Mobile Phone Use and Family Communication Quality: A Semantic Investigation of Interpersonal Interaction

Imer Jul L. Ano-os[1], Mary Jean T. Berandal[2], Charity M. Corpuz[3], Anna Marie S. Estillore[4], Kristabel E. Loquias[5] , Dr. Glenda D. Libed[6*]

College of Information Technology and Computing and College of Science and Mathematics - Social Sciences Unit, University of Science and Technology of Southern Philippines, Philippines

Dr. Glenda D. Libed – Corresponding Author

DOI: https://doi.org/10.47772/IJRISS.2026.100601302

Received: 24 June 2026; Accepted: 29 June 2026; Published: 17 July 2026

ABSTRACT

This study examined the influence of semantics in mobile phone use on the quality of family interpersonal communication. Specifically, it described the respondents' demographic profile, examined how respondents characterize the use of semantics in English, Filipino, and Visayan across SMS and face-to-face communication, determined the frequency of interpersonal communication quality with family members in both communication modes, and tested whether semantics significantly affects family communication quality. Guided by sociolinguistic and communication theories, the study employed a descriptive-correlational design involving 120 purposively selected respondents who answered a validated questionnaire. Data were analyzed using descriptive statistics and multiple linear regression. Results show that respondents are predominantly late adolescents and generally perceive semantics in all three languages as acceptable, with Visayan consistently rated as the most effective in both SMS and face-to-face contexts. Interpersonal communication quality is generally rated from average to above average, with face-to-face interaction yielding higher ratings than SMS. Regression analysis reveals that semantics has a statistically significant but weak positive effect on communication quality. The study concludes that language use contributes to communication effectiveness, but relational and emotional factors remain more influential in family interaction. It is recommended that families and educators promote balanced multilingual communication while strengthening emotional engagement, active listening, and relational closeness to enhance overall communication quality.

Keywords: Mobile Phone Use; Family Communication Quality; Semantic Investigation; Interpersonal Interaction; Multilingual Communication

INTRODUCTION

Communication is a fundamental aspect of human interaction and serves as the foundation for building and maintaining relationships. Within the family, communication allows members to exchange information, express emotions, resolve conflicts, and strengthen interpersonal bonds. Effective communication promotes understanding, trust, and family cohesion, while ineffective communication may result in misunderstanding, tension, and relational conflict (Koerner & Schrodt, 2014). As communication technologies continue to evolve, family interaction has increasingly expanded beyond traditional face-to-face encounters to include technology-mediated communication such as text messaging and mobile communication.

The rapid advancement of mobile communication technologies has transformed the way individuals interact with one another. Cellular phones have become one of the most commonly used communication tools among adolescents and adults because they provide convenience, accessibility, and immediacy in exchanging information. According to recent reports, mobile phone ownership and smartphone usage continue to increase globally, particularly among adolescents and young adults who use mobile devices extensively for

communication with peers, friends, and family members (Pew Research Center, 2024). Through text messaging, individuals can communicate instantly regardless of time and distance, making cellular phones an integral part of daily communication practices.

Despite the benefits of mobile communication, concerns have emerged regarding the quality of communication that occurs through text-based platforms. Unlike face-to-face communication, text messaging lacks nonverbal cues such as facial expressions, gestures, body language, and tone of voice that help clarify the intended meaning of messages. Consequently, messages communicated through cellular phones may be interpreted differently by receivers than originally intended by senders (Kemp et al., 2021). Such differences in interpretation may lead to misunderstanding, confusion, and interpersonal conflict, particularly among family members who rely heavily on mobile communication to maintain relationships.

One important factor influencing message interpretation is semantics. Semantics refers to the study of meaning in language and the processes through which individuals understand, interpret, and assign meaning to words, phrases, and messages. Meaning is not solely determined by the words themselves but is influenced by context, culture, language, experience, and individual perception (Armingol, et.al., 2021). Consequently, a message that appears clear to a sender may be understood differently by a receiver. In mobile communication environments where contextual information is limited, semantic interpretation becomes particularly important because the possibility of ambiguity and misunderstanding increases.

The issue of semantic interpretation is especially relevant within family communication. Family members often communicate through cellular phones to discuss daily activities, express emotions, provide instructions, and maintain interpersonal relationships (McDaniel & Radesky, 2018; Uy-Tioco & Cabañes, 2021). However, when messages are interpreted differently from their intended meaning, misunderstandings may arise and affect the quality of family interpersonal communication (Walther, 2017; McDaniel & Radesky, 2018). Such communication difficulties may be further complicated in multilingual contexts where communicators use different languages, including English, Filipino, and Visayan (Caparas & Gustilo, 2017). Variations in language use may influence how meanings are constructed and understood, thereby affecting interpersonal communication among family members (Walther, 2017; Caparas & Gustilo, 2017).

Family interpersonal communication refers to the process by which family members exchange information, feelings, thoughts, and meanings through verbal and nonverbal interaction (Walther, 2017). Quality family interpersonal communication is characterized by openness, understanding, empathy, trust, mutual respect, and effective feedback. Strong family communication contributes to positive family functioning, emotional support, and relationship satisfaction, whereas poor communication may increase conflict and reduce family cohesion (Schrodt et al., 2008). In contemporary society, where family interactions increasingly occur through mobile communication technologies, understanding factors that influence communication quality has become increasingly important (McDaniel & Radesky, 2018; Uy-Tioco & Cabañes, 2021).

Because of these concerns, there is a need to investigate the role of semantics in cellular phone communication and its effects on the quality of family interpersonal communication. Examining how individuals interpret messages communicated through cellular phones and comparing these interpretations with face-to-face communication may provide valuable insights into communication processes within families. Such knowledge may help explain how semantic differences contribute to communication effectiveness or misunderstanding among family members (Walther, 2017).

This study is anchored on three complementary theoretical perspectives. First, the Meaning of Meaning Theory developed by Ogden and Richards explains that meanings are not inherent in words but emerge through the interaction among symbols, thoughts, and referents. According to this theory, individuals may attach different meanings to the same message depending on their experiences and perceptions (Ogden & Richards, 1923). Second, Communication Pragmatics Theory emphasizes that communication contains both content and relational dimensions, and misunderstanding occurs when communicators interpret messages differently or when relational and content dimensions are inconsistent (Watzlawick et al., 1967). Third, Technological Determinism

Theory suggests that communication technologies influence human behavior and social interaction patterns (McLuhan, 1964). The increasing use of cellular phones may therefore shape how family members communicate, interpret messages, and maintain relationships (McDaniel & Radesky, 2018).

