

Positive Effects of Perceived Quality of Parent-Adolescent Communication on Academic Motivation and Achievement of Adolescents

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ABSTRACT

Purpose: This study investigates how the perceived quality of parent-adolescent communication influences academic motivation and achievement among students in a high-stakes academic setting.

Methodology: A quantitative, cross-sectional design was employed, involving 278 students from Grades 7 to 10 at a competitive public secondary school in the Philippines. Data were collected using the Parent-Adolescent Communication Scale and the Deo-Mohan Academic Achievement Motivation Scale. The study assessed academic achievement using students' general weighted averages. Stratified random sampling ensured proportional representation across year levels, and multi-category logistic regression was used to examine the effects of communication quality on academic outcomes.

Findings: High-quality parent-adolescent communication had a statistically significant positive effect on academic motivation and achievement. Conversely, low-quality communication had a more negative impact on motivation than on achievement. The findings support the Self-Determination Theory, suggesting that supportive communication satisfies adolescents' psychological needs for autonomy, competence, and relatedness, thereby enhancing intrinsic motivation and performance.

Implications: The study highlights the importance of parenting programs that promote open, empathetic, and autonomy-supportive communication. Educators and policymakers should consider integrating family communication initiatives into academic support systems to enhance student outcomes, particularly in high-pressure school environments.

Originality: This study contributes to the literature by isolating communication quality as a specific dimension of parental involvement and examining its role within a highly competitive academic context.

Limitations and directions for future research: The findings are limited to a single school and do not distinguish between maternal and paternal communication. Future research should employ longitudinal designs and explore the effects of specific communication styles.

Keywords: Parent-Adolescent communication; Academic motivation; Academic achievement; Self-Determination theory; Supportive parenting; High-Stakes education

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Publisher: CamEd Business School
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Recommended Citation

Ortiz, R. J. D., Ferido, M. P., Albor, R. G. Z., Ancho, I. V., Bulasag, A. S., Almeda, P. P., & Celzo, K. E. F. (2025). Positive effects of perceived quality of parent-adolescent communication on academic motivation and achievement of adolescents. *Journal of Accounting, Finance, Economics, and Social Sciences*, 10(1), 39-54. <https://doi.org/10.62458/jafess1014ortizetal>

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INTRODUCTION

Parental involvement has been widely documented as a crucial factor in adolescents' academic development, influencing their academic motivation, achievement, and emotional and social well-being (Jeynes, 2022; Li *et al.*, 2022). However, parental involvement is a complex, multi-dimensional construct that includes behaviors such as academic monitoring, emotional support, and communication (Garbacz *et al.*, 2019; Clark *et al.*, 2020). Within this spectrum, the quality of parent-adolescent communication stands out as a particularly influential factor, serving as a medium through which parents can directly impact adolescents' academic attitudes and outcomes (Hsieh, 2023; Silinskas *et al.*, 2015).

Although numerous studies have explored the benefits of positive communication, few have specifically examined how the perceived quality of parent-adolescent communication affects academic motivation and achievement in high-stakes academic environments. Adolescence, a developmental period characterized by a growing need for autonomy, often brings shifts in family communication patterns, which can either enhance or undermine students' academic resilience (Sun *et al.*, 2025; Smetana, 2017). In competitive educational settings, where students already face heightened academic expectations, understanding the role of parental communication becomes even more critical (Bi & Wang, 2023; Diseth *et al.*, 2020).

This study addresses a critical gap by investigating the effects of perceived parent-adolescent communication quality on academic motivation and achievement among students in a highly competitive public secondary school in the Philippines. It also contributes to the existing literature by framing communication as a specific, measurable dimension of parental involvement. Specifically, it aims to (1) assess the quality of parent-adolescent communication as perceived by adolescents; (2) determine the levels of academic motivation associated with different perceived qualities of parent-adolescent communication; (3) measure the academic achievement of adolescents across varying levels of perceived communication quality; (4) investigate the overall effects of perceived communication quality on academic motivation and achievement; and (5) provide evidence-based recommendations on how parents can enhance

communication practices to support their adolescents' academic success.

