country. More importantly, changing preferences and growing competition have made the consumer environment so volatile that insights drawn from this study may provide brands with long-term customer relationships by incorporating chatbot marketing efforts. Moreover, in the clothing industry, chatbot marketing would increase customer interaction by improving their communication skills and developing healthier relationships among customers. However, this study focuses on the following objectives:

- To investigate the mediating role of communication quality and customer-brand relationship between chatbot marketing efforts and customer loyalty.
- To investigate the mediating role of communication quality and customer-brand relationship between chatbot marketing efforts and customer response.

- To investigate the mediating role of communication quality and customer-brand relationship between chatbot marketing efforts and brand Advocacy

## Literature review

### Chatbot Marketing Efforts

AI chatbots have quickly become an indispensable tool in marketing strategy, providing a channel through which businesses communicate with customers through conversational interactions and with the added advantage of groups (Chen et al., 2023). The adoption of AI-driven platforms and Natural Language Processing NLP-enabled chatbots enables the realization of human interaction by providing customers with immediate help, as well as product/service information and excellent assistance across numerous digital channels. Chatbot marketing research results demonstrated that they can increase customer engagement, smooth communication and enhance sales (Tamara et al., 2023)

Social Exchange Theory provides a theoretical perspective to understand the effort of customer marketing interactions through marketing chatbots. According to this theory, the relationship is based on the exchange of benefits and costs between two parties, and people interacting based on agreements and benefits. When used for chatbot marketing, customers who interact with chatbots expect to receive valuable service, personalized advice, and timely support in return for their time and attention (Liu et al., 2022). The adoption of chatbots by brands allows the collection of customer data, on-demand help services, and brand loyalty. This activity is increased via customer relations by a chatbot.

The application of Chatbots in the fashion sector has opened great possibilities to transform customer engagement, provide a personalized shopping environment, and differentiate brands in this competitive market. With technology constantly evolving, chatbot marketing is probably going to have a substantially positive impact on the development of customers and customer relationships in the future (Li & Xu, 2022).

### Communication Quality

The effectiveness of communication is a key factor that influences customer interaction; it has an impact on the quality of delivery, meeting customer satisfaction, and building a loyal brand. The wide range of fields has been greatly explored in terms of communication processes and how they affect customer behavior in consumer-based industries. Effective communication is communication that is complete, correct, and clear between businesses and customers (Zhou et al., 2023). Moreover, the research by Federici et al. (2020) mentioned effectiveness of the communication via chatbots in increasing customer retention. Chatbots aiming to answer customers' queries, give product details, and even offer personalized recommendations will lead to more trust and satisfaction among customers (Jiang et al., 2022).

### Customer Brand Relationship

The customer-brand relationship forms the basis of theory and marketing practice, revolving around the interactions of perceptions and emotional connections of customers with brands. The research by Cheng and Jiang (2022) encapsulates summarizes the different aspects of all customer-brand relationships and their impact on the behavior of customers regarding the products and their efficiency. In other words, customer relationships ideally represent consumer trust, confidence, and their perception about the brand. The development and building of stable customer

relationships are quite vital in creating brand loyalty, maximizing customer equity, and maintaining organizational success (Kang & Choi, 2023). Moreover, the brands that produce good products, along with giving outstanding customer service and excellent value can create a long-lasting relationship between them and the customers (Nguyen et al., 2022).

**Mediating role of communication quality and customer-brand relationship between chatbot marketing efforts and customer loyalty**

Effective communication develops the relationship between customers and brands. Studies have stated that the approaches for creating satisfaction and loyalty among customers are important (Jiang et al., 2022). Moreover, the customer-brand relationship is important in terms of developing the brand-customer relationship. It affects brand loyalty and consumer behavior. Research shows that customer relationship management is strongly associated with customer satisfaction, trust, and loyalty (Cheng & Jiang, 2022). According to SET, these relationships are characterized by the exchange of benefits and costs, in which both parties benefit from the interaction (Cropanzano et al., 2017).

Research shows the ability of chatbots to improve customer engagement, improve communication processes, and increase sales conversions. However, the extent to which chatbot marketing efforts affect customer loyalty depends on the quality of communication and customer relationships (Rehman et al., 2022; Rese et al., 2020). Research shows that chatbots can improve communication efficiency by providing customers with timely and relevant information, resolving their questions, and providing personalized service. As a result, product name recognition increases among customers, which leads to customer understanding, trust, and confidence, thus ultimately increasing loyalty (Chen et al., 2023).

