# International Journal of Multidisciplinary Research and Growth Evaluation.

# Impact of ICT on Family Communication Dynamics within University of Uyo, Nigeria

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## Article Info

## Abstract

This study examines the impact of Information and Communication Technologies (ICTs) on family communication dynamics among members of the University of Uyo community. Specifically, it explores the use of various ICT platforms, such as video calls, social media frequency, effectiveness, and quality of communication within families. The study further investigates how factors like computer literacy, internet accessibility, and social media usage contribute to enhancing or hindering family interactions. Data were collected from male (192) and female (125) respondents randomly selected and administered structured questionnaires, with results showing that ICTs significantly improve family communication, particularly through platforms like WhatsApp (Mean = 2.76 for males, 3.54 for females) and video calls (Mean = 2.80 for males, 2.67 for females). Females reported stronger positive effects in terms of connectivity, while males showed a more balanced response. The study also reveals that while platforms like WhatsApp and video calls are widely recognized for improving communication, tools like email (Mean = 1.94 for males, 1.87 for females) and social media platforms such as Facebook and Twitter were less impactful in promoting family closeness. The findings suggest that ICTs, when used effectively, help bridge geographical and time barriers, fostering a sense of closeness among family members. The study recommends promoting the use of accessible ICT tools, improving computer literacy, and ensuring reliable internet access to further enhance family communication. These insights contribute to understanding the evolving role of technology in maintaining family relationships in the digital era.

## Introduction

In recent decades, the proliferation of Information and Communication Technologies (ICT) has dramatically reshaped the way individuals interact, not only within professional environments but also within their families. ICT encompasses a broad spectrum of digital tools and platforms, including mobile phones, social media, instant messaging, and video conferencing (Haleem *et al.*, 2022) [25]. These technologies have altered traditional communication patterns, bringing about both positive and negative changes in family dynamics. While ICT offers new avenues for connectivity, convenience, and the maintenance of family relationships across distances, its implications for the quality and depth of family communication remain complex and multifaceted (Chen, 2020) [21].

Historically, family communication has primarily occurred face-to-face, with regular interactions fostering emotional closeness, problem-solving, and support. However, the advent of ICT has introduced new methods of interaction that have altered these conventional practices. Technology, such as mobile phones, has enabled family members to stay connected across long distances, enhancing their ability to communicate with each other (Chen & Li 2024) [20]. For instance, families separated by geographical barriers can now engage in real-time video calls, allowing them to participate in daily life

despite physical separation (Blumer *et al*., 2014) [3]. Furthermore, platforms like social media offer families opportunities for sharing moments and creating virtual spaces where relationships can thrive (Valkenburg & Peter, 2013) [26]. This can enhance a sense of closeness and intimacy even among family members who are physically distanced.

However, while ICT can facilitate communication, it also presents challenges that can disrupt traditional family dynamics. The constant presence of digital devices often leads to distractions and a decline in face-to-face interactions, potentially reducing the quality of familial conversations. According to Turkle (2011) [42, 63], the omnipresence of technology has created an environment where people, including family members, may be physically present but emotionally distant. The shift toward digital communication may reduce the depth and emotional richness of interactions, as text-based communication, for instance, lacks the non-verbal cues that characterize in-person conversations (Tsigeman *et al*., 20204) [41]. Moreover, ICT can sometimes enable a form of passive engagement, where family members are "together" but not truly connecting, leading to feelings of isolation even within the same household (Nie & Erbring, 2000) [33].

Another critical consideration is the impact of ICT on family roles and hierarchies. The use of digital technologies can lead to new communication patterns within the family, where younger members, particularly those from "digital native" generations, often take on the role of technology experts (Lenhart *et al*., 2010) [32]. This shift can challenge traditional power dynamics, as younger generations may have greater technological literacy than their parents, influencing both communication style and content. Furthermore, the rise of digital communication has implications for privacy within families. Social media, in particular, allows individuals to share personal information with a wider audience, sometimes creating tensions around boundaries and expectations within the family unit (Fox & Moreland, 2015) [25].