Together, these theories provide a comprehensive framework for understanding how semantic interpretation in cellular phone communication may influence family interpersonal communication. The Meaning of Meaning Theory explains how meanings are constructed, Communication Pragmatics Theory explains how meanings affect relationships, and Technological Determinism Theory explains how communication technologies influence communication processes.

Guided by these theoretical perspectives, this study examines the effects of semantics communicated through cellular phones on the quality of family interpersonal communication. Specifically, this study seeks to determine: (1) the profile of the respondents in terms of selected demographic characteristics; (2) how respondents characterize the use of semantics in terms of Short Message Service (SMS) and face-to-face communication; (3) the qualities of interpersonal communication between respondents and family members when grouped according to text messaging and face-to-face interaction; and (4) whether semantics significantly affects the quality of family interpersonal communication.

Previous studies indicate that demographic factors may influence communication behaviors and message interpretation. Age, for instance, affects communication preferences and technology usage patterns. Adolescents and young adults are generally more comfortable using mobile communication technologies than older individuals, which may influence how messages are interpreted and understood (Pew Research Center, 2024). Likewise, gender differences have been associated with variations in communication style, emotional expression, and relationship maintenance. Research suggests that females tend to be more expressive and relational in communication, whereas males often demonstrate different communication patterns and interpersonal behaviors (Cross & Madson, 1997).

The importance of semantics in communication has also been highlighted in contemporary research. Semantic interpretation influences how individuals understand messages and respond to communicative situations. Because meaning is shaped by context and individual experience, the same message may produce different interpretations among different people (Riemer, 2010). In text messaging environments, the absence of contextual and nonverbal cues increases the possibility of semantic ambiguity and misunderstanding (Armingol et al., 2021). Consequently, understanding how individuals perceive and interpret messages communicated through cellular phones becomes essential in examining communication quality.

Communication medium likewise plays a significant role in message interpretation. Face-to-face communication enables communicators to utilize verbal and nonverbal cues simultaneously, facilitating greater understanding and reducing ambiguity. Conversely, text messaging relies primarily on written language, increasing the likelihood of misunderstanding and misinterpretation (Walther, 2017). These differences suggest that communication quality may vary depending on whether interaction occurs through text messages or face-to-face encounters.

On the broader communication landscape, the increasing use of smartphones and mobile communication technologies has introduced new dynamics in family interaction. While cellular phones facilitate communication and maintain connectedness among family members, excessive dependence on technology-mediated communication may reduce opportunities for direct interaction and increase communication difficulties (Merkaš, et. al., 2024). Similarly, recent studies have shown that technology-related communication behaviors can influence family relationship quality, communication satisfaction, and family cohesion (Liu et al., 2024).

Taken together, these studies suggest that family interpersonal communication may be influenced by demographic characteristics, semantic interpretation, communication medium, and technology-mediated communication practices. However, much of the existing literature has focused on smartphone use, communication frequency, technology dependency, and general family communication patterns. Fewer studies

have specifically examined the role of semantics in shaping family interpersonal communication. Moreover, limited research has compared semantic interpretation in SMS and face-to-face communication, particularly within multilingual environments involving English, Filipino, and Visayan languages. Likewise, studies investigating the effects of semantic interpretation on family interpersonal communication among senior high school students remain scarce within the Philippine context. Hence, this study seeks to address these gaps by examining how semantics communicated through cellular phones influences the quality of family interpersonal communication.

METHODOLOGY

Research Design

This study employed a quantitative cross-sectional descriptive-correlational research design to examine the influence of semantic interpretation in cellular phone communication on the quality of family interpersonal communication among Senior High School students. The descriptive component was used to characterize respondents' demographic profiles, perceptions of semantic interpretation in text messaging and face-to-face communication, and the quality of family interpersonal communication. The correlational component assessed the association between semantic interpretation and family interpersonal communication, while regression analysis was utilized to determine the predictive effect of semantic interpretation on communication quality.

Setting and Participants

The study was conducted at the University of Science and Technology of Southern Philippines (USTP), located in Cagayan de Oro City, Philippines. The target population consisted of Senior High School students aged 15 to 20 years who regularly utilized cellular phones as a primary mode of communication with family members.

Participants were selected because adolescents represent one of the most active user groups of mobile communication technologies and are therefore particularly susceptible to the communicative effects of semantic interpretation in digital environments. To minimize gender-related sampling bias, equal representation of male and female respondents was maintained.

Sample Size Determination

A total of 120 respondents participated in the study. Sample selection was conducted using a two-stage random sampling procedure. During the first stage, Senior High School sections were randomly selected. In the second stage, individual respondents were randomly chosen from the selected sections to ensure equal opportunity for participation.

To supplement the quantitative findings, six respondents (5% of the total sample) were randomly selected for semi-structured in-depth interviews. The qualitative component served to contextualize and substantiate the survey findings by exploring participants' experiences and interpretations of mobile-mediated communication within family settings.

Instrumentation

Data were collected using a researcher-developed questionnaire designed to measure semantic interpretation in cellular phone communication and its influence on family interpersonal communication.

The instrument consisted of two sections. The first section collected demographic information and assessed respondents' perceptions of semantic interpretation in messages communicated through Short Message Service (SMS) and face-to-face interaction. Respondents evaluated messages communicated in English, Filipino, and Visayan and reported their interpretations across communication contexts.

The second section measured the quality of family interpersonal communication and examined the perceived effects of semantic interpretation on communication with family members. Specifically, respondents assessed the frequency and quality of communication with their father, mother, and siblings and evaluated the extent to which semantic misunderstandings influenced interpersonal interactions.

To strengthen the interpretation of survey results, a semi-structured interview guide was developed and utilized during the qualitative phase of the study. The interview protocol explored participants' experiences with message interpretation, communication misunderstandings, and family communication dynamics.

