

The Mediating Role of Communication Quality in Digital Platform Usage and Interpersonal Interaction

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Abstract: While there have been changes in the nature of such relationships in the society and workplace, there is little understanding of the extent to which these types of sites correspond. This study explores the relationship between the quality of human connection as an engine between technology use and interacting with others. Data collected by active users of technological gadgets has been analyzed with an exploratory approach and thus with the help of the Digital Communication Quality Mediation Framework (DCQ-MF) that integrates the platforms thoroughness, interactions ease of use, response and interconnected impact. The results show that using technology by itself does not considerably improve establishing connections unless it is paired with effective communication. It has been proven to help quality control an interaction in the same way of an encounter in an online setting, which is why it is important to have real interactions. By providing a systematic the encouragement procedure that indicates how the internet can promote successful interpersonal enthusiasm, the study adds to the corpus of knowledge in managerial and collaboration. This useful benefits can be of great assistance to corporations in order to improve their online relationships and to exchange results.

Keywords: digital platform usage, communication quality, interpersonal interaction, mediation analysis

1. Introduction

Technological devices have been growing in number at a relatively fast pace, turning the way people interact, connect and converge in all aspects of their lives upside down [1] [2]. The use of techniques such as online social networks, communication devices with encryption and communication tools is becoming more and more important for everyday communication because they enable the "real-time, adaptable and worldwide communication of ideas" [3]. The research carried out previously indicates that enhanced use of digital services will affect social relationships and mobility in the workplace, as well as enhance information sharing [4]. But, the way users interpret and use the software will affect the success of the interactions as well as users' understanding of the software [5].

Despite the increasing prevalence of technology, social interaction has often been impacted, and, in some cases, negatively impacted [6]. Some studies have indicated better cooperation and commitment, but others have identified issues such as lack of implicit cues, misunderstandings, and even simple interactions [7]. These differences suggest that relying on online platforms alone will possibly not be enough to develop ties that are beneficial to both sides [8]. Various pieces of research suggest that the results of dialogue in digital situations are largely determined by primal properties of dialog, namely by its reciprocal "comprehension, openness, transparency and reliability [9] [10]. One of the fundamental concepts to grasp for the effectiveness of computerised relationships is the degree of interaction [11]. With the help of communication through intermediaries, it shows how the users think of communication's social broadness, immediate urgency and how accessible the communication is [12]. There is a correlation between good workmanship interpersonal interaction with increased visibility in society, working productivity, satisfaction with



interactions, especially in technologically mediated interactions [13]. Thus, the effectiveness of communication could be a process that can explain how the process of using online resources can create positive relationships [14] [15]. Based on the abundance of the media hypothesis, socialization concept and the theory of technologically assisted communication, the results of the relations will depend on the media of communication which is able to support the relational conversation and the creation of meaning [16] [17]. The PSYCHOLOGICAL-ACCOUNTING linkage has begun to be explored in experimental research in management and IT research, using mediation theories [18] [19].

However, there is a straightforward studies gap because there hasn't been plenty of empirical study that particularly looks at how well communication works as an intermediary element between human contact and the adoption of online mediums [20]. The present research investigation focuses on the relationship between the degree of communication and the connection between using online environments and interacting with other people and aims to fill that gap. Using a mixed approach to research along with a mediation framework, this research seeks to provide empirical evidence of how how well communication works affects connection final results across online circumstances. The results of the research will contribute to the growing knowledge on governance and technological communication by clarifying the conditions under which discussion forums contribute to strengthening connections while offering concrete guidance for companies that want to optimize the use of broadband access methodologies.

1.1 Contributions

The main innovation of this study is:

- It offers empirical evidence that the quality of the communication is a mediating factor between the use of digital platforms and social interaction.
- It introduces the Digital Communication Quality Mediation Framework (DCQ-MF) systematically to evaluate the effectiveness of digital communication.
- It provides useful managerial insights for improving the quality of communication to achieve better outcomes of digital interactions.

2. Literature Review

The second part provides a systematic analysis of the scientific literature of internet adoption, communication standards and communicating with others, with the aim of identifying the gaps in scientific research and laying the foundations for the research active in course. The findings gaps in the study are summarized in Table 1. Baruah (2025) [21] discussed how the use of messaging through computers impacts connectedness in relation to interpersonal interactions, including the need to be linguistically equitable and considerate with the use of the technology and the blending of virtual and physical spaces. Asawawibul et al. (2025) [22], who investigated the facilitating functions of technological consumption while ancillary variables regarding online store delivery, found that gadget usage greatly mediates the link across expenses and customer happiness. This study's results highlight the importance of robust electronically mediated connections within the community in today's context. In the investigation they conducted of automatic aid for buyers, Ramya and Alur (2025) [23] showed that other people significantly oversee the link during positive experiences with aid and willingness to keep researching, underscoring the importance of evaluated relations proficiency in that is artificially intelligent partnerships. Liu et al. (2025) [24] noted the importance of viewer interaction as a bridge between electronic interaction and purchasing behavior in their view of value added in broadcasting online spaces, indicating that viewers' interaction needs to be driven by social interaction to better connect with others in the context of technology.

The importance involving mental vulnerability in interactions via technology was highlighted by Meng et al. (2025) [25], who looked at virtual personal assistants reacted strategies and found that separation from emotion and successful desire govern an affiliation across relationship building signals and intending to buy. In the research on foreign students' study in China, Liu et al. (2025) [26] found that the three can play a relatively effective role in forming a link between sense of belief and cognitive competence of the foreign students' understanding of the society, so that the competence of spoken phrases plays an important role in the process of accepting the other language environment. In the study of AI for conversation usage goal, Peng et al. (2025) [27] found that peer interaction greatly affected a link between using AI while feeling alone. This means that engaging online through "felt empathy" increases.