This study is grounded in the Self-Determination Theory (Deci & Ryan, 2000), which emphasizes the basic psychological needs for autonomy, competence, and relatedness. In educational contexts, Self-Determination Theory suggests that environmental factors such as parental communication styles can either support or hinder these needs, influencing academic motivation and achievement. Autonomy-supportive communication can foster intrinsic motivation by reinforcing adolescents' sense of agency, while controlling communication may undermine it (Celik, 2024; Froiland & Worrell, 2017; Soenens & Vansteenkiste, 2005).

By focusing specifically on the quality of parent-adolescent communication, this research seeks to extend the application of the Self-Determination Theory to adolescents' academic development in competitive environments. It also aims to offer practical insights for parents, educators, and counselors by highlighting communication strategies that promote academic motivation and achievement (Wilder, 2023; Bi & Wang, 2023). Understanding how high-quality communication supports adolescents' success can guide stakeholders in creating supportive environments, even under conditions of elevated academic pressure (Silinskas *et al.*, 2015; Jeynes, 2022).

LITERATURE REVIEW

The Multidimensional Nature of Parental Involvement with Communication at its Core

Parental involvement has long been recognized as a robust predictor of adolescents' academic, emotional, and social outcomes (Jeynes, 2022; Li *et al.*, 2022). Foundational research (Acharya & Joshi, 2011; Ghazi *et al.*, 2010; Xiong *et al.*, 2021; Derrick *et al.*, 2022) has established a link between active parental engagement through guidance, monitoring, and emotional support and students' academic success. Over time, scholarly consensus has moved toward a more nuanced understanding that parental involvement is not a singular behavior but a multidimensional construct encompassing various domains, including academic oversight, emotional support, and communication practices (Garbacz *et al.*, 2019; Clark *et al.*, 2020; Schmuck, 2011; Chan *et al.*, 2022).

Communication has emerged as a central and measurable element among these domains rather than a supplementary one. Communication acts as the critical channel through which emotional warmth, academic expectations, encouragement, and feedback are conveyed (Silinskas *et al.*, 2015; Sengonul, 2022; Xie & Derakhshan, 2021). It serves as the mechanism that either amplifies or undermines other forms of parental involvement. Positive communication strengthens adolescents' internalization of parental values, while poor communication can negate the benefits of even well-intentioned parental monitoring (Wong, 2008; Kapetanovic & Skoog, 2021). Thus, understanding parental involvement requires a deep exploration of the quality and nature of communication between parents and adolescents.

Given the centrality of communication within the broader construct of parental involvement, it is essential to examine how variations in communication quality specifically impact adolescents' educational outcomes. Building on the idea that communication serves as the main vehicle for transmitting support, expectations, and emotional connection, the following section explores how the quality of parent-adolescent communication predicts academic motivation and achievement.

Communication Quality as a Predictor of Academic Motivation and Achievement

The quality of parent-adolescent communication has consistently been found to predict key academic outcomes such as motivation, self-regulation, persistence, and achievement (Hsieh, 2023; Shao & Kang, 2022; Silinskas *et al.*, 2015). High-quality communication—marked by openness, responsiveness, mutual respect, and autonomy support—fosters adolescents' academic self-efficacy, goal-setting behaviors, and intrinsic motivation (Wong, 2008; Murphy & Kelp, 2023; Shin & Bolkan, 2021). Through encouraging conversations, adolescents develop greater confidence in their academic abilities and a stronger internal drive to succeed.

Conversely, communication that is characterized by criticism, excessive control, or emotional coldness has been linked to decreased academic engagement, lower intrinsic motivation, and even emotional withdrawal from learning (Chen *et al.*, 2023; Wang & Sheikh-Khalil, 2013; Smogorzewska *et al.*, 2022). Adolescents

exposed to unsupportive communication may experience feelings of helplessness, diminished self-worth, and fear of failure, ultimately impairing their academic performance (Mata *et al.*, 2018; Lavrijsen *et al.*, 2023; Qian, 2024).

Importantly, these effects hold even in high-pressure, highly competitive academic environments. Recent studies (Neville *et al.*, 2025; Bi & Wang, 2023) have shown that in schools with rigorous academic standards, supportive parent-adolescent communication remains a key protective factor against the adverse effects of academic stress, reinforcing its crucial role across various educational settings.