Data Collection Procedure

Prior to data collection, approval was obtained from the appropriate academic authorities of the Senior High School Department. After securing institutional permission, the researchers coordinated with class instructors to schedule the administration of the survey.

Participants were informed about the objectives of the study, the voluntary nature of participation, and the confidentiality of their responses. Questionnaires were administered during regular class periods and collected immediately upon completion. Following the quantitative phase, selected respondents participated in semi-structured interviews to provide deeper insights into the quantitative findings.

Completed questionnaires were screened, coded, and encoded for statistical analysis. Interview responses were transcribed and used to support the interpretation of quantitative results.

Statistical Analysis

Data analysis was conducted using both descriptive and inferential statistical procedures. Descriptive statistics, including frequency counts, percentages, means, and standard deviations, were employed to summarize respondents' demographic characteristics, perceptions of semantic interpretation, and levels of family interpersonal communication.

Inferential analysis was performed using simple linear regression to determine the extent to which semantic interpretation predicted the quality of family interpersonal communication. The F-test was used to evaluate the overall significance of the regression model. Statistical significance was assessed at the 0.05 alpha level.

The qualitative interview data were analyzed thematically and were used to triangulate and enrich the interpretation of the quantitative findings.

FINDINGS AND DISCUSSIONS

Table 1 shows the percentage distribution of respondents according to age. The results indicate that most participants belong to the 15–17 age group, with 107 respondents (89.17%), representing late adolescents typically at the senior high school level. In contrast, only 13 respondents (10.83%) fall within the 18–20 age range, indicating a small proportion of older adolescents or young adults. Overall, the sample is heavily concentrated in the younger age group, showing an uneven age distribution dominated by mid-to-late secondary school learners.

Table 1. Percentage Distribution According to Age

Age	Frequency	Percentage
15-17	107	89.17
18-20	13	10.83
Total	**120**	**100.00**

The respondents are predominantly aged 15–17 years (89.17%), with only 10.83% belonging to the 18–20 age group, indicating that the sample is largely composed of late adolescents. This distribution suggests that the communication patterns observed in the study primarily reflect adolescent linguistic behavior, a developmental stage characterized by identity formation, heightened social interaction, and strong engagement in digital communication. Adolescents in this age range typically demonstrate greater flexibility in language use, particularly in multilingual and code-switching environments (Steinberg, 2017); Tagliamonte, 2016). Consequently, the findings are strongly grounded in youth communication practices rather than a balanced age representation. This has methodological implications for generalizability, as the dominance of one developmental stage may limit applicability to older age groups. It also indicates that observed semantic and interpersonal communication patterns are likely shaped by digital-native practices and evolving multilingual competencies common among Gen Z populations (Androutsopoulos, 2021; Creswell & Creswell, 2018).

Table 2 presents the frequency distribution of respondents' acceptance of English semantics in SMS communication across fathers, mothers, and siblings. For fathers, most responses fall under "Accepted" (50.00%), followed by "Neither Accepted" (26.67%), indicating moderate acceptance. Mothers show a similar pattern, with the majority also rated as "Accepted" (44.17%) but with a higher proportion of "Highly Accepted" (27.50%), suggesting slightly more positive perception. Siblings obtained the highest ratings, with "Highly Accepted" (43.33%) as the dominant response, indicating the strongest acceptance among the three groups. Overall, the grand mean of 3.90 reflects an "Accepted" interpretation, showing that English semantic use in SMS is generally viewed positively within the family, with siblings demonstrating the highest level of acceptance.

Table 2. Frequency Distribution in the Use of Semantics Using English Language in SMS

Description	Rating Scale	Father		Mother		Siblings	
		f	%	f	%	f	%
Highly Accepted	4.51- 5.00	20	16.67	33	27.50	52	43.33
Accepted	3.51- 4.50	60	50.00	53	44.17	36	30.00
Neither Accepted	2.51- 3.50	32	26.67	26	21.67	25	20.83
Unaccepted	1.51- 2.50	8	6.67	8	6.67	4	3.33
Highly Unaccepted	1.00- 1.50	0	0.00	0	0.0	3	2.50
Total		**120**	**100.00**		**100.00**	**120**	**100.00**

Grand Mean = 3.90 SD = 0.85 Description = Accepted

The findings show an overall "Accepted" level (M = 3.90), with siblings demonstrating the highest acceptance, followed by mothers and fathers. This indicates that English semantic use in SMS communication is generally viewed positively within family interactions and is particularly embraced by younger respondents. English functions as a dominant digital communication code due to its efficiency, global exposure, and adaptability in text-based interaction (Crystal, 2011; Thurlow & Mroczek, 2011). The higher acceptance among siblings reflects stronger digital literacy and familiarity with hybrid linguistic forms, while fathers' lower acceptance suggests generational differences in exposure and comfort with SMS-based communication styles. These results imply that English serves as a functional bridge language in digital family communication, enhancing speed and clarity but also reflecting shifting generational language preferences in multilingual households.

Table 3 presents the frequency distribution of respondents' acceptance of Filipino semantics in SMS communication across fathers, mothers, and siblings. For fathers, most responses fall under "Accepted" (40.00%), followed by "Neither Accepted" (30.00%), indicating moderate acceptance with a relatively higher neutral response. Mothers show a similar pattern, with "Accepted" (42.50%) as the highest category and a slightly higher proportion of "Highly Accepted" responses, suggesting a more positive perception than fathers. Siblings show the strongest acceptance, with "Accepted" (39.17%) and "Highly Accepted" (26.67%) dominating, and only small proportions in negative categories. Overall, the grand mean of 3.65 indicates an "Accepted" interpretation, showing that Filipino semantic use in SMS is generally acceptable, with siblings demonstrating the highest level of acceptance.