In the context of relationships, Wang et al. (2025) [28] investigated the relationship between partner phubbing and relationship quality and concluded that perceived partner responsiveness mediated the relationship. This study

demonstrates that partner phubbing negatively affects the quality of interpersonal relationships, and effective communication plays a crucial role in maintaining them in digitally mediated relationships.

For livestream commerce, Zhang et al. (2025) [29] found that social presence has a mediating effect between the trust and stickiness of consumers on digital commerce platforms, suggesting that trust boosts the continuous interaction on digital commerce platforms via communication.

This was reinforced by John et al. (2025) [30] who explored the quality of interpersonal interactions in social commerce and showed that trust partially mediates the relationship between the quality of interaction and purchase intention.

Table 1: Summary of Research Gaps

Authors	Focus of the Study	Key Findings	Identified Research Gap
Baruah (2025) [21]	Computer-mediated communication and social interaction	Highlighted transformation of relationships through CMC	Lacks empirical testing of communication quality as a mediating variable
Asawawibul et al. (2025) [22]	Technology usage and customer satisfaction	Technology usage emerged as a strong mediator	Does not examine interpersonal interaction outcomes in digital communication
Ramya&Alur (2025) [23]	Chatbots and parasocial relationships	PSR mediates service quality and continuance intention	Limited to chatbot context; excludes broader digital platforms
Liu et al. (2025) [24]	Live-streaming platform value creation	Audience engagement mediates platform resources and value	Communication quality not explicitly modeled as a mediator
Meng et al. (2025) [25]	Chatbot response strategies	Psychological distance mediates purchase intention	Focuses on consumer behavior rather than interpersonal interaction
Liu et al. (2025) [26]	Cultural intelligence and communication competence	Communication competence mediates adaptation outcomes	Context restricted to international students, not digital platforms
Peng et al. (2025) [27]	Loneliness and conversational AI usage	Parasocial interaction acts as mediator	Does not address communication quality in human–human interaction
Wang et al. (2025) [28]	Partner phubbing and relationship quality	Responsiveness mediates relationship quality	Digital platform usage intensity not examined
Zhang et al. (2025) [29]	Social presence and consumer stickiness	Trust mediates social presence and stickiness	Interpersonal interaction outcomes are commercially focused
John et al. (2025) [30]	Consumer-to-consumer interactions	Trust mediates interaction and purchase intention	Lacks focus on communication quality as a core construct

2.1 Research gaps

Despite its rising volume, digital platforms and technology-mediated communication is still missing some key elements from the literature. The qualitative dimension of communication that could affect the effectiveness of

interaction is under-researched and only a few studies focus on other factors such as platform features, technology adoption, and the outcomes such as purchase intention, satisfaction, trust, and engagement. Although there are many mediation mechanisms studied such as trust, parasocial interaction, responsiveness and engagement, there has been limited research on how these factors mediate interpersonal relationships between the users of digital platforms and the quality of the communication. Moreover, much of the previous research is focused on certain chatbots, such as e-commerce, live streaming, or cultural adaptation, limiting the extent to which the findings can be generalized to other digital interaction contexts. Moreover, some literature sections contain more reflective and conceptual studies, and lack empirical and model-driven studies that integrate platform usage intensity, communication quality and interpersonal interaction within a single model. In order to fill these gaps, the current study uses a structured quantitative approach to empirically investigate the mediating role of communication quality.

2.2 Problem Statement

Communication across interpersonal relationships in social and organizational settings has undergone dramatic transformation due to the use of digital platforms. Although these sites make communication easy and speedy, a lot of people have bad experiences with poor interpersonal skills, low engagement and misunderstandings. Much of previous research has focused on the use and levels of technology, with little attention paid to the qualitative nature of communication that affects the effectiveness of communication interactions. So, it remains to be seen whether the use of digital platforms alone will enhance interpersonal interaction or whether a good communication is an essential intermediate variable. Empirical studies are needed to better understand the nature of how interpersonal interaction and digital platform usage are mediated by communication quality in this gap.

3. Objectives

The goals of the study are innovative in the following ways:

- To explore the impact of the digital platforms on social interaction.
- To investigate the influence of the quality of communication on interpersonal interaction in digital environments.
- To investigate the relationship between interacting with people and using digital platforms, and how the quality of the communication affects this relationship.

3.1 Research Questions

A set of research questions has been formulated according to the purpose of the study:

RQ1: What is the relationship between digital platforms and interpersonal interaction?

RQ2: How does the quality of communication affect interpersonal interaction in digital environments?

RQ3: What is the mediating role of communication quality between the use of digital platform and interpersonal interaction?

3.2 Hypothesis

The hypothesis is that using digital platforms increases people's interpersonal interactions. The hypothesis is: If people use digital platforms, they will have more interpersonal interactions.

Null Hypothesis (H0₁):

The use of digital platforms does not have a significant impact on interpersonal interaction.

$$H = \alpha + \beta_1 DPU + \epsilon, \beta_1 = 0$$

Alternative Hypothesis (H1₁):

The use of digital platforms has a huge impact on interpersonal communication.

$$H = \alpha + \beta_1 DPU + \epsilon, \beta_1 \neq 0$$

The test is to be used to test the hypothesis Communication Quality (CV) affects Interpersonal Interaction (IP Interaction). Hypothesis 2: CV → IP Interaction.