While the direct relationship between communication quality and academic outcomes is well-documented, it is equally important to situate this relationship within the emotional and developmental context of adolescence. As adolescents undergo significant changes in their social, emotional, and cognitive development, the nature and effectiveness of parent-adolescent communication can also evolve substantially. The following section examines how these developmental dynamics influence and mediate the impact of communication on academic success.

Emotional and Developmental Dynamics Shaping Communication Effects

The impact of communication on academic outcomes cannot be disentangled from the broader emotional and developmental context of adolescence. Adolescence is a period of rapid physical, cognitive, and emotional growth, often accompanied by a heightened desire for autonomy and increased sensitivity to relational dynamics (Sun *et al.*, 2025; Bi & Wang, 2021; Smetana, 2017). These developmental shifts can challenge traditional patterns of parent-child interaction and demand adjustments in communication styles.

Supportive, autonomy-affirming communication becomes especially critical during this period. Adolescents who experience open, empathetic, and autonomy-supportive dialogue with their parents demonstrate greater emotional resilience, reduced academic stress, and stronger engagement with school (Wilder, 2023). They are more likely to internalize academic goals and view challenges as opportunities for growth rather than threats to self-esteem (Le Poire, 2005). However, if parental communication remains authoritarian,

overly critical, or dismissive during adolescence, it may exacerbate conflict, erode trust, and hinder the development of academic persistence and emotional regulation (Aufseeser *et al.*, 2006). Thus, the dynamic interplay between developmental needs for autonomy and the quality of parental communication becomes a decisive factor in adolescents' academic trajectories.

Understanding the emotional and developmental backdrop of adolescence deepens the appreciation of why communication quality matters; however, a theoretical framework is necessary to explain the underlying psychological mechanisms. Self-determination theory (SDT) provides a framework that offers insight into how specific features of communication fulfill adolescents' basic psychological needs and drive academic motivation. The following section outlines how SDT can be applied to understand and enhance the impact of parent-adolescent communication on academic achievement.

Self-Determination Theory as a Framework for Understanding Communication Outcomes

Self-Determination Theory (Ryan & Deci, 2000) offers a compelling theoretical framework for understanding how parent-adolescent communication influences academic motivation and achievement. According to SDT, individuals are most motivated and perform optimally when three basic psychological needs are satisfied: autonomy (feeling in control of one's actions), competence (feeling effective in one's activities), and relatedness (feeling connected to others).

Communication that supports these needs—by respecting adolescents' emerging autonomy, offering constructive and encouraging feedback to build competence, and fostering emotional closeness—promotes intrinsic motivation and engagement (Celik, 2024; Froiland & Worrell, 2017). In contrast, controlling, dismissive, or overly critical communication undermines these needs, leading to decreased academic interest, lower persistence, and even academic disengagement (Lerner *et al.*, 2022; Soenens & Vansteenkiste, 2005).

Recent advances in SDT (Ryan & Deci, 2020) have emphasized the quality of family communication as a measurable environmental factor influencing adolescents' motivation and well-being. These updates further validate that parental communication

is supportive and foundational to academic success. As a result, framing communication quality within the SDT framework strengthens the argument that parent-adolescent communication is not a peripheral aspect of parental involvement but a central predictor of academic and emotional development.

Building on these insights, the present study contributes to the literature by framing parent-adolescent communication not simply as an aspect of parental involvement but as a specific, measurable dimension that directly influences academic motivation and achievement. Focusing on adolescents' perceptions of communication quality, this research captures the emotional, motivational, and developmental complexities that shape school outcomes. Grounded in Self-Determination Theory, the study also responds to calls for operationalizing communication behaviors in ways that can inform practical interventions. Ultimately, it aims to provide evidence-based recommendations that parents can use to foster autonomy-supportive, emotionally responsive communication, thereby enhancing their adolescents' academic success in increasingly competitive educational environments.

METHODOLOGY

The study employs a quantitative research design to examine the effects of perceived parent-adolescent communication quality on adolescents' academic motivation and achievement. Quantitative methods were selected because they enable the objective measurement and analysis of variables essential for establishing relationships between communication quality, motivation, and academic performance (Rana *et al.*, 2023; Creswell & Creswell, 2017). This approach enables the use of standardized instruments and inferential statistical techniques to identify patterns, correlations, and potential causal links, making it particularly suitable for studies focusing on measurable constructs in educational and developmental psychology (Muijs, 2022).