Table 3. Frequency Distribution in the Use of Semantics Using Filipino Language in SMS

Description	Rating Scale	Father		Mother		Siblings	
		f	%	f	%	f	%
Highly Accepted	4.51- 5.00	20	16.67	24	20.00	32	26.67
Accepted	3.51- 4.50	48	40.00	51	42.50	47	39.17
Neither Accepted	2.51- 3.50	36	30.00	28	23.33	24	20.00
Unaccepted	1.51- 2.50	12	10.00	14	11.67	11	9.17
Highly Unaccepted	1.00- 1.50	4	3.33	3	2.50	6	5.00
Total		**120**	**100.00**	**120**	**100.00**	**120**	**100.00**

Grand Mean = 3.65 SD = 1.00 Description = Accepted

The results indicate an overall "Accepted" level (M = 3.65), with siblings again showing the highest acceptance. Filipino SMS semantics are generally positively perceived, though slightly less dominant than English in the same context. This suggests that Filipino, while widely used and understood, is shaped by variability in usage patterns and increasing influence from bilingual and translanguaging practices (Garcia & Wei, 2014). The higher acceptance among siblings reflects greater adaptability to hybrid linguistic forms, while fathers demonstrate comparatively lower acceptance, indicating more traditional communication preferences. Overall, Filipino remains a functional medium in SMS communication, but its digital use increasingly coexists with English, reflecting the fluid multilingual nature of contemporary Filipino communication practices.

Table 4 presents the frequency distribution of respondents' acceptance of Visayan semantics in SMS communication across fathers, mothers, and siblings. For fathers, most responses fall under "Accepted" (35.83%) and "Highly Accepted" (30.83%), indicating generally positive acceptance. Mothers show a similar pattern, with "Accepted" (35.83%) and "Highly Accepted" (34.17%) as the dominant categories, reflecting strong receptiveness. Siblings show the highest acceptance, with "Highly Accepted" (36.67%) slightly exceeding "Accepted" (33.33%), and minimal negative responses. Overall, the grand mean of 3.94 indicates an "Accepted" interpretation, showing that Visayan semantic use in SMS is widely accepted across family members, with siblings exhibiting the highest level of acceptance.

Table 4. Frequency Distribution in the Use of Semantics Using Visayan Language in SMS

Description	Rating Scale	Father		Mother		Siblings	
		f	%	f	%	f	%
Highly Accepted	4.51- 5.00	37	30.83	41	34.17	44	36.67
Accepted	3.51- 4.50	43	35.83	43	35.83	40	33.33
Neither Accepted	2.51- 3.50	28	23.33	27	22.50	29	24.17
Unaccepted	1.51- 2.50	12	10.00	9	7.50	6	5.00
Highly Unaccepted	1.00- 1.50	0	0.00	0	0.00	1	0.83
Total		**120**	**100.00**	**120**	**100.00**	**120**	**100.00**

Overall Mean = 3.94 SD = 0.89 Description = Accepted

Visayan obtained the highest overall acceptance (M = 3.94), indicating strong positive perception of its use in SMS communication. This suggests that regional language use remains highly effective in digital interaction, particularly within family contexts. The strong acceptance reflects familiarity, emotional expressiveness, and cultural grounding associated with Visayan as a mother tongue. Siblings and mothers showed particularly high acceptance, while fathers also demonstrated strong but slightly lower ratings. These findings highlight Visayan as an emotionally resonant and functionally efficient language in SMS communication, reinforcing the sociolinguistic view that regional languages carry strong interpersonal value in informal digital exchanges (Gumperz, 1982; UNESCO, 2021).

Table 5 presents the frequency distribution of respondents' acceptance of English semantics in face-to-face communication across fathers, mothers, and siblings. For fathers, most responses fall under "Accepted" (40.00%), followed by "Neither Accepted" (25.83%), indicating moderate acceptance with some neutrality and slight resistance. Mothers show a more balanced distribution, with "Accepted" (33.33%) and "Highly Accepted" (29.17%) as dominant categories, suggesting moderate to high acceptance. Siblings show the highest acceptance, with "Highly Accepted" (42.50%) and "Accepted" (30.83%) as the majority responses, indicating strong receptiveness. Overall, the grand mean of 3.80 reflects an "Accepted" interpretation, showing that English semantic use in face-to-face communication is generally acceptable across families, with siblings demonstrating the highest level of acceptance.

Table 5. Frequency Distribution in the Use of Semantics Using English Language in Face to face

Description	Rating Scale	Father		Mother		Siblings	
		f	%	f	%	f	%
Highly Accepted	4.51- 5.00	22	18.33	35	29.17	51	42.50
Accepted	3.51- 4.50	48	40.00	40	33.33	37	30.83
Neither Accepted	2.51- 3.50	31	25.83	32	26.67	22	18.33
Unaccepted	1.51- 2.50	18	15.00	11	9.17	8	6.67
Highly Unaccepted	1.00- 1.50	1	0.83	2	1.67	2	1.67
Total		**120**	**100.00**	**120**	**100.00**	**120**	**100.00**

Overall Mean= 3.80 SD= 0.93 Description= Accepted

The findings indicate that English face-to-face communication is generally at an "Accepted" level (M = 3.80) among family members, suggesting that English is moderately integrated into family interactions but not the primary language of communication. Siblings demonstrate the highest acceptance, likely due to greater exposure to English in educational settings and media, while fathers show comparatively lower engagement. This suggests generational differences in language use and familiarity.

Overall, English functions as a supplementary language in family communication, commonly associated with academic and formal contexts rather than deeply emotional or relational exchanges. This aligns with the view that English usage in multilingual societies is context-dependent and less dominant in intimate family interaction (Crystal, 2011).

Table 6 presents the frequency distribution of respondents' acceptance of Filipino semantics in face-to-face communication across fathers, mothers, and siblings. For fathers, most responses fall under "Accepted" (42.50%), followed by "Neither Accepted" (22.50%), indicating general acceptance with some neutrality and negative perceptions. Mothers show a similar pattern, with "Accepted" (35.83%) and "Highly Accepted" (26.67%) as dominant responses, reflecting moderate acceptance. Siblings show the most positive perception, with "Highly Accepted" (36.67%) and "Accepted" (34.17%) as the majority, indicating strong receptiveness. Overall, the grand mean of 3.74 reflects an "Accepted" interpretation, showing that Filipino semantic use in face-to-face communication is generally acceptable, with siblings demonstrating the highest level of acceptance.