Null Hypothesis (H0₂):

There is no significant relationship between interpersonal interaction and the quality of the communication.

$$II = \alpha + \beta_2 CQ + \varepsilon, \beta_2 = 0$$

Alternative Hypothesis (H1₂):

The quality of communication has a great impact on interpersonal communication.

$$II = \alpha + \beta_2 CQ + \varepsilon, \beta_2 \neq 0$$

Hypothesis 3: Communication Quality Mediating Role. Mediating Role of Communication Quality Hypothesis

3.

Null Hypothesis (H0₃):

The use of digital platforms does not mediate the relationship between digital platforms use and interpersonal interaction.

$$CQ = \alpha + \beta_3 DPU + \varepsilon, \beta_3 = 0$$

Alternative Hypothesis (H1₃):

The relationship between the use of digital platforms and interpersonal interaction is mediated by the quality of the communication.

$$CQ = \alpha + \beta_3 DPU + \varepsilon, \beta_3 \neq 0$$

where:

DPU = Digital Platform Usage

CQ = Communication Quality

II = Interpersonal Interaction

α = Constant

β = Regression coefficient

ε = Error term

4. Research Methodology

In this section of the paper, the technique employed to analyse the relationship between good communication and the relationship within using online communication is described. Research project is based on exploratory approach and polling data of frequent users of websites and apps. Online usage, personal relationships and communication level were assessed with validated metric scales via a planned survey. The data collected were statistically analyzed by appropriate statistical analysis to test the main and inter-correlative relationships to ensure the reliability and authenticity of the results.

4.1 Conceptual Framework

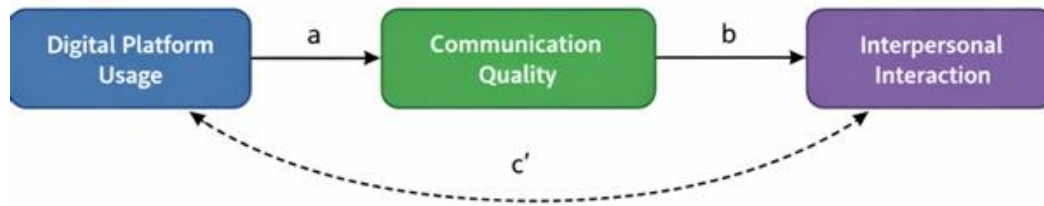


Figure 1: Conceptual Framework of the Mediating Role of Communication Quality

Figure 1 is the conceptual framework of the study. It reveals that interpersonal relationship quality is affected by digital communication practices, such as social media usage, communication preferences, and emotional expression. The framework also suggests that peer interaction, family communication and self-development can reinforce this relationship and the contextual basis of analysis is provided by doing a regional comparison between Chennai and Trichy.

The research method used in the investigation is the quantitative method, which is used to conduct empirical research to test the theory proposed as shown in Figure 1. The regulatory structure is: use of electronic media – independent; physical contact – dependent; quality of communication – mediator. This technique will provide a systematic approach to evaluating direct and indirect effects and maintain consistency in the mental model for evaluating.

4.2 Research Design

The empirical study takes into account the relationships between technological use, communication standard and human relationships, following the methodology of experimenting and exploring. A questionnaire driven approach, which is appropriate for investigating intermediary associations in personality and supervisory research was employed to collect the feedback of participants at a particular point in a period.

4.3 Sample and Data Collection

The target group for this study were those who engage in regular digital communication with other people, such as a social networking service, chat or messaging application, collaborative communication tool or video conferencing service for personal, learning or work-related conversations. Only those who used digital platforms regularly and were 18 years old or older were taken into account and included in the study, to ensure the participants had enough experience in digital communication.

Empirical data were gathered using a cross sectional survey design. A structured questionnaire was created using previously validated measurement scales from the literature, but adapted to reflect the context in which digital platforms are being used, the quality of communication, and interpersonal interactions. This questionnaire had two parts. The demographic information was collected in the first section, and the three latent constructs, namely Digital Platform Usage (DPU), Communication Quality (CQ), and Interpersonal Interaction (II) were measured in the second section. The questions on the construct items were rated on a 5-point Likert scale (1-5), with 1 representing Strongly Disagree and 5 representing Strongly Agree.

The data were gathered using an internet survey that was sent out by email invitations and the social media. Convenience sampling was chosen because it allowed to reach active users of digital platforms in an economical way within the time and resources limit. The questionnaire was checked for content clarity and readability prior to the main survey and items were easily understood by respondents.

During the period of the data collection 428 questionnaires were received. The responses were screened for completeness, double entries, consistency of responses, and then 400 were retained for final analysis (93.5% usable

response rate). The number of samples is considered sufficient for statistical analysis and hypothesis testing in mediation studies and other multivariate statistical methods.

The survey was done on a voluntary basis. Participants in the study were given information regarding the purpose of the study, made aware of the anonymity and confidentiality of the data they would be providing and informed that the data they would provide would be used solely for academic research. Compliance was achieved with accepted standards of social science research by obtaining informed consent electronically from all participants and not gathering personally identifiable information.

4.4 Measurement of Variables

Table 2: Measurement of Study Variables

Variable Type	Variable Name	Measurement Dimensions	Scale Type
Independent Variable	Digital Platform Usage (DPU)	Frequency of use, intensity of use	Likert scale
Mediating Variable	Communication Quality (CQ)	Communication clarity, responsiveness, effectiveness	Likert scale
Dependent Variable	Interpersonal Interaction (II)	Perceived engagement, interaction satisfaction	Likert scale

The investigation is based on initial information gathered from people who regularly communicate electronically. A structured survey, which was disseminated via online platforms, was used to collect data. Limited time and portability concerns led to selecting a comfort mode of sampling. The sample size of four hundred was deemed sufficient for the empirical testing of mediators in that larger numbers of subjects would lead to more precise findings and increased generalizations and reliability of findings in managerial and interpersonal investigations. Fully completed opinions were used for the final assessment only because data accuracy and reliability was ensured.