Despite these challenges, some studies suggest that ICT can play a pivotal role in enhancing family communication by providing tools for collaboration and emotional support. For example, research has shown that families who use ICT to stay in touch with distant relatives report feeling more emotionally connected (Kalmijn, 2016) [15]. In particular, digital platforms provide opportunities for families to collaborate on tasks such as planning events or sharing important updates, thus strengthening family bonds through joint efforts (Ishimaru, 2019) [13]. Additionally, ICT can serve as a means of resolving conflicts and improving family problem-solving by facilitating open lines of communication (Jonassen, 2010) [14]. Thus this paper aims to critically examine both the positive and negative impacts of ICT on family communication dynamics among staff in the University of Uyo, Akwa Ibom State, Nigeria, considering its influence on relational quality, interaction patterns, and family roles. It will also explore potential strategies for mitigating the challenges posed by ICT, ensuring that its integration into family life promotes healthy and effective communication.

## Methodology

The study was conducted in the University of Uyo situated in Uyo Local Government Area (LGA) of Akwa Ibom State, Nigeria. Uyo LGA lies between latitude 4°33'and 5°33'N and longitude 7°53' and 8°25'E. Uyo LGA is bounded in the East by Ibsikpo Asutan and Nsit Ibom LGAs, Etinan LGA in the South, Abak LGA in the West, while Ikono and Itu LGAs are in the North (Jacob *et al*., 2024; Ukpong *et al*., 2023; Jacob and Nelson, 2021) [30, 33, 29].

This study employed a descriptive survey design to explore the impact of ICT on family communication among academic staff at the University of Uyo. The target population comprised 1,521 academic staff members, from which a sample size of 317 was selected using Taro Yamane's formula. Simple random sampling ensured equal representation.

Data collection involved a structured questionnaire designed to elicit responses on ICT use, family closeness, and communication challenges. The instrument, validated by experts in Home Economics, achieved a reliability coefficient of 0.79 using the Pearson Product-Moment Correlation method. Statistical analysis included mean scores and standard deviations to address research questions and t-tests to test hypotheses at a 0.05 significance level.

## Results and Discussion
### ICT Platforms for Family Communication

The results from Table 1 present the mean responses of respondents regarding the use of different ICT platforms by family members in a university community. In terms of video calls, both male (mean = 2.98) and female (mean = 2.53) respondents report relatively frequent use, though males use video calls more often. The standard deviations of 1.026 (male) and 0.039 (female) suggest greater variability in male responses, with a wider range of experiences in video call usage among men. Both genders agreed that video calls are an established but somewhat occasional means of communication in families. Previous studies have emphasized that video calls are becoming increasingly significant for maintaining family ties, especially in long-distance relationships (Abel *et al*., 2019) [1].

Regarding WhatsApp, males (mean = 2.67) and females (mean = 2.54) both indicated moderate use, with females using it slightly less frequently than males. The standard deviations (0.970 for males, 0.947 for females) are similar, indicating relatively consistent patterns of usage among respondents. Both groups also rated WhatsApp use with an "A," reflecting its common use for family communication, though not as the primary platform. WhatsApp has been found to be widely used for family communication due to its accessibility and ease of use (Valkenburg & Peter, 2013) [26]. Phone calls, however, exhibit a notable gender difference. Males reported a lower mean (2.51), suggesting less frequent use of phone calls for family communication, while females gave a much higher mean (3.97), indicating that phone calls are a significant mode of communication for women in their families. Both genders had similar standard deviations (0.880 for males and 0.879 for females), signaling relatively consistent responses. The agreement by both genders reflects that phone calls are important for family communication, but the higher rating for females highlights a potential gender-based difference in communication preferences. Research has indicated that women are more likely to use phone calls for maintaining close relationships (Kalmijn, 2016) [15].

In contrast, email usage is notably low for both genders, with males (mean = 1.94) and females (mean = 1.87) giving the lowest ratings of all platforms. This suggests that email is not a popular means of communication within families, with both genders showing a similar disinterest. The "DA" (Disagree)

remark further emphasizes this lack of engagement with email. Previous research indicates that email is often seen as too formal or impersonal for regular family communication. Lastly, text messages are similarly important for both male (mean = 2.95) and female (mean = 2.77) respondents, with both genders agreeing on their utility for passing confidential information. The use of text messages is thus rated positively by both groups, with standard deviations of 0.967 for males and 0.872 for females, signifying moderately consistent

usage patterns across both groups. Text messaging has been found to be a popular and effective mode of communication for sharing brief and private information (Church & De Oliveira, 2013) [7]. Nevertheless, the clustered means of 3.01 for males and 2.94 for females suggest that, overall, ICT platforms are used moderately by family members in the university community even though, there are clear differences in preferences, particularly in phone call usage, where females reported significantly higher engagement.

