Original Research Article

PARENTAL INVOLVEMENT AND CLASSROOM CLIMATE ASPREDICTORS OF METACOGNITIVE SKILLS IN ENGLISHSUBJECTS AMONG JUNIOR HIGH SCHOOL STUDENTS

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ABSTRACT

This study aimed to investigate whether parental involvement and classroom climate significantly predict metacognitive skills among junior high school students in public secondary institutions in Davao City, Philippines. Employing a descriptive-correlational research design, standardized questionnaires were administered through face-to-face surveys to 200 junior high school students The mean, standard deviation (SD), Pearson product-moment correlation, as well as simple and multiple linear regression analyses were utilized for data analysis. The findings revealed that the extent of parental involvement, classroom climate, and metacognitive skills were described as extensive. Correlation analysis indicated significant relationships between parental involvement, classroom climate, and metacognitive skills. Furthermore, parental involvement and classroom climate significantly influenced the metacognitive skills of junior high school students. It is recommended that educators and policymakers prioritize initiatives to enhance parental involvement and foster positive classroom climates. Additionally, interventions aimed at improving metacognitive skills may be integrated into educational programs.

Keywords: Parental Involvement, Classroom Climate, Metacognitive Skills, Junior High School, Descriptive Correlational, Education, Davao City, Philippines

1. INTRODUCTION

Proficiency in metacognition is a pivotal determinant of academic success, particularly in subjects like English, which demand complex language skills and critical thinking. However, many students lack the requisite metacognitive skills to navigate the complexities of English language acquisition and application. According to the Programme for International Student Assessment (PISA) conducted by the Organization for Economic Cooperation and Development (OECD) [1], which assessed reading proficiency which includes metacognitive competencies among students across 79 countries, only 8.7% students were able to comprehend lengthy texts, deal with concepts that are abstract or counterintuitive, and establish distinctions between fact and opinion, based on implicit cues on the content or source of information.

Furthermore, when examining the relationship between metacognitive skills and English proficiency, it becomes evident that students with lower metacognitive competencies tend to perform poorly in English subjects [2]. Research also indicates that many struggle to develop

effective metacognitive strategies necessary for efficient language learning and application in English subjects [3]. This issue is further exacerbated by the vast cultural and linguistic differences across countries, making it a complex international problem [4].

In the Philippines, the situation remains equally concerning. The same assessment conducted by OECD in 2018 revealed that only three of ten Filipino students (28.2%) attained at least the minimum proficiency level (Level 2) in English literacy. Disparities in the quality of education further exacerbate this deficiency in metacognitive abilities, with students from socioeconomically disadvantaged backgrounds disproportionately affected. Alarmingly, this national problem is perpetuated by a lack of adequate support systems, as only 20% of schools reported having comprehensive metacognitive skill development programs in place [5].

Zooming in on the educational landscape of Davao City, Realino [6] investigated the academic challenges faced by Kalagan learners. Among the six themes distilled from the collected data, participants notably emphasized the importance of utilizing English in both written and spoken communication. Similarly, students often make errors in understanding written instructions, comprehending announcements, and following guidelines [7]. The same study found that the students' exposure to the English linguistic environment was moderate, and their level of oral proficiency in terms of comprehension, fluency, grammar, pronunciation, and vocabulary was low. Furthermore, within the context of Davao's unique socio-cultural environment, it was observed that factors such as limited access to quality English instruction, varying levels of parental involvement, and disparities in classroom climates exacerbated the metacognitive skill deficit among students.

Similarly, research by Motlaq and Talepour [8] revealed that a positive classroom climate, characterized by a supportive and inclusive learning environment, fosters metacognitive skill growth among students. When students feel safe and encouraged to express their thoughts and take intellectual risks, their metacognitive capacities flourish. Greenier et al. [9] conducted a study in the United Kingdom and reported that school climate strongly predicts metacognition.

Despite the growing recognition of the importance of metacognitive skills, parental involvement, and classroom climate in shaping students' success in English subjects, a notable research gap exists in the current body of literature. While various studies have independently explored the influence of parental involvement or classroom climate on metacognitive skills, a dearth of comprehensive research examines the interplay between these two critical factors within the specific context of English language learning. Additionally, limited attention has been paid to region-specific investigations, such as studies focused on the unique challenges and opportunities students face in Davao, which could provide valuable insights for localized interventions.