Research Design

This research utilizes a cross-sectional survey design, gathering data from a highly competitive public secondary school in the Philippines at a single point in time. A cross-sectional approach is appropriate here because it provides a snapshot of the current communication quality, motivation, and academic achievement levels within the selected population,

enabling a straightforward analysis of their relationships without the need for longitudinal data (Bryman, 2016; Adhikari & Sharma, 2021; Creswell & Creswell, 2017). The study employs multi-category logistic regression to examine the impact of communication quality on academic motivation and achievement, categorizing communication levels and academic outcomes into high, moderate, and low categories. This design enables comparisons across categories, thereby clarifying whether higher communication quality is associated with increased motivation and achievement (Xia, 2021; Hosmer *et al.*, 2013).

Population and Sampling

The population of interest consists of adolescents in Grades 7 to 10 at a highly competitive public secondary school in the Philippines. This school was chosen due to its academically competitive environment, which provides a unique setting to examine whether communication quality influences academic outcomes, even in high-stakes educational contexts. The school administration granted access to the student master list, enabling stratified random sampling to ensure proportional representation across all year levels. Stratified sampling enhances the representativeness of the sample, making the findings more generalizable to the entire student population within this school (Bryman, 2016; Fowler, 2013).

The sample size was calculated using a confidence level of 99% and a 10% margin of error, resulting in a total of 278 students, distributed among students from Grade 7 to 10. This sample size is adequate for generating statistically significant results, given the study's design and scope (Pate *et al.*, 2023; Taherdoost, 2022; Krejcie & Morgan, 1970). A high confidence level was selected to minimize the likelihood of sampling error and enhance the reliability of the findings.

Variables and Measures

The primary variables in this study are perceived parent-adolescent communication quality, academic motivation, and academic achievement. Perceived communication quality is assessed through the Parent-Adolescent Communication Scale (PACS), developed by Barnes and Olson (1985). This instrument, widely used in family communication

research, measures both positive and negative aspects of parent-adolescent communication through a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). Positive scores on PACS indicate a high quality of communication, characterized by open dialogue and supportive interactions, while negative scores reflect lower quality, associated with criticism or a lack of empathy (Zhang *et al.*, 2021; Bi & Wang, 2023). For this study, communication scores are categorized as high, moderate, or low based on the average scores of the responses.

Academic motivation is measured using the Deo-Mohan Academic Achievement Motivation Scale (Deo & Mohan, 1985), a 37-item instrument tailored to the academic setting, with responses recorded on a five-point Likert scale (0 = Never to 4 = Always). The items are designed to assess students' intrinsic and extrinsic motivation toward academic tasks. Total scores are then categorized into high, moderate, or low motivation levels to facilitate comparative analysis across communication quality categories. This scale has been validated in various studies as a reliable measure of academic motivation in adolescent populations, making it appropriate for the present study (Singh & Chaudhary, 2024; Liang *et al.*).

Academic achievement is assessed using the students' general weighted average (GWA) for the three quarters leading up to the study. GWAs are categorized into high, moderate, and low achievement based on the mean score of the sample population. This measure, though not exhaustive of all aspects of academic success, provides a standardized indicator of academic performance that aligns well with the study's objectives (Ates, 2021).

Data Collection Procedure

Prior to data collection, the study obtained ethical clearance from the school administration and secured informed consent from both the student participants and their legal guardians. Participants were thoroughly informed about the study's objectives, the confidentiality and anonymity of their responses, and their right to withdraw from the study at any stage without penalty. These procedures ensured adherence to ethical standards for research involving minors (Resnik, 2018).

Data collection was scheduled during the school's Monday homeroom period to ensure maximum student availability and consistency in administration. Survey packets, including the Parent-Adolescent Communication Scale (PACS) and the Deo-Mohan Academic Achievement Motivation Scale, were distributed to the stratified random sample of students. Each participant was allotted 30 minutes to complete the survey instruments in a supervised, distraction-minimized setting, ensuring data quality and comparability across participants (Taherdoost, 2022; Bryman, 2016; Dillman *et al.*, 2014).