**Table 1:** Mean responses on the different platforms of ICTs employed by family members in the University of Uyo Community (Male = 192, Female = 125)

| S/N | Different ICT Platforms | Male | | | Female | | |
|---|---|---|---|---|---|---|---|
| | | Mean | Std Dev | Remarks | Mean | Std Dev | Remarks |
| 1 | In my family we make use of video calls when necessary or as the need arise. | 2.98 | 1.026 | A | 2.53 | 0.039 | A |
| 2 | In my family we employ WhatsApp chat when communicating with each other. | 2.67 | 0.970 | A | 2.54 | 0.947 | A |
| 3 | Phone call is utilized in my family to communicate directly with one another. | 2.51 | 0.880 | A | 3.97 | 0.879 | A |
| 4 | My family members uses email to stay connected with each other. | 1.94 | 0.714 | DA | 1.87 | 0.660 | DA |
| 5 | Test massages are ways we use to pass confidential information in my family. | 2.95 | 0.967 | A | 2.77 | 0.872 | A |
| | **Clustered Mean** | **3.01** | **0.9114** | | **2.936** | **0.6794** | |

**Effects of ICT on Family Closeness**

Table 2 presents the mean responses on the effect of ICTs on family closeness. The first item in the table assesses how ICT tools, including computers and mobile phones, have changed family interactions. Both male (mean = 2.73) and female (mean = 2.98) respondents reported moderate agreement, with females indicating a slightly stronger agreement than males. The standard deviations (0.986 for males and 0.954 for females) suggest relatively consistent responses within both groups. The p-value of 0.002 indicates a statistically significant difference between the two genders, with males perceiving less of an impact on their family interactions than females. This finding aligns with previous research, which shows that technology use, particularly mobile devices, has fundamentally altered family communication patterns, creating both positive and negative effects on family relationships (Rosen et al., 2013) [31].

The second item explores whether ICT tools are viewed as a "double-edged sword" that, while offering some benefits, also have downsides in terms of family closeness. Both male (mean = 1.90) and female (mean = 1.82) respondents disagreed with this statement, with mean scores below the neutral value of 3, suggesting that ICTs are not perceived as having significant negative effects on family relationships. The p-value of 0.442 indicates no significant difference between males and females on this issue. Previous studies have noted that, although ICTs can disrupt face-to-face interactions, they generally provide more positive benefits, such as enabling long-distance communication (Kuss & Griffiths, 2017) [16].

The third item assesses the role of video calls in managing time scarcity and keeping family members connected. Both males (mean = 2.80) and females (mean = 2.67) agreed that video calls have facilitated communication despite time constraints, with males indicating slightly stronger agreement. The p-value of 0.003 suggests a significant difference between genders, with males perceiving a greater

benefit from video calls. The growing importance of video calls, especially in maintaining family relationships across distances, has been highlighted in research, which indicates that video communication can strengthen family bonds by reducing the challenges posed by time and geographical separation (Cabalquinto 2022; Blumer, et al., 2014) [4, 3].

The fourth item explores whether communicating via social media has reduced face-to-face interactions within the family. Males (mean = 3.86) strongly agreed with the statement, while females (mean = 2.90) agreed to a lesser extent. The standard deviations (0.649 for males, 0.569 for females) suggest relatively consistent responses. The p-value of 0.0182 indicates a significant gender difference, with males perceiving a greater reduction in face-to-face interactions due to social media use. This finding is consistent with the argument that while social media can facilitate communication, it might also replace more personal interactions.