Table 6. Frequency Distribution in the Use of Semantics Using Filipino Language in Face to face

Description	Rating Scale	Father		Mother		Siblings	
		f	%	f	%	f	%
Highly Accepted	4.51- 5.00	22	18.33	32	26.67	44	36.67
Accepted	3.51- 4.50	51	42.50	43	35.83	41	34.17
Neither Accepted	2.51- 3.50	27	22.50	25	20.83	22	18.33
Unaccepted	1.51- 2.50	18	15.00	17	14.17	9	7.50
Highly Unaccepted	1.00- 1.50	2	1.67	3	2.50	4	3.33
Total		**120**	**100.00**	**120**	**100.00**	**120**	**100.00**

Overall Mean= 3.74 SD= 1.03 Description= Accepted

The findings indicate that Filipino face-to-face communication is generally at an **"Accepted" level (M = 3.74)** among family members, suggesting that Filipino semantics are effectively used and understood in household interactions. This shows that Filipino serves as a functional medium for expressing thoughts, emotions, and intentions within the family. Siblings exhibited the highest level of acceptance, followed by mothers and fathers, indicating greater receptiveness among younger family members. This may be attributed to their stronger exposure to Filipino and code-mixed communication in both academic and digital contexts.

Overall, the results reflect the multilingual nature of Filipino households, where language use is shaped by context and familiarity. Filipino functions as a communicative bridge that supports shared meaning and strengthens interpersonal communication within the family (García & Wei, 2014).

Table 7 presents the frequency distribution of respondents' acceptance of Visayan semantics in face-to-face communication across fathers, mothers, and siblings. For fathers, responses are mainly "Accepted" (33.33%) and "Highly Accepted" (32.50%), indicating general acceptance with some neutrality. Mothers show stronger acceptance, with "Highly Accepted" (38.33%) as the dominant category, followed by "Accepted" (28.33%). Siblings show the highest acceptance, with "Highly Accepted" (40.00%) and "Accepted" (35.00%) as the majority responses. Overall, the grand mean of 3.91 reflects an "Accepted" interpretation, indicating that Visayan semantic use in face-to-face communication is generally acceptable, with siblings showing the highest level of acceptance.

Table 7. Frequency Distribution in the Use of Semantics Using Visayan Language in Face to face

Description	Rating Scale	Father		Mother		Siblings	
		f	%	f	%	f	%
Highly Accepted	4.51- 5.00	39	32.50	46	38.33	48	40.00
Accepted	3.51- 4.50	40	33.33	34	28.33	42	35.00
Neither Accepted	2.51- 3.50	26	21.67	25	20.83	19	15.83
Unaccepted	1.51- 2.50	13	10.83	13	10.83	9	7.50
Highly Unaccepted	1.00- 1.50	2	1.67	2	1.67	2	1.67
Total		**120**	**100.00**	**120**	**100.00**	**120**	**100.00**

Overall Mean= 3.91 SD= 0.99 Description= Accepted

The findings indicate that Visayan face-to-face communication is at an **"Accepted"** level (M = 3.91) among family members, suggesting strong overall receptiveness to its use in interpersonal interaction. Siblings and mothers demonstrate particularly high acceptance, while fathers also show positive engagement, indicating consistent use and understanding of Visayan across family roles. This suggests minimal generational barriers in its use within the family setting. Overall, Visayan functions as a primary language for emotional expression and interpersonal closeness, strengthening clarity and familial bonding. These findings support the importance of mother tongue use in enhancing communication effectiveness and reinforcing family relationships (UNESCO, 2021; Wei, 2018).

Table 8 presents the perceived level of interpersonal communication quality in English SMS across fathers, mothers, and siblings. For fathers, most responses fall under "Average" (51.67%), followed by "Above average" (33.33%), indicating moderate communication quality. Mothers show slightly better results, with "Above average" (45.00%) and "Average" (42.50%) as dominant categories. Siblings also rank mostly in "Above average" (40.83%) and "Average" (37.50%), though with a slightly wider distribution of responses. Overall, the grand mean of 3.46 indicates an "Average" level, suggesting that English SMS communication is generally moderate across family members, with mothers and siblings showing slightly higher communication quality than fathers.

Table 8. Distribution of Respondents' Level of quality of Interpersonal Communication in English Language SMS

Descriptions	Rating Scale	Father		Mother		Siblings	
		f	%	f	%	f	%
Excellent	4.51-5.00	6	5.00	9	7.50	7	5.83
Above average	3.51-4.50	40	33.33	54	45.00	49	40.83
Average	2.51-3.50	62	51.67	51	42.50	45	37.50
Below average	1.51-2.50	11	9.17	6	5.00	16	13.33
Poor	1.00-1.50	1	0.83	0	0.00	3	2.50
Total		**120**	**100.00**	**120**	**100.00**	**120**	**100.00**

Overall Mean = 3.46 SD = 0.71 Description = Average

The overall "Average" rating (M = 3.46) indicates that English SMS communication is functional but not highly expressive in family interaction. While respondents can effectively communicate in English via SMS, it is not consistently used for emotionally rich exchanges. This suggests that English serves primarily as a utilitarian digital language focused on clarity and efficiency rather than emotional depth (Thurlow & Mroczek, 2011).

Table 9 presents the perceived interpersonal communication quality in Filipino SMS across fathers, mothers, and siblings. For fathers, responses are mostly "Average" (42.50%) and "Above average" (38.33%), indicating moderate effectiveness. Mothers show an even split between "Average" and "Above average" (41.67% each), suggesting slightly stronger communication quality. Siblings are mainly rated "Average" (39.17%) and "Above average" (35.00%), with more variation in responses. Overall, the grand mean of 3.43 reflects an "Average" level, indicating moderate Filipino SMS communication quality across family members, with parents showing slightly better performance than siblings.