In addition, interaction through chatbots has been shown to intensify customers' attachment to the brand through knowledgeable and emotional content that helps develop a connection and collaboration (Khan et al., 2023). Presumably, the interactions with products in the SET model constitute a flow of social and emotional messages conveying cooperation and commitment among customers and brands (Rane et al., 2023). In a nutshell, research on communication by chatbots between brands and customers leads to better customer-based relationships resulting in enhanced customer loyalty in the era (Chen et al., 2023; Limarunothai et al., 2022; Liu et al., 2022). Based on the above discussion, the following hypothesis is proposed:

***$H_1$:*** *Communication quality and customer-brand relationship sequentially mediate the relationship between chatbot marketing efforts and customer loyalty.*

**Mediating role of communication quality and customer-brand relationship between chatbot marketing efforts and customer response**

Effective communication in the SET framework is one of the ways through which people can come to terms with each other and work together through value exchange which is the essence of marketing (Song et al., 2022). Customer brand relationship also stands as a pivotal factor influencing customer response to marketing activities. Studies show that among all other factors, strong relationships play an important role in the credibility of business, advertising, and word-of-mouth marketing (Bhatia & Bhatt, 2023; Cheng & Jiang, 2022).

Research shows that chatbots can interact with customers, streamline communication processes, and increase sales. However, the extent to which chatbot marketing efforts affect customer response is measured by effective communication and customer relations (Nguyen et al., 2022).

Research highlights that chatbots enable better communication efficiency as they provide fast, responsive, and customized service to users (Zhou et al., 2023). This step brings on enhanced knowledge and understanding, builds trust and belief in the product, enhances engagement, and generates positive reactions (Song et al., 2022). On the other hand, a chatbot-mediated interaction has been proven to have a better customer experience, and a positive customer and product relationship because of a communication presence and consumer engagement (Kang & Choi, 2023).

Finally, the study of how customer and product communication strategy involved with marketing chatbots is in line with customer response demand information what customers want from advertiser marketing customer relation marketing (CRM) which will have a more comprehensive concern about how a customer prefers to be treated like a human being. This communication quality will result in better customer-brand relationships leading to positive customer response in which a customer will be willing to pay even premium prices for those brands with whom they have excellent brand relationships (Cheng & Jiang, 2022; Zhang et al., 2022; Zhou et al., 2023). Thus, this study hypothesized the following hypothesis:

***$H_2$:*** *Communication quality and customer-brand relationship sequentially mediate the relationship between chatbot marketing efforts and customer response*

**Mediating role of communication quality and customer-brand relationship between chatbot marketing efforts and brand Advocacy**

Communication is a powerful tool that helps improve the business through communication. The interaction between customers and products is the other key component. It has been proved that it helps close the gap between customer requirements and the level of brand advocacy (Jamil et al., 2023). SET communication efficiency means the communication channel through which customer and product transfer vital resources, thereby strengthening both the customer's confidence and advocacy (Siddhi et al., 2021). Similarly, customer-brand relations are another important aspect of growing brand advocacy and the rate of transformation of customers to buyers. According to the outcome of the studied research, customer relationships have a positive effect on satisfaction, trust, and advocacy (Kusumawati et al., 2022; Liu et al., 2022).Chatbot marketing has evolved to be a strong medium for brands and their products to reach their target audience and personalize their experience.

The research reveals that they are efficient tools to supercharge customer engagement, smooth out communication processes, and boost sales. Nevertheless, the intensive marketing approach with the support of chatbots is correlated with the effectiveness of communication and customer-brand relations which in turn leads to advocacy (Chowdhury & Swaminathan, 2023; Gulati et al., 2023). Chatbot studies reveal that they can be used for the maximum benefit of the customer by providing customer service quickly, relevantly, and personally. Consequently, this results in customer's advocacy for the brand, as the customers get enough understanding, to trust and finally depend on the brand (Liu et al., 2022; Senyapar, 2024). Moreover, such interaction, through communication quality is a robust instrument to strengthen customers' relationships with brands and to motivate people to become brand advocates (Limarunothai et al., 2022; Rese et al., 2020).