As noted in Table 2, all variables studied were assessed on scales with multiple items which were created and modified for the needs of platforms of digital interaction. Digital media use was seen as autonomous and was quantified by indicators of the amount and extent of software use. The quality of interaction was expressed and evaluated as the mediator of interacting, using metrics of general communication success, agility and conveying conciseness. The estimated involvement, along with items that measured contentment, were used to assess the personal conversation that was viewed as the dependent variable. By evaluation every statistic on a five point Likert scale, which went from 1 (strongly disagree) to 5 (strongly agree), the participants were able to express how much they agree with every point of view.

4.5 Data Analysis Techniques

Inferential and Descriptive statistical techniques were used to analyse the collected data. To examine the relationship of the research components, the presence and absence of indirect connections between the components were examined in accordance with established conciliation test procedures, using mediation evaluation. Validity and reliability tests were carried out before the test was conducted to make sure that the measurement method would be robust in testing hypotheses.

5. Results and Discussion

The results of empirical research of the information collected are presented and discussed with respect to the initial and connecting implications of the interactions between persons, communication standard and computing systems usage.

5.1 Respondent Profile and Descriptive Statistics

The statistical description of the main research variables and the characteristics of the subjects are shown in table 3. Fig. 2, a graph with a that shows the gender specific breakdown of those who responded, shows a fairly equivalent illustration of the men (53%) and female (47%) who responded. A great deal of those surveyed are between the decades of 25 and 34, with the 35–44 age group ranking in second, according to the socioeconomic makeup of the

those interviewed displayed in Fig. 3. The party that is the most responsive in terms of profile, that is, regular consumers of digital media, shows a marked predominance of membership in the 25-34 age group and even is in terms of gender. The fairly high mean scores for digital medium usage ($M = 3.82$), the quality of communication ($M = 3.94$), and social interaction ($M = 3.76$) indicate that the participants frequently use digital mediums and in general believe the exchange is effective, according to the statistical analyses. It's captivating to note that the level of interaction has the greatest average, indicating that it is believed to be essential for facilitating beneficial online conversations. The fairly limited ranges for each parameter suggest good responses and also help the collection's ability to be further analyzed, including for mediation. With the rise of popularity of digital systems, these first findings give good indications that the qualitative aspects of communication could be more important in improving the outcomes of humane relationships, despite this.

Table 3: Respondent Profile and Descriptive Statistics

Category	Description	Frequency (n = 400)	Percentage (%)
Gender	Male	212	53.0
	Female	188	47.0
Age Group	Below 25 years	96	24.0
	25–34 years	158	39.5
	35–44 years	102	25.5
	Above 44 years	44	11.0
Digital Platform Usage (Mean $\pm$ SD)	—	3.82 ± 0.71	—
Communication Quality (Mean $\pm$ SD)	—	3.94 ± 0.68	—
Interpersonal Interaction (Mean $\pm$ SD)	—	3.76 ± 0.73	—

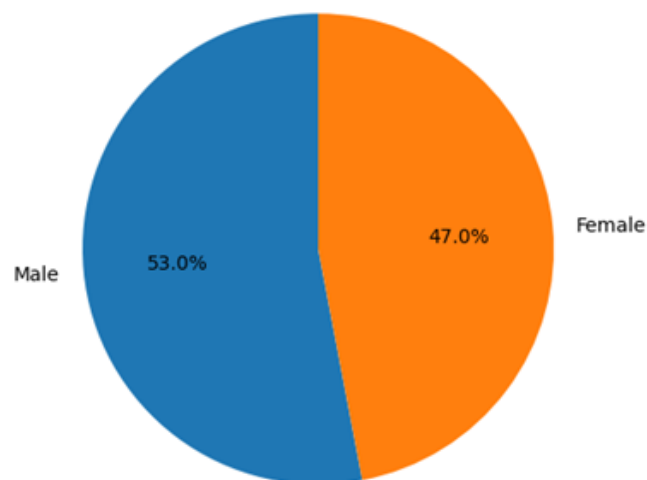


Fig 2: Gender-wise distribution of respondents

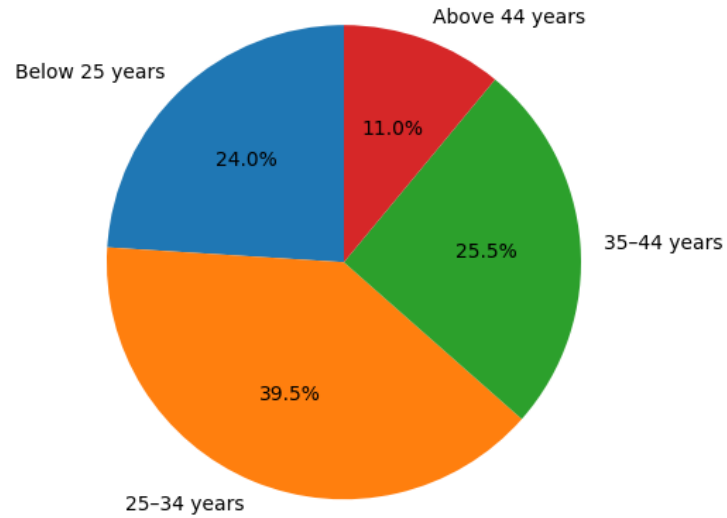


Fig 3: Age-wise distribution of respondents

5.2 Measurement Model Assessment (Reliability and Validity)

Table 4: Reliability and Validity Assessment of Measurement Model

Construct	No. of Items	Cronbach's Alpha	Composite Reliability (CR)	AVE
Digital Platform Usage (DPU)	4	0.84	0.88	0.65
Communication Quality (CQ)	5	0.89	0.92	0.70
Interpersonal Interaction (II)	4	0.86	0.90	0.68