Table 9. Distribution of Respondents' Level of Quality of Interpersonal Communication in Filipino Language SMS

Descriptions	Rating Scale	Father		Mother		Siblings	
		f	%	f	%	f	%
Excellent	4.51-5.00	8	6.67	8	6.67	9	7.50
Above average	3.51-4.50	46	38.33	50	41.67	42	35.00
Average	2.51-3.50	51	42.50	50	41.67	47	39.17
Below average	1.51-2.50	14	11.67	11	9.17	17	14.17
Poor	1.00-1.50	1	0.83	1	0.83	5	4.17
Total		120	100.00	120	100.00	120	100.00

Overall Mean = 3.43 SD = 0.08 Description = Average

Filipino SMS communication also received an "Average" rating (M = 3.43), indicating moderate effectiveness. While widely used, its communicative depth is limited compared to Visayan SMS interaction. Variability in responses reflects differences in language preference, fluency, and digital communication habits among family members. This highlights the ongoing influence of bilingualism and code-switching in shaping Filipino digital communication practices (Garcia & Wei, 2014).

Table 10 presents the perceived interpersonal communication quality in Visayan SMS across fathers, mothers, and siblings. For fathers, responses are mainly "Above average" (40.00%) and "Average" (33.33%), indicating generally strong communication quality. Mothers show the highest ratings, with "Above average" (47.50%) and "Excellent" (17.50%) as key categories. Siblings also show positive results, with "Above average" (42.50%) and "Average" (34.17%) dominating, though with slightly more variation. Overall, the grand mean of 3.74 reflects

an "Above average" level, indicating strong Visayan SMS communication quality across families, with mothers ranking highest.

Table 10. Distribution of Respondents' Level of Quality of Interpersonal Communication in Visayan Language SMS

Description	Rating Scale	Father *f*	Father (%)	Mother *f*	Mother (%)	Siblings *f*	Siblings (%)
Excellent	4.51–5.00	23	19.17	21	17.50	17	14.17
Above Average	3.51–4.50	48	40.00	57	47.50	51	42.50
Average	2.51–3.50	40	33.33	36	30.00	41	34.17
Below Average	1.51–2.50	6	5.00	6	5.00	9	7.50
Poor	1.00–1.50	3	2.50	0	0.00	2	1.67
Total	—	**120**	**100.00**	**120**	**100.00**	**120**	**100.00**

Overall Mean = 3.74 SD = 0.08 Description = Above Average

Visayan SMS communication obtained an "Above Average" rating (M = 3.74), indicating strong effectiveness in digital interaction. Respondents perceive Visayan as clear, emotionally expressive, and relationally effective in SMS communication. This reinforces the role of regional languages in enhancing interpersonal connection in digital contexts, particularly where emotional familiarity and cultural identity are central (UNESCO, 2021).

Table 11 presents the perceived interpersonal communication quality in English face-to-face interaction across fathers, mothers, and siblings. For fathers, responses are mainly "Above average" (50.83%) and "Average" (36.67%), indicating generally strong communication quality. Mothers show the highest ratings, with "Above average" (58.33%) and a notable "Excellent" (12.50%), reflecting the strongest communication quality among the groups. Siblings also show positive results, with "Above average" (52.50%) and "Average" (34.17%) as dominant categories, though with slightly more variation. Overall, the grand mean of 3.71 indicates an "Above average" level, suggesting strong English face-to-face communication across family members, with mothers ranking highest.

Table 11. Distribution of Respondents' of Quality of Interpersonal Communication in English Language Face to Face

Descriptions	Rating Scale	Father		Mother		Siblings	
		f	%	f	%	f	%
Excellent	4.51-5.00	8	6.67	15	12.50	7	5.83
Above average	3.51-4.50	61	50.83	70	58.33	63	52.50
Average	2.51-3.50	44	36.67	29	24.17	41	34.17
Below average	1.51-2.50	6	5.00	6	5.00	6	5.00
Poor	1.00-1.50	1	0.83	0	0.00	3	2.50
Total		**120**	**100.00**	**120**	**100.00**	**120**	**100.00**

Overall Mean = 3.71 SD = 0.68 Description = Above Average

The overall "Above Average" rating (M = 3.71) indicates relatively effective English face-to-face communication within families. However, it remains secondary to regional language use in emotional interaction. Mothers show higher proficiency, while siblings and fathers demonstrate moderate competence. English thus functions as a complementary interpersonal language influenced by educational exposure rather than emotional centrality in family communication (Crystal, 2011).

Table 12 presents the perceived interpersonal communication quality in Filipino face-to-face interaction across fathers, mothers, and siblings. For fathers, responses are mainly "Above average" (50.00%) and "Average"

(29.17%), indicating generally strong communication quality. Mothers show a balanced pattern between "Above average" (45.00%) and "Average" (37.50%), with some "Excellent" ratings. Siblings show an even split between "Average" (40.83%) and "Above average" (40.00%), indicating moderate communication quality. Overall, the grand mean of 3.56 reflects an "Above average" level, suggesting generally strong Filipino face-to-face communication across families, with fathers slightly higher than mothers and siblings.

Table 12. Distribution of Respondents' Level of Quality of Interpersonal Communication in Filipino Language Face to Face

Descriptions	Rating Scale	Father		Mother		Siblings	
		f	%	f	%	f	%
Excellent	4.51-5.00	12	10.00	12	10.00	7	5.83
Above average	3.51-4.50	60	50.00	54	45.00	48	40.00
Average	2.51-3.50	35	29.17	45	37.50	49	40.83
Below average	1.51-2.50	11	9.17	8	6.67	11	9.17
Poor	1.00-1.50	2	1.67	1	0.83	5	4.17
Total		**120**	**100.00**	**120**	**100.00**	**120**	**100.00**

Overall Mean = 3.56 SD = 0.79 Description = Above Average

Filipino face-to-face communication received an "Above Average" rating (M = 3.56), indicating moderate effectiveness. While it serves as a national bridging language, it is less emotionally expressive compared to Visayan. The results reflect its role as a functional communication medium shaped by multilingual interaction patterns within households. Filipino remains important but context-dependent in interpersonal communication effectiveness. This is consistent with sociolinguistic findings that Filipino operates as a national lingua franca in multilingual settings, where its use is often situational and frequently complemented by regional languages and English through code-switching practices (Smolicz & Nical, 1997; Bautista, 2004).

Table 13 presents the perceived interpersonal communication quality in Visayan face-to-face interaction across fathers, mothers, and siblings. For fathers, responses are mainly "Above average" (46.67%) and "Average" (31.67%), indicating generally strong communication quality. Mothers show the highest ratings, with "Above average" (54.17%) and "Excellent" (16.67%), reflecting the strongest communication quality among the groups. Siblings also show positive results, with "Above average" (45.00%) and "Average" (33.33%) as dominant categories, though with slightly more variation. Overall, the grand mean of 3.75 indicates an "Above average" level, suggesting strong Visayan face-to-face communication across families, with mothers ranking highest.