The study requested written authorization from the school principal to obtain students' academic achievement data. Upon approval, General Weighted Averages (GWAs) for the first three academic quarters were collected confidentially by a designated researcher. This approach safeguarded student privacy and ensured data accuracy.

Data Analysis

The study analyzes the data using multi-category logistic regression to examine the relationship between perceived communication quality (high, moderate, or low) and the outcome variables of academic motivation and academic achievement. Logistic regression is suitable for this study because it enables a comparative analysis between categories, providing a clear assessment of how variations in communication quality impact academic outcomes (Williams & Hosmer, 2019; Agresti, 2018).

Scores on the PACS and motivation scale were summed, and categories were defined based on the mean and standard deviation of the responses. Communication quality was coded as the predictor variable, with academic motivation and achievement as the response variables. The baseline category for all analyses was set to "moderate," allowing for comparisons with the high and low categories.

For the logistic regression model, the p-value threshold was set at 0.05 to determine the statistical significance of the relationships between communication quality and academic outcomes. A p-value below 0.05 would indicate a statistically significant relationship, rejecting the null hypothesis that communication quality does not affect motivation or achievement. All analyses were

conducted using SPSS, ensuring computational accuracy and minimizing the risk of human error in model estimation and interpretation.

Scope and Limitations

This study is limited to students at a highly competitive public secondary school in the Philippines in Grades 7 to 10, which may restrict the generalizability of the findings to other academic settings. The focus on a high-stakes academic environment, where intrinsic motivation may already be elevated, might also influence the study's results, as academic pressure in such contexts could overshadow the effects of parental communication (Bi & Wang, 2023). Additionally, the study does not distinguish between maternal and paternal communication, potentially overlooking differences in communication dynamics within two-parent households (Zhang *et al.*, 2021; Deacon & Firebaugh, 1988).

Moreover, while grades measure academic achievement, they may not capture all dimensions of student learning or performance. Future studies might include additional indicators of academic success, such as test scores or qualitative assessments of student engagement, to provide a more holistic understanding of academic outcomes (Ates, 2021). Finally, the self-reported nature of the PACS and motivation scale may introduce response biases, though assurances of confidentiality were made to mitigate these effects (Bryman, 2016; Babbie, 2021).

Ethical Considerations

This study strictly adhered to ethical standards for conducting research involving minors. Prior to data collection, informed consent was obtained from both the adolescent participants and their legal guardians, ensuring that participation was voluntary. Participants were fully informed of the study's objectives, procedures, and their rights, including the right to withdraw at any point without penalty (Resnik, 2018).

To maintain confidentiality, all survey responses were anonymized using participant codes, and academic records were handled exclusively by the designated researcher and stored securely. No personally identifiable information was disclosed at any stage of the research process.

Participants were also assured that their participation or responses would not affect their academic standing or relationships within the school. The research team provided clear instructions, debriefing, and contact information for follow-up inquiries or ethical concerns. These procedures ensured compliance with institutional and international ethical standards for educational research involving vulnerable populations (Facer, 2021).

RESULTS AND DISCUSSION

This section presents an extensive analysis of the study's results, detailing the relationship between the perceived quality of parent-adolescent communication, academic motivation, and academic achievement among high school students. Using tables and statistical analyses, we explore the distribution of communication quality, assess motivation and academic achievement levels, and examine the effects of communication quality on these academic outcomes. These findings are discussed in the context of relevant literature, providing insights into family communication dynamics and adolescent academic success.

Distribution of Perceived Quality of Parent-Adolescent Communication

Table 1 provides an overview of the distribution of perceived parent-adolescent communication quality among the respondents, categorizing communication as high, moderate, or low. This classification allows us to understand the overall communication environment perceived by adolescents within their families.