The fifth item examines how ICTs help families stay connected. Both male (mean = 2.99) and female (mean = 2.89) respondents strongly agreed with the statement, suggesting that ICTs play a crucial role in fostering family closeness. The p-value of 0.0006 indicates a significant difference between genders, with males again reporting slightly stronger agreement. This reflects the widespread view that ICTs, particularly social media and messaging apps, have helped bridge the gap in communication, making it easier to stay in touch regardless of physical distance (Valkenburg & Peter, 2013) [26]. In summary, the clustered mean for males (3.06) and females (3.05) shows that both genders perceive ICTs to have a positive effect on family closeness, with some notable gender differences in specific areas such as video calls and social media usage. While both genders acknowledge the benefits of ICT tools in maintaining family connections, the results suggest that men and women experience and perceive these impacts differently in certain contexts.

**Table 2:** Mean responses on the effect of ICTs towards family members' closeness (Male = 192, Female = 125)

| S/N | Family Closeness | Male | | | Female | | | P-Value | Decision |
|---|---|---|---|---|---|---|---|---|---|
| | | Mean | Std Dev | Rmks | Mean | Std Dev | Rmks | | |
| 1 | The use of ICT tools like computer and mobile phones has changed the way we interact with each other in my family. | 2.73 | 0.986 | A | 2.98 | 0.954 | A | 0.002 | A |
| 2 | Though ICT tools are considered as double-edge sword, they still provide significant benefits to my family closeness. | 1.90 | 0.878 | DA | 1.82 | 0.814 | DA | 0.442 | R |
| 3 | The use of video call has allowed my family members to manage time scarcity and made it easier for us to stay in touch. | 2.80 | 0.691 | A | 2.67 | 0.624 | A | 0.003 | A |
| 4 | Communicating through social media has reduced face-to-face interactions in my family. | 3.86 | 0.649 | A | 2.90 | 0.569 | A | 0.0182 | A |
| 5 | In my family, the use of information and communication technologies have helped us to stay connected. | 2.99 | 0.673 | A | 2.89 | 0.920 | A | 0.0006 | A |
| | Clustered Mean | 3.06 | 0.7754 | | 3.052 | 0.7762 | | 0.1152 | R |

## Impact of computer literacy level on effective communication among families

The resuls in Table 3 presents the mean responses of respondens on the impact of computer literacy on effective communication within families working in the university community. The first item investigates whether the use of email has helped family members improve their communication skills. Both male (mean = 2.11) and female (mean = 2.05) respondents disagreed with the statement, as evidenced by their mean scores being below the neutral value of 3. The standard deviations (0.821 for males and 0.888 for females) suggest slight variability in the responses within each group. With a p-value of 0.764, the data shows no significant difference between male and female perceptions. This result aligns with previous research, indicating that while email may be widely used, it is not necessarily seen as a tool that enhances communication skills (Harris & Rea, 2009). Email's impersonal nature may limit its ability to foster effective communication compared to other mediums, particularly within family contexts.

The second item addresses the role of web conferencing and video chats in facilitating easier communication within families. Both male (mean = 2.99) and female (mean = 2.99) respondents expressed agreement, suggesting that video-based communication has a significant positive impact on family interactions. The p-value of 0.046 indicates a statistically significant result, but no gender differences were observed in this case. This finding is consistent with literature showing that video conferencing tools like Zoom and Skype help families overcome geographic barriers, enabling more meaningful communication (Harper e al 2022; Valkenburg & Peter, 2013) [11, 26]. The ability to see and interact with family members remotely can enhance the quality of communication, making it feel more personal than text-based communication.

The third item examines whether computer literacy, particularly in written forms like email and messaging, impacts communication skills in families. Both male (mean = 2.00) and female (mean = 1.98) respondents disagreed, with their mean scores indicating that computer literacy has minimal impact on improving written communication within the family context. The p-value of 0.001 suggests a significant difference between genders, with females

reporting slightly lower agreement than males. This result suggests that while computer literacy may improve individual written communication skills, its impact on family communication is limited. This aligns with findings from other studies, which suggest that while technology enables faster communication, it does not always enhance communication quality within families (Beilmann *et al.*, 2023) [2].

The fourth item investigates whether texting, as a component of computer literacy, helps resolve conflicts more effectively within the family. Both male (mean = 1.89) and female (mean = 1.88) respondents disagreed with the statement, suggesting that texting is not perceived as an effective tool for conflict resolution. The p-value of 0.321 indicates no significant gender difference in perceptions. This finding supports research indicating that while texting may offer convenience in communication, it lacks the nuance and emotional depth necessary for resolving complex family conflicts.