The researcher's professional experience as a dedicated DepEd teacher specializing in English instruction provides a unique vantage point for investigating the critical issue of low metacognitive skills among students in English subjects. Through years of dedicated teaching in the Department of Education, the researcher has witnessed firsthand the challenges that students face in developing metacognitive competencies necessary for effective language learning and application. Moreover, this experience has enabled the researcher to discern the multifaceted role that parental involvement and classroom climate play in the educational journey of students. Having engaged with diverse classroom environments and interacted closely with students and parents, the researcher understands the complex interplay of factors that contribute to students' metacognitive development or lack thereof. Hence, this study aims to determine the metacognitive skills of senior high

school students and describe how parental involvement and classroom climate affect it. The study outcomes will be valuable as these can be translated into practical strategies and recommendations that can be readily applied within the DepEd system to enhance the metacognitive skills of students in English subjects.

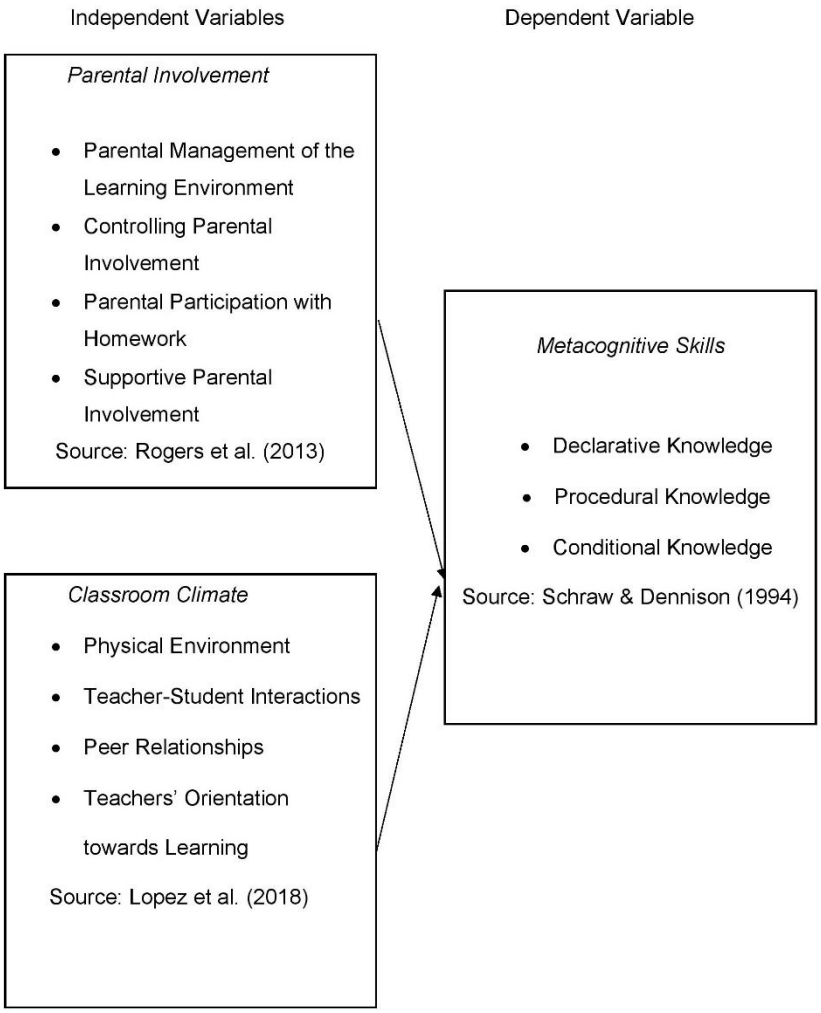

Figure 1. Conceptual Framework of the Study

2. METHODOLOGY

2.1 Research Design

The study utilized a quantitative research design, specifically adopting the descriptive correlation design. Quantitative research, which defined as a systematic investigation of phenomena by gathering quantifiable data and employing statistical, mathematical, or computational techniques, emphasizes objectivity, accuracy, and the quantification of factors. To arrive at valid results, this research approach employed controlled and

standardized data-gathering methods such as surveys, experiments, or observations, allowing for the measurement of variables and testing of hypotheses [10].