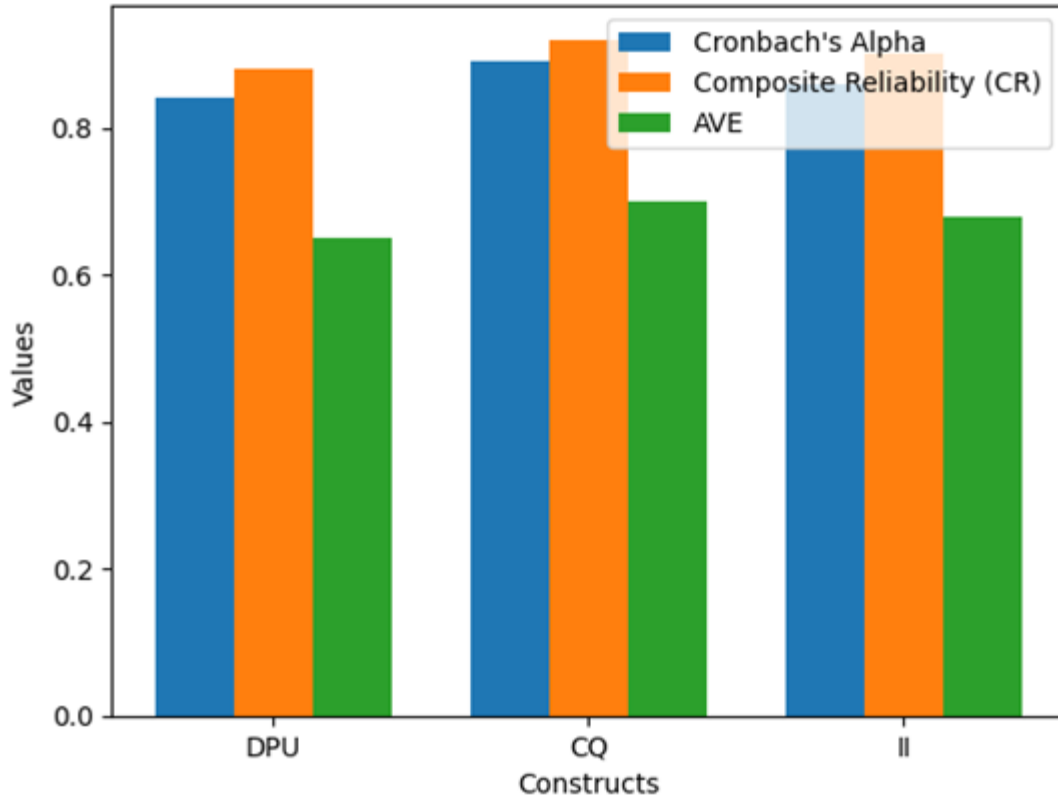


Fig 4: Reliability and validity assessment of the measurement model

The results of the reliability and validity of the estimation model are shown in Table 4, which shows cronbach's alpha and the composite reliability (CR) for each construct as well as the average variance extracted (AVE). As shown in Fig. 4, it can be seen that each of the items met the recommended level of Cronbach's α (>0.70), composite reliability (>0.70), and AVE (>0.50), demonstrating satisfactory accuracy and validity in terms of convergence. The accuracy and reliability of the measurement machine learning model were tested before the hypothesis test. Cronbach's alphas for all constructs were above 0.70, which is the threshold for a valid measurement scale. The Cronbach's alpha values for all constructs were above the recommended value of 0.70 signifying valid measurement scales. The composite consistency values show that the components are very durable (0.88-0.92). The validity of convergence is supported as all the AVEs for the variables are above the minimum value of 0.50. The concept of communication proficiency is the most consistent and valid one in terms of convergence and thus, has the intellectual value within the proposed arrangement. The results confirm the statistical and practical strength of the hypothesis of quantification, and its application to other evaluations of mediating and psychological relationships.

5.3 Correlation and Multicollinearity Analysis

Table 5: Correlation Matrix and Multicollinearity Assessment

Variables	DPU	CQ	II	VIF
Digital Platform Usage (DPU)	1.00	0.46**	0.32**	1.38
Communication Quality (CQ)	0.46**	1.00	0.58**	1.52
Interpersonal Interaction (II)	0.32**	0.58**	1.00	—