In conclusion, research on the mediating effect of communication quality and customer brand relations between marketing chatbot efforts and brand advocacy helps create a comprehensive view of how customers participate in this process. By applying SET's practical model, researchers

can comprehend how these changes impact customers' attitudes, satisfaction, and advocacy in the technological era. Hence, the following hypothesis is put forth:

***$H_3$:*** *Communication quality and customer-brand relationship sequentially mediate the relationship between chatbot marketing efforts and brand advocacy.*

## Methodology

This particular research uses a quantitative, cross-sectional survey approach to examine the impact of the chatbot in marketing, customer loyalty, response, and advocacy among apparels firms in Pakistan. Structured questionnaires were adopted in the data collection process, and the study focused on clothing brand used consumers in Lahore who have engaged with chatbots online.

The questionnaire follows 7-point Likert scale ranging from strongly disagree to strongly agree and addressing perceptions about the chatbot marketing communication efforts, the quality of communication, relationship between customers and brand as well as outcomes of the chatbot marketing communication. The items of the questionnaire were adopted from other related scale used in prior studies to make the current items more pertinent and valid for chatbot marketing in apparel industry. Five items developed by Khonkanen (2023) were used to capture the extent of chatbot marketing efforts. Communication quality was measured with seven items using the questions from Khonkanen et al.'s digital communication quality scale. Customer-brand relationship was assessed by four items on trust and emotional attachment, which were developed based on Khonkanen's scale. The customer loyalty, customer response and brand advocacy were measured through the items used in earlier works of Khan et al., (2019) & Pourazad et al., (2020). A pilot study involving 30 subjects was used to improve the clarity and relevance of the questions to the research endeavor.

The research targets the consumers from Lahore, Pakistan who have communicated or used the chatbots across such platforms as social media and e-commerce platforms. Convenience sampling was used, especially participants from malls, clothing stores, and social media accounts. In this study, 750 questionnaires were administered, and 304 valid copies were considered for analysis after eliminating those with missing information, which gives a response rate of 40.5%. The quantitative research data gathered were analyzed through PLS-SEM employing SmartPLS to assess the reliability, validity, and hypotheses of the variables. This approach revealed the role of chatbot marketing on customer loyalty, response, and advocacy mediated by communication quality and customer-brand relationship.

## Analysis and Results Discussion

The analysis is divided into two main sections: the measurement model and the structural model (Qureshi et al., 2023). The measurement model assesses the reliability and validity of the constructs, ensuring that the indicators accurately represent the latent variables. The structural model examines the hypothesized relationships among the constructs, providing insights into the direct and indirect effects of the variables (Azhar et al., 2024).

Out of the total number of 304 respondents, a vast number are females with 68.09% of the total, comprising 207 persons, against the ratio of males with 31.90%, numbering 97 in total. Moreover, regarding age, the majority of the respondents are from the 18-28 years bracket with a total of 183 representing 60.19%, while 87 make up 28.61% between 29-39 years of age. The next smallest is between 40-50 years, which was 28 or 9.21%, while those over 50 years old comprised only 6 or 1.97%. So, it depicts that most of the respondents were young. Furthermore, regarding education,

52.96% have complete Matric/O Levels while 49.67% of the participants have bachelor's degree, 25.65% have master's degree and higher, 10.19% have Intermediate/A Levels education and 14.47% selected other education level which indicate that majority of the participants have at least a college level education.

**Measurement Model**

**Table 1: Construct Reliability and Validity**

| | Cronbach's alpha | Composite reliability | Average variance extracted |
|---|---|---|---|
| **BA** | 0.762 | 0.883 | 0.791 |
| **CBR** | 0.761 | 0.845 | 0.577 |
| **CL** | 0.839 | 0.874 | 0.634 |
| **CME** | 0.773 | 0.845 | 0.522 |
| **CQ** | 0.822 | 0.868 | 0.485 |
| **CR** | 0.756 | 0.830 | 0.625 |

All the constructs had Cronbach alpha value above the threshold of 0.7 indicating that all the measurements were reliable; the values ranged between 0.756 (CR) and 0.839 (CL). Finally, the analysis of the reliability of the measurement was done using Composite Reliability (CR) and all of the constructs were above 0.7, as shown below: CR 0.830; AVE 0.770; BA; 0.883. Convergent validity as estimated by AVE, should be .5 or higher (Cheung et al., 2024). All constructs met or surpassed this threshold with the exception of CQ, which had an AVE of 0.485 – still reasonable owing to common threshold of 0.5 (Amofah & Saladrigues Solé, 2020). BA possessed the largest AVE (0.791), and this indicates that the contributed constructs sufficiently accounted for variance of the indicators.