Additionally, the study adhered to a non-experimental research paradigm involving observing and analyzing naturally occurring relationships and patterns among variables. Unlike experimental research, non-experimental research did not manipulate variables but sought to understand and describe relationships as they naturally existed [11]. This approach was particularly relevant in exploring the complex interplay between parental involvement, classroom climate, and metacognitive skills among junior high school students in English subjects.

Furthermore, descriptive correlation was used to analyze and describe correlations between two or more variables without changing them. Finding and comprehending the patterns, relationships, or connections between these variables was the main objective of descriptive correlational research. Unlike experimental research, where variables are manipulated to establish causation, descriptive correlational research focuses on observing and measuring the strength and direction of relationships between variables as they naturally occur in the real world [12].

In context, the descriptive-correlational research design was considered appropriate for the study because it described the extent of parental involvement, classroom climate, and metacognitive skills. It also determined the significance of the relationship between the independent variables, parental involvement, and classroom climate, while the dependent variable was metacognitive skills among public junior high school students in English subjects.

2.2 Research Respondents

A total of 200 junior high school students were included in the public secondary education institution under study. The following inclusion criteria were used to make the sample as homogeneous as possible: First, the student must have been officially enrolled in a public junior high school institution for School Year 2023-2024. Second, the student must have at least one English subject enrolled.

Furthermore, the sample was selected using a simple random sampling technique. According to Demir & Sahim [13], in simple random sampling, each member of a population had an equal chance of being chosen through the use of an unbiased selection method. Each subject in the sample was given a number, and then the sample was chosen by a random method. This study selected the sample through a lottery method after collecting the population frame.

This approach allows for a comprehensive examination of the private secondary education institutions under the study, ensuring that the sample accurately represents the population while maintaining homogeneity based on the specified criteria.

2.3 Research Instrument

In order to determine the parental involvement, classroom climate, and critical thinking skills of the students, an adopted survey questionnaire was used. The questionnaire used for this study was composed of three parts, namely, the Parental Involvement Scale, Classroom Climate Scale, and Metacognitive Awareness Inventory. The items in the questionnaire were carefully chosen and based on published related studies and literature.

An expert review panel of five individuals was asked to review the survey to establish content validity. These experts were asked about clarity and readability and to provide written comments on the issues table included in the expert review packet. A pilot survey was conducted on 30 students to determine the items' face validity and logical ordering. This process also determined if any items had been overrepresented or omitted in the data collection process. Changes were made to the survey based on the expert panel review and the pilot survey. Additionally, the pilot survey process was conducted to determine the instrument reliability of the survey. The Cronbach alpha coefficient was used to estimate the consistency of scores in the instrument. A Cronbach alpha score of 0.7 and above was obtained to declare that the research instrument was reliable.

The first part of the questionnaire was measured by a 35-item Parental Involvement Scale. The scale has four dimensions, namely, parental management of the learning environment, controlling parental involvement, parental participation with homework, and supportive parental involvement. The scale was constructed by Rogers, Tannock, and Midgett [14]. Moreover, the Parental Involvement questionnaire demonstrated excellent reliability in this study, with a Cronbach's alpha value of 0.92.

The second part of the questionnaire was adopted from the Classroom Climate Scale by Lopez et al. [15] consisting of 24 questions. The scale has five dimensions: physical environment, teacher-student interactions, peer relationships, and teachers' orientation toward learning. Furthermore, the Classroom Climate questionnaire demonstrated excellent reliability in this study, with a Cronbach's alpha value of 0.94.

The third part was adopted from Schraw & Dennison's [16] questionnaire on Metacognitive Awareness Inventory, consisting of 17 questions. The scale has three dimensions, namely, declarative knowledge, procedural knowledge, and conditional knowledge. Moreover, the Metacognitive Skill questionnaire demonstrated excellent reliability in this study, with a Cronbach's alpha value of 0.93.

2.4Data Analysis

In analyzing and interpreting the data gathered for this study, the following statistical tools were employed:

Mean. This was used to determine the respondents' extent of parental involvement, classroom climate, and metacognitive skills.

Pearson-r Moment Correlation. This was used to determine the significant relationship among the respondents' parental involvement, classroom climate, and metacognitive skills.

Multiple Linear Regression. This was used to determine whether the respondents' parental involvement and classroom climate significantly predicted their metacognitive skills.