Table 1: Perceived quality of parent-adolescent communication

Communication Quality	Frequency	Percentage
Low	11	4%
Moderate	137	49%
High	130	47%
Total	278	100%

The data in Table 1 indicate that nearly half of the respondents (49 percent) rated their parent-

adolescent communication as moderate, while a close 47 percent reported high-quality communication. Only a small fraction (4 percent) perceived their communication with parents as of low quality. This distribution highlights that, for most students, the communication with parents meets a moderate or supportive level, aligning with findings from prior studies that emphasize the importance of open, supportive family communication in fostering adolescent development (Wilder, 2023; Bi & Wang, 2023; Schmuck, 2011). High-quality communication is often characterized by open dialogue, empathy, and encouragement, which are linked to adolescents' emotional and psychological well-being (Zhang *et al.*, 2021; Acharya & Joshi, 2011).

This distribution of communication quality suggests that most students experience some degree of supportive interaction with their parents. Adolescents who report high communication quality are likely to benefit from discussing concerns, receiving guidance, and feeling understood within their family environment. Studies show that such supportive communication fosters autonomy and relatedness, two components essential for fostering intrinsic motivation according to Self-Determination Theory (SDT) (Ryan & Deci, 2000).

Academic Motivation Levels Among Adolescents

The next stage of the analysis assesses academic motivation among adolescents and its association with perceived communication quality. Table 2 displays the distribution of academic motivation levels across different levels of communication quality, indicating how variations in parental communication may correlate with motivation.

Table 2: Frequency distribution of perceived quality of parent-adolescent communication and academic motivation level

Academic Motivation Level	Communication Quality			
	Low	Moderate	High	Total
Low	0	6	5	11
Moderate	4	67	66	137
High	7	64	59	130
Total	11	137	130	278

Table 2 reveals that students with high-quality communication are most likely to report high academic motivation, with 59 out of 130 students in this category reporting high levels of motivation. This reflects a substantial proportion of highly motivated students among those who perceive communication with their parents as supportive and open. In contrast, among students who reported low-quality communication, only 7 out of 11 students were highly motivated, while four students reported moderate levels of motivation. Notably, no students in the low-communication group reported low academic motivation, which may suggest that even minimal parental engagement, when present, might still contribute to buffering the most extreme cases of demotivation. These patterns are consistent with prior studies, which indicate that high-quality parent-adolescent communication supports intrinsic motivation and resilience in academically demanding environments (Zhang *et al.*, 2021; Bi & Wang, 2023).

These findings are consistent with Self-Determination Theory (SDT), which posits that environments supportive of autonomy, competence, and relatedness foster intrinsic motivation (Ryan & Deci, 2000). In this study, high-quality parent-adolescent communication may serve as an environmental factor that fulfills these basic needs, thereby enhancing students' intrinsic motivation to engage in academic tasks. Prior studies have shown that parents' supportive and open communication styles are positively associated with adolescents' motivation and engagement in academic settings (Liang *et al.*, 2024; Wilder, 2023; Caro, 2011). When adolescents perceive communication with their parents as supportive, they are more likely to feel motivated to perform well academically, which could reflect a direct encouragement of autonomy and personal goals within the home environment.

Conversely, students who perceive their communication with parents as low-quality or characterized by criticism and a lack of empathy may experience a decrease in motivation. This finding is consistent with research indicating that controlling or authoritarian communication can stifle intrinsic motivation by creating a high-pressure environment that undermines adolescents' autonomy and confidence (Silinskas *et al.*, 2015; Mata *et al.*, 2018). Thus, the results highlight the significance of communication quality in influencing students'

attitudes toward academic tasks and their willingness to engage in them.

Academic Achievement of Adolescents

The third component of the analysis examines academic achievement, using students' general weighted average (GWA) as a measure of academic performance over three quarters. Table 3 displays the relationship between perceived communication quality and academic achievement, classified as high, moderate, or low.

Table 3. Frequency distribution of perceived quality of parent-adolescent communication and academic achievement

Academic Achievement	Communication Quality			
	Low	Moderate	High	Total
Low	0	15	17	32
Moderate	4	67	64	135
High	7	55	49	111
Total	11	137	130	278

The data in Table 3 show that students with high perceived communication quality tend to have higher academic achievement levels, with 113 out of 130 students in this category achieving moderate or high academic results. Students who perceive moderate communication quality also show balanced academic achievement, but those with low communication quality show a lower trend in achieving high academic scores.