Table 13. Distribution of Respondents' Level of Quality of Interpersonal Communication in Visayan Language Face to Face

Descriptions	Rating Scale	Father		Mother		Siblings	
		f	%	f	%	f	%
Excellent	4.51-5.00	18	15.00	20	16.67	16	13.33
Above average	3.51-4.50	56	46.67	65	54.17	54	45.00
Average	2.51-3.50	38	31.67	25	20.83	40	33.33
Below average	1.51-2.50	6	5.00	9	7.50	8	6.67
Poor	1.00-1.50	2	1.67	1	0.83	2	1.67
Total		**120**	**100.00**	**120**	**100.00**	**120**	**100.00**

Overall Mean =3.75 SD = 0.78 Description = Above Average

Visayan face-to-face communication obtained an "Above Average" rating (M = 3.75), confirming its position as the most effective interpersonal communication medium among family members. It is strongly associated with emotional expressiveness, clarity, and relational closeness. This underscores the dominance of mother

tongue communication in strengthening family relationships and enhancing interpersonal understanding, consistent with evidence that first-language use enhances cognitive processing, emotional resonance, and communicative efficiency in interpersonal contexts (Cummins, 2000; García & Wei, 2014; UNESCO, 2021).

Table 14 presents the regression analysis on the effect of semantics on family interpersonal communication quality. The results show a positive relationship ($\hat{Y} = 2.501 + 0.364x_1$), indicating that increased use of semantics is associated with improved communication quality. The model is statistically significant ($F = 10.868$, $p = 0.001$), confirming a significant effect. However, the relationship is weak ($r = 0.290$), and the adjusted r^2 of 0.077 shows that only 7.7% of the variation in communication quality is explained by semantics, while most is influenced by other factors.

Table 14. Significant Effect in the Use of Semantics to the Quality of Family Interpersonal Communication

Independent Variable	Dependent Variable	Regression Model	F	Significance
Use of Semantics	Quality of Interpersonal Communication	$\hat{Y}=2.501+0.364x1$	10.868**	Highly Significant
Multiple r	0.290	P value = 0.001	Test =.05 level of significance	
Adjusted r2	0.077	F Test - 10.868**	Highly Significant	

The regression analysis reveals that semantics significantly influences the quality of family interpersonal communication ($p = 0.001$), although the relationship is weak ($r = 0.290$; $R^2 = 0.077$). This indicates that while language use contributes to communication quality, it explains only a small proportion of variation. Most variation is attributed to non-linguistic factors such as emotional closeness, frequency of interaction, cultural values, and relational dynamics. This suggests that interpersonal communication is multidimensional, with semantics functioning as a supportive rather than primary determinant of communication quality (Creswell & Creswell, 2018; Thurlow & Mroczek, 2011).

CONCLUSION

This study, *"Mobile Phone Use and Family Communication Quality: A Semantic Investigation of Interpersonal Interaction,"* examined the role of semantics in shaping family communication across SMS and face-to-face contexts. The findings indicate that the respondents were predominantly late adolescents, reflecting the communication behaviors of individuals who are highly engaged in both digital and face-to-face interactions. The use of semantics in English, Filipino, and Visayan was generally accepted across SMS and face-to-face communication contexts, with Visayan obtaining the highest levels of acceptance and communication quality.

The results further reveal that interpersonal communication quality was generally above average, particularly when family members communicated using their mother tongue, highlighting the importance of linguistic familiarity, cultural identity, and emotional expressiveness in family interaction (UNESCO, 2022; Muin, 2023). These findings support contemporary perspectives that multilingual and mother tongue communication strengthen interpersonal understanding, relational closeness, and effective family interaction (UNESCO, 2025).

Regression analysis demonstrated that the use of semantics significantly influences the quality of family interpersonal communication ($p = 0.001$), although the relationship was weak ($r = 0.290$; Adjusted $R^2 = 0.077$). This suggests that language use contributes to communication effectiveness but represents only one dimension of family interaction. The quality of communication is also shaped by relational, emotional, and contextual factors, including communication patterns, family relationships, and digitally mediated interactions (Palviainen & Kędra, 2020; Rahman & Alavi, 2023). The weak but significant relationship further supports the view that effective family communication depends not only on linguistic competence but also on the quality of interpersonal relationships and communication practices within the family (Wu & Mufasa, 2023).

Overall, the study concludes that semantics plays a significant role in enhancing family communication quality, particularly when communication occurs in familiar linguistic contexts. However, language alone does not fully determine communication effectiveness. To further strengthen interpersonal communication among family members, schools and families should encourage meaningful multilingual communication practices, promote effective language use in digital and face-to-face settings, and foster open, supportive, and emotionally responsive family interactions (UNESCO, 2025; Tammisalo & Rotkirch, 2022).