SPSS (Statistical Package for the Social Sciences) version 21.0 was used to analyze the data.

2.5Ethical Consideration

In this study, the researcher considered the ethical research standards. Initially, the researcher secured an institutional ethics certification with certificate number 204-01-21-24, demonstrating adherence to established ethical guidelines. Following this, the researcher diligently followed the protocols outlined by the relevant authorities involved in the study. Letters seeking permission were sent to the appropriate authorities to ensure the study's safe conduct. Participation in this study was entirely voluntary, and respondents were informed of their right to refuse participation. Importantly, such refusal had no bearing on any services or entitlements of the respondents to their respective institutions nor from Rizal Memorial Colleges, Inc.

Furthermore, respondents were made aware of their right to withdraw from participation at any time without needing to provide justification, and the researcher duly acknowledged any withdrawals and retracted relevant data. It was communicated to the respondents that the outcomes of this study would be utilized solely for academic discussions and not for any financial gain. Additionally, the researcher adhered strictly to the basic health guidelines prescribed by relevant agencies to ensure the safety of both the researcher and the respondents, particularly during the ongoing national health crisis.

3. RESULTS AND DISCUSSION

3.1 Extent of Parental Involvement among Junior High School Students

Table 1. *Extent of Parental Involvement among Junior High School Students*

Indicators	SD	Mean	Descriptive Level
Parental Management of the Learning Environment	1.13	3.66	Extensive
Controlling Parental Involvement	1.24	2.63	Moderately Extensive
Parental Participation with Homework	1.01	3.51	Extensive
Supportive Parental Involvement	1.02	3.92	Extensive
Overall	**1.12**	**3.43**	Extensive

Table 1 presents the extent of parental involvement among junior high school students. It has garnered an extensive overall mean rating of 3.43, with the mean rating of the different indicators ranging from 2.63 to 3.92. This implied that the parents were often involved in their

child's learning. The indicator "Controlling Parental Involvement" had a mean rating of 2.63, while "Supportive Parental Involvement" had a mean rating of 3.92. The overall standard deviation of 1.12, being higher than 1, indicated that the ratings were spread out over a wider range around the mean.

Parental involvement in education has been widely recognized as a crucial factor influencing students' academic achievement and overall school success [17]. Numerous studies have demonstrated the positive impact of parental involvement on various aspects of students' educational experiences.For instance, a study conducted by Epstein [18] emphasized the significance of parental involvement in enhancing students' academic motivation, school attendance, and educational outcomes. Epstein highlighted the importance of establishing strong home-school partnerships, where parents are actively engaged in their children's learning process, such as monitoring homework completion, communicating with teachers, and participating in school events. Furthermore, Benner et al. [19] conducted a study on parental involvement and academic achievement, concluding that students with highly involved parents tend to perform better academically across different grade levels and socioeconomic backgrounds. Moreover, Epstein [20] proposed a theoretical framework known as the "Model of Parental Involvement" to understand the mechanisms through which parental involvement influences student outcomes. According to this model, parental involvement influences students' motivation, engagement, and academic achievement through its impact on students' perceptions of parental support, efficacy beliefs, and goal orientations.

3.2Extent of Classroom Climate among Junior High School Students

Table 2. *Extent of Classroom Climate among Junior High School Students*

Indicators	SD	Mean	Descriptive Level
Physical Environment	0.92	3.90	Extensive
Teacher-Student Interactions	0.94	3.90	Extensive
Peer relationships	0.92	3.83	Extensive
Teacher's Orientation towards Learning	0.92	4.08	Extensive
Overall	**0.95**	**3.93**	Extensive

Table 2 presents the extent of classroom climate among junior high school students. It has garnered an extensive overall mean rating of 3.93, with the mean rating of the different indicators ranging from 3.83 to 4.08. This implied that a conducive classroom climate was often observed. The indicator "Peer relationships" had a mean rating of 3.83, while the "Teacher's Orientation towards Learning" had a mean rating of 4.08. The overall standard deviation of .95, being less than 1, indicated that the ratings were tightly clustered around the mean.