**Table 2: Details of discriminant validity**

| | BA | CBR | CL | CME | CQ | CR |
|---|---|---|---|---|---|---|
| **BA** | 0.890 | | | | | |
| **CBR** | 0.275 | 0.760 | | | | |
| **CL** | 0.613 | 0.350 | 0.796 | | | |
| **CME** | 0.147 | 0.201 | 0.030 | 0.722 | | |
| **CQ** | 0.010 | 0.245 | 0.102 | 0.321 | 0.697 | |
| **CR** | 0.450 | 0.191 | 0.649 | 0.044 | 0.212 | 0.791 |

The Fornell-Larcker criterion, on the other hand, implies that the square root of the AVE for each construct, that is, its self-correlation, should be greater than its correlations with all other constructs in the model (Henseler et al., 2014). Thus, in Table 4.5, the square root of the AVE for BA is 0.890, which is greater than the correlations of BA with CBR (0.275), CL (0.613), CME (0.147), CQ (0.010), and CR (0.450). Hence, BA is different from these constructs. For CBR, the square root of the AVE is 0.760, higher than its correlations with BA (0.275), CL (0.350), CME (0.201), CQ (0.245), and CR (0.191), hence confirming its uniqueness. On the part of CL, the square root of the AVE is 0.796; it also outpaces its correlations with BA (0.613), CBR (0.350), CME (0.030), CQ (0.102), and CR (0.649); hence, this further establishes that CL maintains distinctiveness. STEM is followed by the square root of the AVE, which is 0.722 and greater than

its correlations with BA (0.147), CBR (0.201), CL (0.030), CQ (0.321), and CR (0.044), so that CME is unique too.

Finally, the square root of the AVE for CQ is 0.697, higher than its respective correlations with BA at 0.010, CBR at 0.245, CL at 0.102, CME at 0.321, and CR at 0.212, thereby affirming its distinctiveness. CR presents an AVE whose square root is 0.791 and is higher than its respective correlations with the other constructs: BA (0.450), CBR (0.191), CL (0.649), CME (0.044), and CQ (0.212). Overall, discriminant validity has been established because the square root of the AVE for each construct is greater than its correlations with other constructs, thus confirming the reliability and distinctiveness of the measurement model.

**Table 3: Measurement Model**

| Variables | Items | Item Loadings |
|---|---|---|
| **BA1** | I would recommend this brand to lots of people. | 0.815 |
| **BA2** | I would try to spread the good word about this brand | 0.958 |
| **CBR1** | I believe the brand really listens to what I have to say (e.g. feedback) | 0.824 |
| **CBR2** | I believe I enjoy dealing with this brand | 0.691 |
| **CBR3** | I believe I feel very confident about the brand | 0.803 |
| **CBR4** | I believe I can see that the brand wants to maintain a relationship with me | 0.713 |
| **CL1** | I will suggest this apparel brand to others on social media. | 0.775 |
| **CL2** | I will regularly visit this apparel brand on social media. | 0.805 |
| **CL3** | This apparel brand will be my first choice as compared to others. | 0.721 |
| **CL4** | I am satisfied with this apparel brand with every visit. | 0.877 |
| **CME1** | The chatbot has the knowledge to answer my questions | 0.691 |
| **CME2** | The chatbot can offer immediate answers anytime and anywhere | 0.761 |
| **CME3** | I enjoy choosing products more if they are recommended by the chatbot than if I choose them myself | 0.759 |
| **CME4** | I feel that using this chatbot meets my personal needs | 0.734 |
| **CME5** | The chatbot has the knowledge to answer my questions | 0.663 |
| **CQ1** | I am scared that chatbots could steal my personal data and violate my privacy | 0.653 |
| **CQ2** | It is easy to find what I want by using chatbots | 0.693 |
| **CQ3** | Chatbots are easy to use | 0.756 |
| **CQ4** | Using the chatbot is more efficient than other forms of communication | 0.791 |
| **CQ5** | Chatbots save a tremendous amount of time | 0.664 |
| **CQ6** | Communication with a chatbot service agent is accurate and complete | 0.645 |
| **CQ7** | I am scared that chatbots could steal my personal data and violate my privacy | 0.660 |
| **CR1** | I am willing to pay a higher price for this apparel brand than for other brands. | 0.644 |
| **CR2** | The price of this apparel brand would have to increase quite a bit before I would switch to other brands. | 0.735 |
| **CR3** | I am willing to pay more for this apparel brand than for other brands | 0.960 |