Note: ** $p < 0.01$

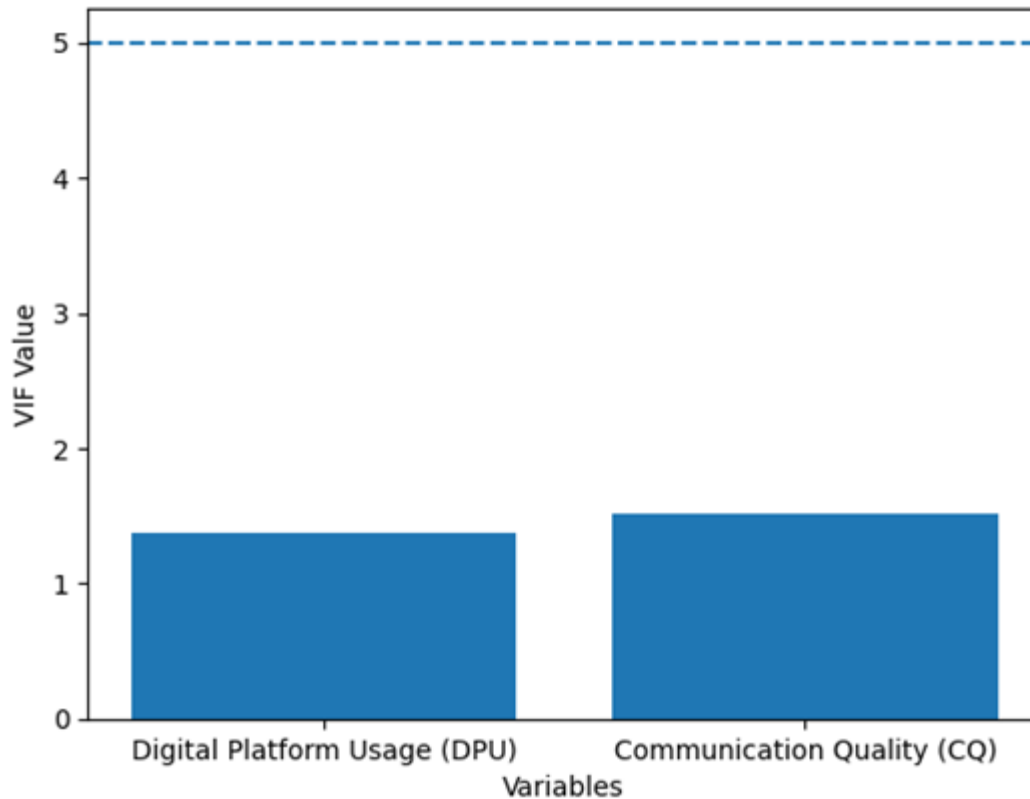


Fig 5: Multicollinearity assessment using variance inflation factor (VIF)

To check multicollinearity between the study variables, the variance inflation factor (VIF) values are presented along with the Pearson correlation coefficient values in Table 5. As can be seen in Fig. 5, no multicollinearity issues are found between the independent and mediating variables as all the VIF values are far below the suggested cutoff point of 5. According to results of correlation analysis, there is a positive and significant correlation between the use of digital platforms and interpersonal interaction ($r = 0.32$, $p < 0.01$), as well as communication quality ($r = 0.46$, $p < 0.01$). The interpersonal interaction and quality of communication are associated positively ($+0.58$, $p < 0.01$) and communication quality becomes a key factor in enhancing the interpersonal interaction in digital environment. The correlation coefficients are moderate indicating non-redundancy amongst the constructs, as the critical value of 0.80 is not met. Moreover, all of the Variance Inflation Factor (VIF) values are considerably less than the recommended value of 5.0, based on multicollinearity diagnostics, which suggests that the issue does not exist in the model. These results can inform further testing of hypotheses and indicate that the variables are suitable for mediation analysis using regression.

5.4 Direct Effects Analysis

Table 6: Direct Effects Regression Results

Hypothesized Path	β Coefficient	t-value	p-value	Result
Digital Platform Usage $\rightarrow$ Interpersonal Interaction	0.32	6.41	<0.001	Supported
Digital Platform Usage $\rightarrow$ Communication Quality	0.46	9.12	<0.001	Supported
Communication Quality $\rightarrow$ Interpersonal Interaction	0.58	11.37	<0.001	Supported

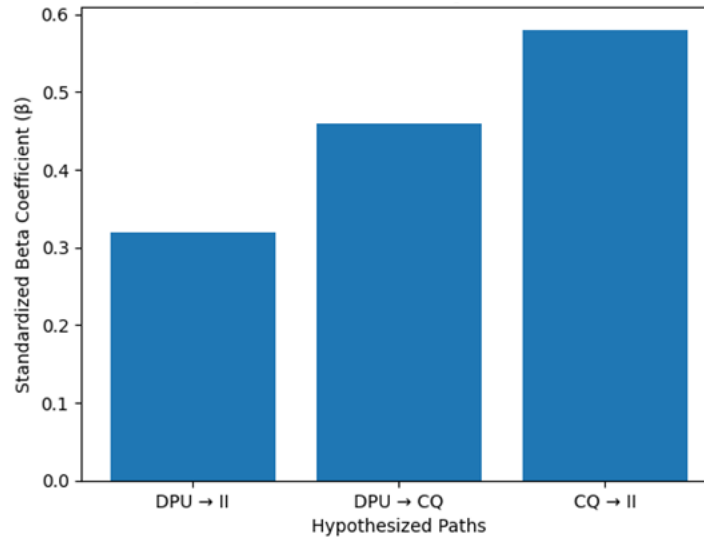


Fig 6: Direct effects of digital platform usage and communication quality

The results of the regression analysis looking at the direct effects between the study variables are shown in Table 6. The standardized direct effects of the study variables are presented in Fig. 6, showing that digital platform usage is the second most important factor that affects interpersonal interaction ($\beta = 0.58$), after communication quality. The result of the analysis of the direct effects that were obtained in the hypothesis test for hypothesis 1, namely that there is a significant relationship between using the digital platforms and interpersonal interaction, is presented in table 6 below. The results of the direct effects analysis obtained in the hypothesis test for hypothesis 1, that is that the use of digital platforms significantly increases interpersonal interaction, are presented in table 6 below. This indicates that the more digital is used, the better the results of interpersonal interaction. In addition, there was a strong link between the use of digital platforms and communication quality ($\beta = 0.46$, $p < 0.001$), suggesting that the greater the engagement with the platform, the more the quality of communication is perceived as good. The interdependence of communication quality and interpersonal interaction is supported by high and significant positive correlation ($\beta = 0.58$, $p < 0.001$) which indicates that communication quality had a strong contribution to interpersonal interaction. A preliminary indication of the potential mediating role of communication quality in the proposed model comes from the relatively higher coefficient for communication quality, suggesting that the impact of communication quality is greater than that of the other variables in the model in building interpersonal interaction.