A study by Allen et al. [21] found that a positive classroom climate, characterized by supportive teacher-student relationships, clear expectations, and a sense of belonging, is associated with higher levels of student motivation and achievement. Furthermore, research conducted by Wang and Degol[22] demonstrated that a positive classroom climate has a strong positive effect on student learning outcomes across various subject areas and grade levels. Moreover, several researchers have underscored the importance of classroom climate in the context of senior high school education.

In their study examining classroom climate in senior high school settings, Oriol et al. [23] emphasized the role of a positive classroom environment in fostering students' intrinsic motivation and academic engagement. Similarly, Núñez et al. [24] highlighted the significance of a supportive classroom climate in promoting students' sense of competence and autonomy, which are crucial for academic success in the senior high school years. Additionally, research by Darling-Hammond and Cook-Harvey [25] emphasized the impact of classroom climate on students' emotional well-being and satisfaction with school. They found that a positive classroom climate characterized by warmth, respect, and a sense of community contributes to students' overall satisfaction with their educational experience. This, in turn, can lead to greater engagement and motivation to learn.

3.3 Extent of Metacognitive Skills among Junior High School Students

Table 3. *Extent of Metacognitive Skills among Junior High School Students*

Indicators	SD	Mean	Descriptive Level
Declarative Knowledge	0.90	3.89	Extensive
Procedural Knowledge	0.88	3.98	Extensive
Conditional Knowledge	0.80	4.06	Extensive
Overall	**0.90**	**3.98**	Extensive

Table 3 presents the extent of metacognitive skills among junior high school students. It has garnered an extensive overall mean rating of 3.98, with the mean rating of the different indicators ranging from 3.89 to 4.06. This implied that the metacognitive skills of the students were often observed. The indicator “Declarative Knowledge” showed a mean rating of 3.89, while the “Conditional Knowledge” had a mean rating of 4.06. The overall standard deviation of .90, being less than 1, indicated that the ratings were tightly clustered around the mean.

A study by Bahri and Corebima[26] suggested that students with strong metacognitive skills are better equipped to set goals, select appropriate learning strategies, and regulate their cognitive processes effectively. Moreover, Abbas et al. [27] socio-cognitive model emphasized the significance of metacognitive self-regulation in academic achievement, highlighting its role in fostering strategic learning behaviors and enhancing academic performance. Furthermore, Sheffler et al. [28] proposed that metacognitive abilities develop progressively throughout adolescence, indicating that students may exhibit a heightened level of metacognitive awareness compared to younger students.

Additionally, studies have shown that metacognitive skills are pivotal in language learning and proficiency development [29]. For instance, Liu [30] argued that metacognitive strategies, such as planning, self-monitoring, and self-evaluation, are instrumental in improving language learners' comprehension and production abilities. Similarly, Haque [31] highlighted the importance of metacognitive awareness in language learning autonomy, emphasizing its role in fostering learners' ability to regulate their learning process and overcome challenges effectively.

3.4Significance of Relationship between Parental Involvement, Classroom Climate on Metacognitive Skills

Table 4. *Significance of Relationship between Parental Involvement, Classroom Climate on Metacognitive Skills*

	Metacognitive Skills		
	R	p-value	Remarks
Parental Involvement	0.414	0.000	Significant
Classroom Climate	0.638	0.000	Significant

Table 4 shows that parental involvement was significantly related to metacognitive skills, with an R-value of 0.414. Also, it reflects a p-value of 0.000, which is less than the alpha set at .05 (two-tailed), supporting a significant relationship. It means that as the extent of parental involvement increases, the extent of metacognitive skills of students also significantly increases. In similar manner, classroom climate revealed a significant relationship with metacognitive skills ($r=0.638$, $p<0.05$). This means that as the extent of classroom climate increases, the extent of students' metacognitive skills significantly increases.

The finding of a significant relationship between parental involvement and metacognitive skills among students aligns with Socio-cultural Theory. According to Vygotsky's socio-cultural theory [32], learning occurs within the context of social interactions, with parents serving as primary socialization agents in a child's life. This notion is echoed in a study by Jeynes[33] which found that parental involvement positively correlated with various cognitive skills, including metacognition. Metacognitive skills, encompassing self-awareness, self-regulation, and strategic thinking, are crucial components of effective learning and problem-solving. Parental involvement manifested through activities such as engaging in discussions about learning strategies, providing scaffolding during homework tasks, and modeling metacognitive behaviors can foster the development of these skills in children. Moreover, a study by Thomas et al. [34] revealed a significant association between parental involvement and academic achievement, with metacognitive skills mediating this relationship.