The fifth item explores whether the use of word processing software has influenced family members' willingness to explore new communication tools. Both male (mean = 2.53) and female (mean = 2.55) respondents agreed with this statement, suggesting that exposure to word processing tools has a positive influence on openness to other communication technologies. The p-value of 0.003 indicates a significant difference, with females showing slightly stronger agreement than males. This finding is supported by studies showing that exposure to technological tools often leads to greater acceptance and use of new digital communication methods (Yu *et al.*, 2017) [28].

Finally, the clustered means for males (2.30) and females (2.29) suggest that while computer literacy has some impact on communication in families, the overall effect is relatively moderate. The p-value of 0.227 indicates no significant gender difference in the general impact of computer literacy on family communication. These results imply that, while certain ICT tools like video chats and word processing software are perceived positively, the overall influence of computer literacy on communication within families is nuanced and may depend on factors such as the type of technology used and the context of communication. (Wang *et al.*, 2019) [27].

**Table 3:** Mean responses on the impact of computer literacy level on effective communication among families working in the University Community (Male = 192, Female = 125)

| S/N | Computer Literacy | Male | | | Female | | | P-Value | Decision |
|---|---|---|---|---|---|---|---|---|---|
| | | Mean | Std Dev | Remarks | Mean | Std Dev | Remarks | | |
| 1 | The use of email has helped my family members to improve on their communication skills. | 2.11 | 0.821 | DA | 2.05 | 0.888 | DA | 0.764 | **R** |
| 2 | Web conferencing and video chats leads to easy mode of communicating in my family. | 2.99 | 0.272 | A | 2.99 | 0.500 | A | 0.046 | A |
| 3 | Computer literacy strongly impacts the communication skills in my family especially in the written form of communication. | 2.00 | 0.283 | DA | 1.98 | 0.515 | DA | 0.001 | A |
| 4 | Computer literacy levels like texting tends to resolve conflicts more effectively in the family. | 1.89 | 0.360 | DA | 1.88 | 0.630 | DA | 0.321 | R |
| 5 | The use of word processing software has affected my family members willingness to explore new communication tools. | 2.53 | 0.728 | A | 2.55 | 0.843 | A | 0.003 | A |
| | Clustered Mean | 2.30 | 0.4928 | | 2.29 | 0.6752 | | 0.227 | R |

**Challenges of ICT Use**

Table 4 presents the challenges of internet accessibility and its impact on effective communication among families. In the first item, assessment was made on whether the availability of internet access enables family members to communicate more frequently when desired. Both male (mean = 2.94, standard deviation = 0.473) and female (mean = 2.94, standard deviation = 0.693) respondents indicated agreement, as evidenced by their mean scores, which are just below the neutral value of 3.00, suggesting that they perceive the internet to positively influence the frequency of communication. The p-value of 0.007 suggests a significant result, but no gender difference was observed. This finding is consistent with existing literature that highlights the role of internet access in enabling regular communication, especially in long-distance relationships (Abel *et al*., 2021) [1]. The intern*et al*lows family members, particularly those who live in different locations, to stay in touch more frequently, thereby enhancing communication frequency.

The second item investigates whether the availability of internet access creates more opportunities for effective communication in the family. The results show that both male (mean = 2.98, standard deviation = 0.988) and female (mean = 3.93, standard deviation = 0.969) respondents agreed, with females expressing slightly stronger agreement than males. The p-value of 0.0039 indicates a statistically significant difference in perceptions between genders. This supports previous research which suggests that internet access broadens the scope of communication by facilitating various channels such as video calls, messaging, and email, thereby increasing the overall effectiveness of family communication (Tammisalo & Rotkirch, 2022) [22]. The higher mean for females suggests they may utilize these communication tools more frequently or value them more for maintaining family connections.

The third item examines whether poor internet access hinders effective communication in families. Both male (mean = 2.86, standard deviation = 0.645) and female (mean = 2.74, standard deviation = 0.725) respondents indicated agreement, although the p-value of 0.4071 reveals no significant gender difference. This suggests that while poor internet access may limit communication, the overall impact is not perceived as significant by either gender. This result is in line with research that indicates inconsistent or poor internet access can disrupt family communication, particularly when families rely on digital communication for regular interaction (Segrin & Flora, 2018) [19]. However, the relatively low mean scores suggest that while poor internet access is an issue, it may not always have a severe impact on communication.