REFERENCES

1. Androutsopoulos, J. (2021). Multilingualism, digital communication, and language practices in social media. In A. Georgakopoulou & T. Spilioti (Eds.), The Routledge handbook of language and digital communication. Routledge.
2. Armingol, E., Officer, A., Harismendy, O., & Lewis, N. E. (2021). Deciphering cell-cell interactions and communication from gene expression. Nature Reviews Genetics, 22(2), 71–88. https://doi.org/10.1038/s41576-020-00292-x
3. Bautista, M. L. S. (2004). Tagalog-English code switching as a mode of discourse. Asia Pacific Education Review, 5(2), 226–233. https://doi.org/10.1007/BF03024960
4. Cabalquinto, E. C. (2021). "We're not only here but we're there in spirit": Asymmetrical mobile intimacy and the transnational Filipino family. Media International Australia, 179(1), 23–36. https://doi.org/10.1177/1329878X20985962
5. Caparas, P., & Gustilo, L. (2017). Communicative aspects of multilingual code-switching in computer-mediated communication. Indonesian Journal of Applied Linguistics, 7(2), 435–448. https://doi.org/10.17509/ijal.v7i2.8137
6. Creswell, J. W., & Creswell, J. D. (2018). Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). SAGE Publications.
7. Cross, S. E., & Madson, L. (1997). Models of the self: Self-construals and gender. Psychological Bulletin, 122(1), 5–37. https://doi.org/10.1037/0033-2909.122.1.5
8. Crystal, D. (2011). Internet linguistics: A student guide. Routledge.
9. Cummins, J. (2000). Language, power and pedagogy: Bilingual children in the crossfire. Multilingual Matters.
10. García, O., & Wei, L. (2014). Translanguaging: Language, bilingualism and education. Palgrave Macmillan. https://doi.org/10.1057/978-1-137-54847-1
11. Gumperz, J. J. (1982). Discourse strategies. Cambridge University Press.
12. Koerner, A. F., & Schrodt, P. (2014). An introduction to the special issue on family communication patterns theory. Journal of Family Communication, 14(1), 1–15. https://doi.org/10.1080/15267431.2013.857328
13. Lerner, R. M. (Ed.). (2018). Handbook of adolescent psychology (4th ed.). Wiley.
14. Liu, S., Li, X., & Zhang, Y. (2024). Problematic smartphone use and communication in families with adolescents. Behavioral Sciences, 14(1), 8. https://doi.org/10.3390/bs14010008
15. McDaniel, B. T., & Radesky, J. S. (2018). Technoference: Parent distraction with technology and associations with child behavior problems. Child Development, 89(1), 100–109. https://doi.org/10.1111/cdev.12822
16. McLuhan, M. (1964). Understanding media: The extensions of man. McGraw-Hill.
17. McNallie, J., & Gettings, P. E. (2023). Exploring family communication patterns and interpersonal technologies in United States-based grandparent-grandchild relationships. Journal of Family Communication, 23(2), 139–156. https://doi.org/10.1080/15267431.2023.2205842
18. Merkaš, M., Bodrožić Selak, M., & Žulec Ivanković, T. (2024). Digital communication technologies and family relationship quality: A systematic review. Human Behavior and Emerging Technologies, 2024, Article 8894532. https://doi.org/10.1155/2024/8894532
19. Muin, F. R. (2023). The role of family interpersonal communication in preserving local languages. IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature, 11(1), 69–76. https://doi.org/10.24256/ideas.v11i1.3783

20. Ogden, C. K., & Richards, I. A. (1923). The meaning of meaning: A study of the influence of language upon thought and of the science of symbolism. Kegan Paul, Trench, Trubner & Co.
21. Palviainen, Å., & Kędra, J. (2020). What's in the family app? Making sense of digitally mediated communication within multilingual families. Journal of Multilingual Theories and Practices, 1(1), 89–111. https://doi.org/10.1558/jmtp.15363
22. Peebles, A., & Chen, Y. A. (2024). Parental Internet practices in the family system: Restrictive mediation, problematic Internet use, and adolescents' age-related variations in perceptions of parent–child relationship quality. Journal of Family Communication, 24(1), 1–18. https://doi.org/10.1177/02654075231221581
23. Pew Research Center. (2024). Teens, social media and technology 2024. https://www.pewresearch.org/internet/2024/12/12/teens-social-media-and-technology-2024/
24. Rahman, N. A. A., & Alavi, K. (2023). Pattern of interpersonal communication between parents and adolescence among the B40 family. EDUCATUM Journal of Social Sciences, 9(1), 1–11. https://doi.org/10.37134/ejoss.vol9.1.1.2023
25. Riemer, N. (2010). Introducing semantics. Cambridge University Press. https://doi.org/10.1017/CBO9780511808883
26. Schrodt, P., Witt, P. L., & Messersmith, A. S. (2008). A meta-analytical review of family communication patterns and their associations with information processing, behavioral, and psychosocial outcomes. Communication Monographs, 75(3), 248–269. https://doi.org/10.1080/03637750802256318
27. Smolicz, J. J., & Nical, I. (1997). Exporting the European idea of a national language: Some educational implications of the use of English and indigenous languages in the Philippines. International Review of Education, 43(5–6), 507–526. https://doi.org/10.1023/A:1003098421350
28. Steinberg, L. (2017). Adolescence (11th ed.). McGraw-Hill Education.
29. Steinberg, L. (2018). Identity development and adolescence. In R. M. Lerner (Ed.), Handbook of adolescent psychology (4th ed.). Wiley.
30. Tagliamonte, S. A. (2016). Teen talk: The language of adolescents. Cambridge University Press. https://doi.org/10.1017/CBO9781139583800
31. Thurlow, C., & Mroczek, K. (Eds.). (2011). Digital discourse: Language in the new media. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199795437.001.0001
32. UNESCO. (2021). The importance of multilingual education and mother tongue-based learning. https://www.unesco.org/
33. UNESCO. (2022). Global report on culture for sustainable development. UNESCO Publishing. https://www.unesco.org/
34. UNESCO. (2025). Languages matter: Silver Jubilee celebration of International Mother Language Day. https://www.unesco.org/en/articles/languages-matter-silver-jubilee-international-mother-language-day-2025
35. Uy-Tioco, C. S., & Cabañes, J. V. A. (2021). Glocal intimacies and the contradictions of mobile media access in the Philippines. Media International Australia, 179(1), 9–22. https://doi.org/10.1177/1329878X20985962
36. Walther, J. B. (2017). Computer-mediated communication. In C. R. Berger, M. E. Roloff, S. R. Wilson, J. P. Dillard, J. Caughlin, & D. Solomon (Eds.), The International encyclopedia of interpersonal communication. Wiley-Blackwell. https://doi.org/10.1002/9781118540197.wbeic219
37. Watzlawick, P., Beavin, J. H., & Jackson, D. D. (1967). Pragmatics of human communication: A study of interactional patterns, pathologies, and paradoxes. W. W. Norton & Company.
38. Wei, L. (2018). Translanguaging as a practical theory of language. Applied Linguistics, 39(1), 9–30. https://doi.org/10.1093/applin/amx039
39. Wu, N., & Mustafa, S. E. (2023). Effects of social media use on family relationship quality: A systematic review. Forum Komunikasi, 19(1), 195–225.