Moreover, numerous studies have highlighted the significant relationship between classroom climate and metacognitive skills. A study by Şahin [35] found that a positive and supportive classroom environment fosters the development of metacognitive skills among students. They argued that when students feel safe, respected, and engaged in the learning process, they are more likely to engage in metacognitive activities such as planning, monitoring, and evaluating their learning progress. Similarly, Greenier et al. [9] emphasized the importance of a conducive classroom climate in promoting metacognitive regulation, suggesting that teachers' encouragement, feedback, and instructional support are crucial in enhancing students' awareness and control over their cognitive processes. Furthermore, [36] highlighted in his meta-analysis that classroom climate factors, such as teacher-student relationships and peer interactions, substantially impact students' metacognitive development and academic achievement.

3.5 Significance of the Influence of Parental Involvement and Classroom Climate on Metacognitive Skills

Table 5. *Significance of the Influence of Parental Involvement and Classroom Climate on Metacognitive Skills*

		Metacognitive Skills			
Singular Influence of the Predictors		Standardized Coefficients	T	p-value	Remarks
Parental Involvement		0.139	2.242	0.026	Significant
Classroom Climate		0.570	9.215	0.000	Significant
Combined Influence of the Predictors					
R	0.649				
R^2	0.421				
F	71.689				
P	0.000				Significant

Table 5 shows the results of the multiple regression analysis. In singular capacity, the parental involvement shows a p-value of 0.026, which is less than 0.05 level of significance (2-tailed) with a positive standardized beta value of 0.13. It means that for every unit increase in the value of the extent of parental involvement, there is a corresponding increase of 0.13 in the extent of metacognitive skills of students.

Likewise, the independent variable, classroom climate, reflects a positive standardized beta value of 0.570 and a p-value of 0.00, less than the 0.05 level of significance (2-tailed). This means that, in a singular capacity, the extent of classroom climate is a significant predictor of students' metacognitive skills. In addition, the combined influence of the two independent variables, parental involvement and classroom climate, towards metacognitive skills was significant ($F=71.68$ $p<0.05$). Meanwhile, the model explains 42 percent of the variance of metacognitive skills based on the independent variables included in this study, as indicated by $R2= 0.42$. This means that 58 percent of the variance in metacognitive skills can be attributed to other factors aside from parental involvement and classroom climate. The findings indicated that parental involvement and classroom climate are significant predictors of metacognitive skills among students.

The results of the study validated the theories anchored in this study. Firstly, Social learning theory by Bandura [37] posited that individuals learn through observation, modeling, and reinforcement within their social environment. In the context of metacognitive skills development, parental involvement plays a crucial role as parents serve as primary socializing agents.

According to Bandura's social learning theory, children observe and internalize cognitive and behavioral strategies modeled by their parents. Active parental involvement in their child's education, such as discussing academic goals, providing guidance on problem-solving strategies, and encouraging reflective thinking, fosters the development of metacognitive skills by providing direct modeling and reinforcement mechanisms.

Secondly, the Self-determination theory by Deci and Ryan [38] emphasized the importance of autonomy, competence, and relatedness in promoting intrinsic motivation and optimal functioning. A positive classroom climate, characterized by supportive teacher-student relationships, opportunities for autonomy, and a sense of belonging, aligns with the basic psychological needs outlined in self-determination theory. When students feel respected, valued, and supported within their learning environment, they are more likely to engage in self-regulatory processes, including metacognitive strategies such as planning, monitoring, and evaluating their learning progress.

Lastly, Ecological theory by Bronfenbrenner [39] underscored the interconnectedness between individuals and their environments, emphasizing the impact of multiple systems,

including family, school, and community, on human development. Within the ecological framework, parental involvement bridges the home and school environments, facilitating the transfer of metacognitive skills across contexts. A positive classroom climate, influenced by teacher-student interactions, peer relationships, and instructional practices, contributes to the development of metacognitive skills by creating a supportive learning environment conducive to reflection, collaboration, and cognitive engagement.