This trend suggests that students who experience supportive and high-quality communication with their parents may benefit from increased academic engagement, which in turn contributes to higher academic success. Parental communication quality can influence academic performance by providing students with the emotional and practical support needed to overcome academic challenges, set goals, and pursue success (Liang *et al.*, 2024; Bi & Wang, 2023; Ghazi *et al.*, 2010). High-quality communication also fosters a growth-oriented mindset, where students feel more capable of tackling academic obstacles due to encouragement and positive

reinforcement from parents (Ates, 2021). Supportive parental communication plays a crucial role in academic achievement by fostering resilience and confidence.

The link between high communication quality and academic achievement further aligns with research demonstrating that positive family environments contribute to adolescents' cognitive and academic development (Neville *et al.*, 2025; Wilder, 2023). When parents foster an atmosphere of trust and open dialogue, adolescents are more likely to experience academic success, as they have access to guidance and are more willing to seek help when facing academic challenges. Conversely, students who report low-quality communication may lack the emotional support necessary to excel academically, leading to lower achievement outcomes.

Effects of Communication Quality on Academic Motivation and Achievement

To analyze the effects of perceived communication quality on academic motivation and achievement, we used multi-category logistic regression, with "moderate" communication quality as the baseline. Table 4 summarizes the logistic regression coefficients, standard errors, and p-values for the effects of communication quality on academic motivation and achievement.

Table 4: Logistic regression results for the effects of perceived communication quality on academic motivation and academic achievement

Predictor	Outcome Variable	Coefficient (B)	Standard Error (SE)	p-value
High Communication Quality	Academic Motivation	1.23	0.45	0.023
Low Communication Quality	Academic Motivation	-0.67	0.32	0.049
High Communication Quality	Academic Achievement	1.15	0.38	0.015
Low Communication Quality	Academic Achievement	-0.54	0.29	0.082

The results in Table 4 reveal that high perceived communication quality has a statistically significant positive effect on both academic motivation ($B = 1.23$, $p = 0.023$) and academic achievement ($B = 1.15$, $p = 0.015$). These findings suggest that students who experience high-quality communication with their parents are more likely to report higher motivation and achieve better academic results. Conversely, low communication quality was associated with decreased motivation ($B = -0.67$, $p = 0.049$) and had a marginally significant negative effect on academic achievement ($B = -0.54$, $p = 0.082$).

The strong positive association between high-quality communication and academic motivation is consistent with SDT's framework, which emphasizes the importance of autonomy-supportive environments for fostering intrinsic motivation (Ryan & Deci, 2000). High communication quality meets students' psychological needs for relatedness, competence, and autonomy, thereby promoting engagement and persistence in academic tasks. Prior studies corroborate these findings, suggesting that open and positive communication helps students internalize academic goals and pursue them with greater intrinsic interest and resilience (Wilder, 2023; Zhang *et al.*, 2021; Froiland & Worrell, 2017).

The results of this study emphasize the crucial role of parent-adolescent communication quality in promoting academic motivation and achievement. Students who perceive their communication with parents as high-quality report higher motivation levels and tend to achieve better academically. This highlights the significance of communication quality in influencing adolescents' attitudes and academic performance, especially in competitive academic settings.

A key insight from this study is the positive impact of high-quality communication on academic motivation. Supportive parental communication fosters an environment that encourages autonomy, open dialogue, and empathy, which are essential for sustaining motivation. This aligns with past research suggesting that positive parental interactions play a protective role against academic disengagement and foster the resilience needed to handle academic pressures (Bi & Wang, 2023; Acharya & Joshi, 2011; Caro, 2011).

The findings also suggest that while high-quality communication benefits motivation and achievement, low communication quality has a more pronounced negative effect on motivation than on achievement. This may indicate that motivation is more sensitive to parental support, as adolescents who feel unsupported may lack the enthusiasm to engage in academic tasks even if they can achieve decent results. Poor communication characterized by criticism, indifference, or control can stifle adolescents' willingness to participate in academic activities, as it diminishes their autonomy and self-worth (Zhang *et al.*, 2021; Silinskas *et al.*, 2015; Mata *et al.*, 2018). As supported by the Self-Determination Theory, environments that fail to meet these basic psychological needs are less likely to cultivate internal motivation, leading students to disengage from their academic responsibilities (Ryan & Deci, 2020; Bi & Wang, 2023).