5.5 Mediation Effect of Communication Quality

The findings of the mediation analysis looking at the indirect impact of using digital platforms on interpersonal interaction through communication quality are shown in Table 7. The relation between the use of digital platforms and interpersonal interaction is partially mediated by communication quality as it is revealed in Fig. 7. The mediation analysis results confirm that interpersonal interaction is significantly mediated by communication quality in the relationship between digital platform usage and interpersonal interaction. The positive and statistically significant indirect effect of digital platform use on interpersonal interaction through the communication quality ($\beta = 0.27$, $p < 0.001$) lend support to the third hypothesis. However, the direct effect of digital platforms on interpersonal interaction remains significant after the mediator is taken into account, but it is less pronounced, indicating partial mediator. The findings suggest that the more often digital platforms are used, the more interactions between people are fostered, but the more effective the interactions are the more effective the digital platform is. This confirms the findings from previous mediation studies on digital communication and management, namely that it is important for effectiveness, responsiveness and clarity in communication to ensure that the engagement on digital platforms is translated into valuable interpersonal communication.

Table 7: Mediation Analysis Results

Path	Effect Type	β Coefficient	t-value	p-value	Interpretation
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Digital Platform Usage → Interpersonal Interaction	Direct Effect	0.32	6.41	<0.001	Significant
Digital Platform Usage → Communication Quality	Indirect Path (a)	0.46	9.12	<0.001	Significant
Communication Quality → Interpersonal Interaction	Indirect Path (b)	0.58	11.37	<0.001	Significant
Digital Platform Usage → Interpersonal Interaction (with mediator)	Indirect Effect (a×b)	0.27	7.85	<0.001	Significant
Mediation Type	—	—	—	—	Partial Mediation

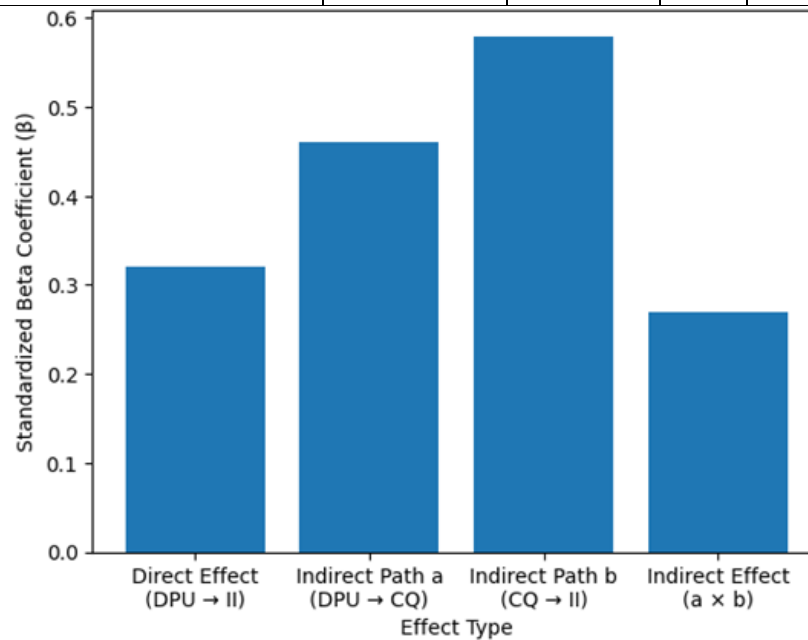


Fig 7: Mediation Effect of Communication Quality

5.6 Summary of Hypothesis Testing Results

Table 8: Summary of Hypothesis Testing Results

Hypothesis	Path	Result	Significance Level	Decision
H1	Digital Platform Usage → Interpersonal Interaction	Significant	p<0.001	Accepted
H2	Communication Quality → Interpersonal Interaction	Significant	p<0.001	Accepted
H3	Digital Platform Usage → Communication Quality → Interpersonal Interaction	Significant (Partial Mediation)	p<0.001	Accepted

Table 8 shows the results obtained from this research's theory experiment. There was actual proof backing up each of the suggestions put forth. In Fig. 8, all of the suggested hypotheses (H1–H3) were supported at $p<0.001$, which means that there were immediate and intangible associations. The results confirm Hypothesis 1 as it was revealed that the use of internet resources has a significant impact on interacting with others. In addition, it was found that the level

of contact was an important factor on social engagement which supported Hypothesis 2. Most importantly, the mediation exam confirmed Hypothesis 3, highlighting that a level to interact might partially reduce the links between the use of digital platforms and encounters with people. Together these findings highlight the importance of conversations enabled by technology as an indicator of how technology helps to facilitate human connection in addition to engagement. The results support the applicability of the techniques for mediation to managerial research, and highlight the role of the degree of interaction as a key process linking the adoption of computer technology and cultural implications.