The outer loadings for each of the variables are indicative of the strength of their respective indicators, with a benchmark of 0.6 being acceptable in terms of validity. For BA, the outer loadings range from a low of 0.815 to a high of 0.958, with both indicators strongly related to the latent construct. This suggests that the indicators effectively capture the essence of BA. Finally, the loadings for the CBR variable range from the lowest at 0.691 to the highest at 0.824. This good range shows that most of the indicators are substantial in this construct and posit its robust nature. The Outer loadings for the CL variable range between 0.721 and 0.877, purporting that all indicators fittingly represent the construct and meet threshold criteria for acceptable validity.

As for CME, the loadings vary from the low of 0.663 to the high of 0.761; the threshold for all indicators has been exceeded. This supports their heavy contribution to the latent variable and suggests that the indicators are reliable in measurement. The outer loadings for the CQ variable range between 0.645 and 0.791. Some of these indicators are low, but all still fall within an acceptable threshold to be considered relevant to the construct. The last variable, CR, has loadings ranging from 0.644 to a high of 0.960, confirming the strong relationships across its indicators. Overall, all the variables show acceptable outer loadings since none drop below the 0.6 benchmark. Hence, the constructs have been proven valid and reliable to measure.

**Structural Model**

**Table 4: Hypothesized Model**

| Hypothesis | Paths | Original sample/ Beta value | T statistics | P values | Status |
|---|---|---|---|---|---|
| ***H1*** | **CME -> CQ -> CBR -> CL** | **0.027** | **3.152** | **0.002** | Accepted |
| ***H2*** | **CME -> CQ -> CBR -> CR** | **0.015** | **2.352** | **0.019** | Accepted |
| ***H3*** | **CME -> CQ -> CBR -> BA** | **0.022** | **3.173** | **0.002** | Accepted |

The table above show that all hypotheses tested has significant mediation effects. For H1, the path from CME to CQ to CBR to CL has a beta value of 0.027, with T of 3.152 and P of 0.002. This, therefore, means that CQ significantly mediates the relationship between CME and CL. This agrees with the hypothesis that effective communication strengthens customer loyalty due to an improved brand relationship. Taken as a whole, the acceptance of H1 confirms that CME enhances CQ, which in turn strengthens CBR which eventually leads to increased customer loyalty. The finding underlines the importance of high-quality conversations created by chatbots. Developing better communication with chatbots can allow a brand to create a substantive relationship with customers, leading to loyalty (Hsu & Lin, 2023). This hypothesis supports past literature on the role of effective communication in establishing customers' trust and therefore ultimately maintaining such long-term relationships.

The beta value is 0.015, the T statistic is 2.352, and the P value is 0.019; thus, CQ also mediates the relationship between CME and CR. This supports the hypothesis that the better the communication quality, the more it contributes positively toward customer responsiveness through

its effect on brand relationships. Support of Hypothesis H2 means that at least CQ acts as a mediator in the link between CME and CR via CBR. It infers that effective communication builds up the relationship between customers and brands, leading to better customer response. While customers interact more with brands through chatbots, the quality of interaction influences their perceptions and reactions (Hsu & Lin, 2023).

Finally, for H3, from CME to CQ, then to CBR, and ending at BA, beta is 0.022, the T-statistic is 3.173, and the P-value is 0.002. These findings further confirm that CQ is a mediating variable of CME-BA; greater communication quality, in other words, enhances brand authenticity because of strong customer-brand relationships. The acceptance of Hypothesis H3 shows that CQ and CBR together bear a positive consequence on brand advocacy. The result here shows that effective communication through chatbots not only nurtures customer-brand relationships but also fosters brand advocacy by customers.