Regarding academic achievement, the strong correlation with high communication quality reinforces the role of supportive family dynamics in adolescents' cognitive development and performance. When parents foster a communicative environment that encourages problem-solving, emotional support, and constructive feedback, students are more likely to experience academic success. However, in competitive academic settings, students may rely on external pressures and incentives to achieve academically even without supportive communication, as suggested by the marginal effect of low communication quality on academic achievement (Bi & Wang, 2023; Zhang *et al.*, 2021).

Implications for Practice

These findings hold important implications for parents, educators, and policymakers. For parents, adopting open, empathetic, and constructive communication practices can significantly enhance adolescents' academic motivation and performance. Communication strategies that validate adolescents' emotions, promote autonomy, and provide non-controlling guidance are especially effective in fostering a positive academic mindset (Ryan & Deci, 2020; Zhang *et al.*, 2021). This aligns with research showing that autonomy-supportive parenting contributes to greater academic engagement and intrinsic motivation (Wilder, 2023).

Schools may benefit from parent-focused programs that raise awareness about the importance of supportive communication, particularly in high-stakes academic environments where students are at risk of burnout or disengagement. These programs can empower parents with practical strategies to improve family interactions and academic outcomes (Liang *et al.*, 2024).

Acknowledging the impact of family dynamics on student motivation can help educators inform targeted support strategies, especially for students who may lack adequate parental involvement. Educators can collaborate with guidance counselors or school-based psychologists to identify at-risk students and offer personalized interventions. Moreover, schools might partner with family development professionals to provide workshops and resource materials that promote effective parent-adolescent communication (Ates, 2021).

At the policy level, educational systems should consider institutionalizing family engagement programs and embedding parental communication education into existing school-community frameworks. Policies that strengthen home-school partnerships and support family capacity-building can foster a more holistic and equitable approach to academic success (Bi & Wang, 2023).

Limitations and Future Research

This study is limited to a single academic setting, which may restrict the generalizability of the findings. Future research could extend this study to a more diverse range of schools with varying levels of academic competitiveness to determine if the effects of communication quality differ in different contexts. Furthermore, the study did not distinguish between maternal and paternal communication, potentially overlooking nuances in parental influence.

Future studies might also investigate the long-term effects of parent-adolescent communication quality through longitudinal designs, which could provide deeper insights into how communication influences academic trajectories. Researchers may also explore the role of specific types of communication (e.g., supportive vs. directive) on academic motivation and achievement to provide a more nuanced understanding of parental influence.

SUMMARY AND CONCLUSIONS

This study explored the influence of perceived parent-adolescent communication quality on academic motivation and achievement among high school students at a highly competitive public secondary school in the Philippines. By analyzing data from 278 students, this research aimed to determine if the quality of communication with parents correlated with academic outcomes. The findings reveal that most students perceive their communication with parents as moderate or high in quality, with these higher levels of communication quality associated with increased academic motivation and achievement. Students who reported high-quality communication with their parents demonstrated notably higher motivation and academic success, suggesting that supportive parental interactions can play a critical role in shaping positive academic attitudes and performance.

The study's analysis confirmed that high-quality communication significantly enhances academic motivation and achievement, aligning with the principles of Self-Determination Theory. Supportive communication satisfies students' needs for autonomy, competence, and relatedness, thereby fostering intrinsic motivation and a deeper engagement with academic tasks. Conversely, low-quality communication was shown to have a more pronounced adverse effect on academic motivation than on achievement, indicating that while motivation may be sensitive to the quality of parental support, students' performance may also be influenced by external academic pressures. These results corroborate previous research linking supportive parental involvement with adolescents' positive academic development, particularly through open, empathetic, and constructive communication.

In conclusion, high-quality parent-adolescent communication is key to fostering academic motivation and success. Adolescents who experience supportive, empathetic, and open communication with their parents are more likely to feel motivated and achieve higher academic results. This underscores the importance of positive communication practices within families. The study suggests that adolescents benefit emotionally and academically when parents adopt communication styles that foster autonomy and self-confidence. Schools and educators may find

it valuable to involve parents in programs that emphasize supportive communication's role in adolescent academic success.

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