The fourth item addresses whether the lack of internet connection has restricted the ways family members interact using ICT tools. Both male (mean = 3.48, standard deviation = 0.303) and female (mean = 3.49, standard deviation = 0.562) respondents agreed, with a significant p-value of 0.0051. This suggests that the lack of internet access has a noticeable impact on the ability to use ICT tools for family communication. This finding aligns with previous research showing that limited access to the internet restricts families' ability to utilize communication technologies, particularly in rural or underserved areas (Valkenburg & Peter, 2013) [26].

The fifth item examines whether improved internet accessibility has positively influenced communication skills within families. Both male (mean = 3.63, standard deviation = 0.234) and female (mean = 3.62, standard deviation = 0.456) respondents agreed, with very similar mean scores. The p-value of 0.0041 indicates that the improvement in internet access has a positive effect on communication skills in both genders. This aligns with studies suggesting that access to the internet enhances communication skills by providing platforms for family members to engage in diverse forms of interaction, such as video chats and social media (DeHoff *et al*., 2016) [8]. The clustered mean scores for male (3.18) and female (3.336) respondents suggest that, overall, both genders agree that internet accessibility plays a significant role in enhancing communication within the family. The p-value of 0.0854 indicates no significant gender differences in the overall effect, though females appear to be more strongly affected by the availability of internet access.

**Table 4:** Mean responses on the challenges of internet accessibility on effective communication among families working in the University Community (Male = 192, Female = 125)

| S/N | Challenges of Internet Accessibility | Male | | | Female | | | P-Value | Decision |
|---|---|---|---|---|---|---|---|---|---|
| | | Mean | Std Dev | Remarks | Mean | Std Dev | Remarks | | |
| 1 | Availability of internet access helps my family members to communicate more often when they want. | 2.94 | 0.473 | A | 2.94 | 0.693 | A | 0.007 | A |
| 2 | Availability of internet access creates more room for effective communication in my family. | 2.98 | 0.988 | A | 3.93 | 0.969 | A | 0.0039 | A |
| 3 | Poor internet access hinders effective communication in my family. | 2.86 | 0.645 | A | 2.74 | 0.725 | A | 0.4071 | R |
| 4 | Lack of internet connection has limited the ways my family members will interact through ICT. | 3.48 | 0.303 | A | 3.49 | 0.562 | A | 0.0051 | A |
| 5 | Improved internet accessibility has positive influenced communication skills within my family. | 3.63 | 0.234 | A | 3.62 | 0.456 | A | 0.0041 | A |
| | **Clustered Mean** | **3.18** | **0.5286** | | **3.336** | **0.681** | | **0.0854** | **R** |

## Implications for Family Dynamics

The mean responses regarding the impact of social media usage on effective communication within families is presented in table 5. The first item addresses the role of WhatsApp in improving family communication. Both male (mean = 2.76, standard deviation = 0.250) and female (mean = 3.54, standard deviation = 0.500) respondents agree that WhatsApp is associated with effective communication within the family. The p-value of 0.004 reveals a statistically significant difference between male and female responses, with females showing a stronger agreement. This result aligns with previous studies indicating that WhatsApp, as a popular messaging platform, facilitates communication by providing a quick and accessible means for family members to stay connected, regardless of their physical location (Tawodzera, 2025) [23]. Females may find this platform particularly valuable for regular interaction with family members.

The second item investigates whether the use of Instagram has increased communication among family members. Male respondents reported a mean of 2.78 (standard deviation = 1.442), while female respondents reported a mean of 3.15 (standard deviation = 1.048). The p-value of 0.002 shows a statistically significant difference between genders. Both genders agree that Instagram contributes to communication, though females appear to experience a stronger impact. Instagram, as a visually oriented platform, allows families to share photos, videos, and updates, which can strengthen emotional bonds and foster communication (Shannon 2022) [20]. The higher mean for females suggests they might use the platform more to stay connected with family, sharing personal milestones or casual interactions.