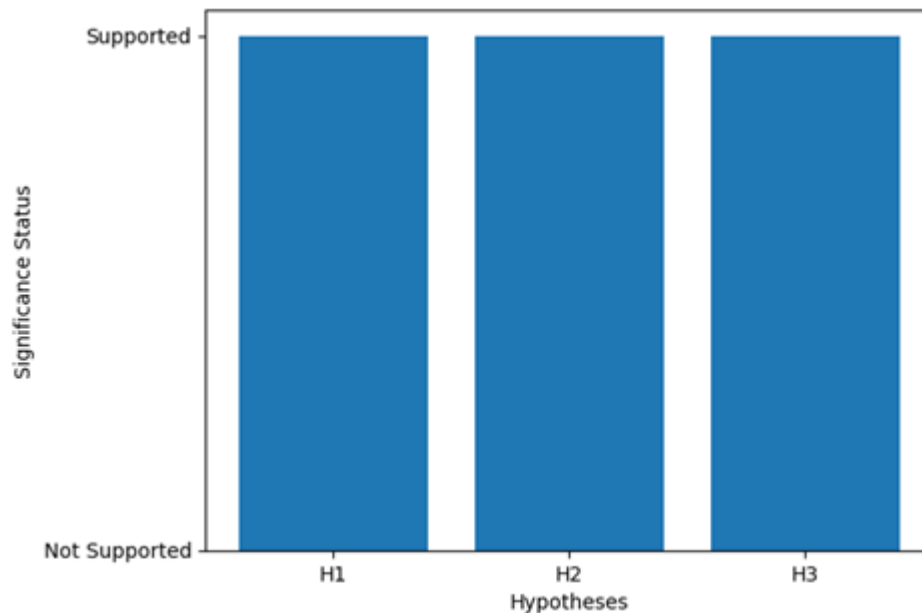


Fig 8: Summary of accepted hypotheses and mediation results

5.7 Discussion of Empirical Findings

The concrete results of the present analysis corroborate previous studies which have revealed the importance of medium usage and of unconventional communication strategies in order to build successful connections, profitable. The Internet impacts how people act, broadening deductions and opportunities to participate as reported by Baruah et al., (2025) [21] and Liu et al., (2025) [24] align with the study's important immediate findings of Internet device usage and its influence on relationship dynamics between individuals. The findings, like those of Wang et al. (2025) [28], however, show that the amount and time frame for activity on platforms can sometimes not translate into greater relationships that exists between people, highlighting the necessity of looking at shifting factors that impact the volume of messages. Good communication has significant and advantageous impact on personal relationships, which is consistent with the previous research that shows that there are three key variables in the relationship results in digital context: reactivity, clarity, communicative variety. This finding is consistent with the results achieved by Ramya and Alur (2025) [23] and Peng et al. (2025) [27] and Zhang et al. (2025) [29] who found that interpersonal quality and participation in technologically-assisted environment are greatly enhanced with parasocial relationships, willingness to respond, while confidence which affect viewed interactions. The findings from Liu et al., 2025 [26] further lend support to this particular study which focused on communication proficiency as an elementary relational phenomenon, as it was found that adaptation and interaction performance are dependent on personal interaction proficiency.

First, the confirmed mediation of the communication quality is in line with the current administration and technology studies mediation basically research. Asawawibul et al. (2025) [22], Meng et al. (2025) [25] and John et al. (2025) [30] found that this disconnect between digital and behaviour is narrowed by the connection with quality factors such as social distance, trust, and the effectiveness of contemporary technological use. This is consistent with their findings that this partial mediation effect is observed. By explicitly describing the excellence of communication as the mediator and providing empirical proof for a structured mechanism that enhances relationship building through the use of online channels, the present inquiry builds on previous research. This helps to enrich the human organism

of literature by emphasizing the effectiveness of communication as a key argumentative procedure in the research of electronic communication rather than a secondary aspect of it.

5.8 Limitations

- The study adopted a cross-sectional research design which makes it difficult to establish the causal relationship between interpersonal interaction, communication quality and usage of digital platform.
- The data were collected by convenience sampling (2), and may not be generalizable to other populations or organizational contexts.
- Self-reported measures may lead to response bias because participants' perceptions may not necessarily meet the reality of their communication.

5.9 Practical and Managerial Implications

Organizational-Level Implication: Adoption of Digital Platforms can be accompanied by the systematic enhancement of Communication Quality through providing Training and Development initiatives that focus on message clarity, quick response and efficient digital communication rules and etiquette.

Implication for Platform and Service Design: Digital platform designers and service providers can enhance the outcomes of interpersonal communication by designing communication interfaces that are richer, more responsive and more user-friendly by using real-time feedback tools, better interaction cues and adaptive communication interfaces.

6. Conclusion

The current study tested a facilitator's role of good communication for determining the relationship between the use of technological site and relationships with other persons by using the data from 400 users of technological site. The findings revealed that the quality of communication has instant impact on the consequences of relationships, yet using technological tools has a positive impact in communicating with others. A mediation study shows that the relationship between the use of technology and making connections is somewhat mediated by the level of communication excellence. This implies that highly effective interactions are an essential way in which technological tools enable meaningful connections among humans. The examination builds on the existing literature on administration and internet chats by providing and presenting the Digital Communication Quality Mediation Framework (DCQ-MF) and providing practical suggestions for improving virtual relations.

Prospects for Future Research

Further studies can employ a range of sampling methods and longitudinal designs to affirm the mediation of communication quality in other organizational and digital settings.

Ethical Considerations

This study was carried out in a manner that took care of the ethical aspects. The aim of the study was explained to the respondents before the data were collected and they were assured that their participation was voluntary. All participants gave informed consent, and no personally identifiable information was collected in order to keep the information confidential and anonymous. Guarantees were given to respondents that their responses would only be used for academic research. The study ensured that the participants were free from any consequences of leaving the study and followed ethical guidelines for social science studies.

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