A good-quality interaction that conveys valuing and understanding will naturally lead a customer to share such positive experiences with others and improve word-of-mouth about the brand. Therefore, brands should develop a more balanced focus on chatbot marketing strategies that present an enhancement of both CQ and CBR to foster customer advocacy. The findings highlight the need to revisit CQ and CBR as inherent components of an integrated marketing strategy, especially within the intensely competitive garment industry, where consumer involvement and loyalty are considered crucial for business success (Lin & Wu, 2023).

According to the outcomes of mediation analysis, all the hypothesized propositions are labeled as accepted, since their related P-values were less than 0.05, pointing to evidence that the indirect paths as specified are significant, hence supporting the hypothesized relationships amongst the variables.

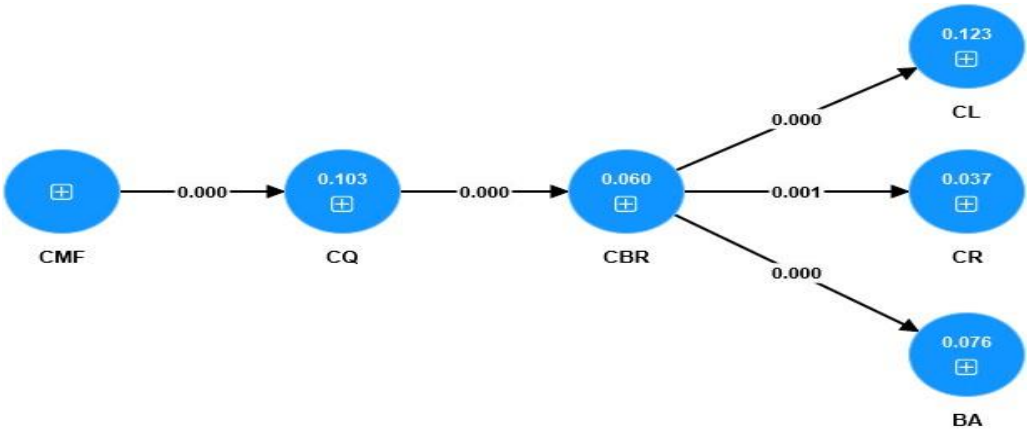


**Figure 1: Structural Model**

## Conclusion

This study has indicated the key role of chatbot marketing efforts in raising the quality of communication, further enhancing the quality of relationships between customers and brands, culminating in key consumer outcomes such as customer loyalty, customer response, and brand advocacy. The acceptance of all three mediation hypotheses underlines the interrelated nature of these constructs regarding the Pakistani clothing and apparel industry. Therefore, it is worth focusing on the quality of the communication, whereby the brand can build a deeper relationship with their consumers.

This study greatly contributes to the theoretical framework that underpins digital marketing, particularly in the context of chatbot interactions. It provides an enrichment of existing literature on customer engagement and loyalty by establishing the mediating roles of the quality of the communication and relationships between customers and the brand in relation to chatbot marketing efforts. It helps in reinforcing the notion that effective communication is the bedrock upon which good relations develop between the consumer and brands, aligned with theories regarding relationship marketing, such as trust, engagement, and satisfaction. From a practical point of view, the acceptance of all three mediation hypotheses underlines that brands need to develop their chatbot functionalities to make sure effective and high-quality communications (Tamara et al., 2023). It requires sophisticated investments in artificial intelligence and natural language processing technologies so that it can conduct more personalized and contextually relevant conversations with customers. This research is context-specific; mostly, it has briefed on the clothing and apparel sector, particularly within the state boundaries of Pakistan. In such a background, the generalizability of findings to other industry sectors or geographic territories may become limited. This is because the current study relies heavily on self-reported data, which are open to several biases, such as social desirability bias or inaccuracy in the perceptions of the respondents. This limitation will be mitigated by combining qualitative insights with quantitative data through mixed-method approaches expected to deepen the understanding of customer experiences and perceived quality.

Longitudinal studies again will be fruitful for future research to identify how these dynamics change over time and help in establishing the direction of causation between variables. Emotion-related issues in customer-chatbot interactions are also one of the most promising avenues of research. Emotion would be understood in relation to the role it plays in creating satisfaction and loyalty in customers, with a view to developing emotionally intelligent chatbot systems that can dynamically change their communication style based on customer sentiment. Another important perspective is concerned with the ethical implications of chatbots in customer service, related to privacy and data security, since brands are becoming increasingly dependent on digital interactions.

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