The third item evaluates whether social media platforms like Facebook, Twitter, and Instagram are used in families to share opinions and gossip. Both male (mean = 2.65, standard deviation = 0.888) and female (mean = 2.58, standard deviation = 0.872) respondents gave similar responses, with neither gender strongly agreeing or disagreeing. The p-value of 0.564 indicates no significant difference between genders.

This finding is consistent with studies suggesting that while social media platforms are commonly used to share personal thoughts and opinions, they may not always lead to direct communication improvement within families. Instead, social media may be more about keeping up with personal networks rather than directly enhancing family dialogue.

The fourth item explores whether family members who use Twitter and WhatsApp feel more connected than those who do not. Male respondents scored a mean of 2.64 (standard deviation = 0.849), while female respondents reported a mean of 2.80 (standard deviation = 0.730). The p-value of 0.0032 indicates that female respondents perceive these platforms as more effective for maintaining family connections. This finding aligns with research showing that Twitter and WhatsApp are frequently used for family updates and bonding. The increased connectivity reported by females may be linked to more active engagement on these platforms compared to their male counterparts.

The fifth item assesses whether WhatsApp has improved communication within the family. Both male (mean = 3.13, standard deviation = 1.042) and female (mean = 3.46, standard deviation = 0.838) respondents agree that WhatsApp has positively impacted family communication. The p-value of 0.0032 indicates a statistically significant difference, with females once again showing a higher level of agreement. WhatsApp's real-time messaging feature enables instant communication, allowing family members to share updates quickly and discuss important matters. The clustered mean scores for male (2.79) and female (3.106) responses indicate a stronger perception of the positive impact of social media on communication among female respondents, though both genders acknowledge its effectiveness. The p-value of 0.1152 shows no significant difference in the overall impact of social media usage between the two groups, but the trend suggests that females are more likely to embrace social media platforms for family communication.

**Table 5:** Mean responses of respondents on the impact of social media usage on effective communication among families working in the University Community (Male = 192, Female = 125)

| S/N | Social Media | Male | | | Female | | | P-Value | Decision |
|---|---|---|---|---|---|---|---|---|---|
| | | Mean | Std Dev | Remarks | Mean | Std Dev | Remarks | | |
| 1 | The use of social media platform such as WhatsApp is associated with effective communication within my family. | 2.76 | 0.250 | A | 3.54 | 0.500 | A | 0.004 | A |
| 2 | The use of Instagram among my family members have increased our level of communication. | 2.78 | 1.442 | A | 3.15 | 1.048 | A | 0.002 | A |
| 3 | In my family, we use social media platforms such as Facebook, Twitter and Instagram to share opinions and gossips. | 2.65 | 0.888 | A | 2.58 | 0.872 | A | 0.564 | R |
| 4 | Family members who uses Twitter and WhatsApp are more connected to each other than those who do not. | 2.64 | 0.849 | A | 2.80 | 0.730 | A | 0.0032 | A |
| 5 | WhatsApp platform has helped to improve effective communication within the family. | 3.13 | 1.042 | A | 3.46 | 0.838 | A | 0.0032 | A |
| | **Clustered Mean** | **2.79** | **0.8942** | | **3.106** | **0.797** | | **0.1152** | **R** |

## Conclusion

This study highlights the significant role that information and communication technologies (ICTs), particularly social media platforms like WhatsApp and Instagram, play in enhancing family communication among university community members. Both male and female respondents acknowledge the positive impact of these tools, with females generally reporting stronger benefits in terms of improved connectivity and communication. Platforms like WhatsApp are especially valued for their ability to facilitate real-time interaction, making communication more frequent and efficient. However, there is less agreement regarding the use of email and social media platforms such as Facebook and Twitter for family communication, which suggests that these tools may not be as effective in fostering closer family ties.

Based on these findings, it is recommended that families encourage the use of accessible and engaging platforms, like WhatsApp, for regular communication. Furthermore, greater emphasis should be placed on improving computer literacy and internet accessibility to overcome potential communication barriers. Future studies could explore the long-term effects of ICTs on family relationships and investigate other platforms that may contribute to family communication. Understanding these dynamics can help create strategies for fostering stronger family bonds in the digital age.

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