4. SUMMARY OF FINDINGS

This study aimed to determine if parental involvement and classroom climate significantly predict the metacognitive skills among junior high school students in public secondary institutions in Davao City. Five specific objectives were set to accomplish the general objective of the study. First, the study determined the extent of parental involvement in terms of parental management of the learning environment, controlling parental involvement, parental participation with homework and supportive parental involvement. Second, the study determined the extent of classroom climate in terms of physical environment, teacher-student interactions, peer relationships and teachers' orientation towards learning. Third, the study determined the extent of metacognitive skills in terms of declarative knowledge, procedural knowledge and conditional knowledge.Fourth, the study determined the significance of the relationship between parental involvement and classroom climate on the metacognitive skills of the students. Finally, the study determined the significance of the singular and combined influence of parental involvement and classroom climate on the metacognitive skills of the students.

Utilizing a descriptive-correlational research design, a total of 200 junior high school students from a secondary education institution in Davao City, Philippines, were surveyed using standardized questionnaires administered through face-to-face survey. The mean, standard deviation (SD), Pearson product-moment correlation, as well as simple and multiple linear regression analyses were employed to analyze the collected data.From the data gathered, the following findings were drawn:

Firstly, the extent of parental involvement among junior high school students obtained an overall mean of 3.43, which was described as extensive and with a standard deviation of 1.12. The indicators, parental management of the learning environment, controlling parental involvement, parental participation with homework, and supportive parental involvement showed a mean of 3.66, 2.63, 3.51, and 3.92, respectively.

Secondly, the extent of classroom climate among junior high school students obtained an overall mean of 0.95, described as extensive, and a standard deviation of 1.17. The indicators, physical environment, teacher-student interactions, peer relationships and teachers' orientation toward learning, showed a mean of 3.90, 3.90, 3.83 and 4.08, respectively.

Thirdly, the extent of metacognitive skills among junior high school students obtained an overall mean of 3.98, which was described as extensive and a standard deviation of 0.90. The indicators declarative, procedural and conditional knowledge showed a mean of 3.89, 3.98 and 4.06, respectively.

Fourthly, the correlation between parental involvement and metacognitive skills obtained an r-value of 0.414, which was significant (p=.000) at a 0.05 alpha level of significance. Meanwhile, the correlation between classroom climate and metacognitive skills obtained an r-value of .638, which was significant (p=0.000) at a 0.05 alpha level of significance.

Finally, when the singular influence of the independent variables on the dependent variable was determined, parental involvement (β=0.139, p=0.026) significantly influenced metacognitive skills. In the same way, classroom climate (β = 0.570, p=0.000) significantly influenced metacognitive skills. When the combined influence of the independent variables on the dependent variable was examined, both parental involvement and classroom climate (F=71.689, p<0.000) significantly influenced metacognitive skills.

5. CONCLUSIONS

Based on the findings of the study, the following conclusions were formulated:

Parental involvement among junior high school students is oftentimes observed. It suggests that parents actively engage in various aspects of their child's education and school life. This involvement could manifest in activities such as attending parent-teacher meetings, volunteering at school events, assisting with homework, or participating in school decision-making processes.

The classroom climate among junior high school students is oftentimes observed. It indicates that there is an environment conducive to learning, collaboration, and mutual respect among students and teachers. A positive classroom climate often entails elements such as supportive teacher-student relationships, clear expectations, effective communication, and a sense of belonging for all students.

The metacognitive skills of junior high school students are often observed. It suggests that they possess the ability to monitor, regulate, and reflect on their own learning processes. Metacognitive skills include activities such as setting goals, planning strategies, monitoring progress, and evaluating outcomes.

There is a significant relationship between parental involvement and metacognitive skills. Additionally, a significant relationship is observed between classroom climate and metacognitive skills. It suggests that these two factors play important roles in shaping students' ability to monitor and regulate their own learning processes. When parents are actively engaged in their child's education and there is a positive classroom environment, students are more likely to develop stronger metacognitive skills.

Parental involvement and classroom climate significantly influence metacognitive skills. It implies that a symbiotic relationship between home and school environments shapes students' ability to monitor and regulate their learning processes. When parents are actively engaged and there is a positive classroom atmosphere, students are more likely to develop stronger metacognitive abilities.

6. RECOMMENDATIONS

Based on the findings and conclusions of the study, the following recommendations were created:

The Department of Education may emphasize parental involvement and foster a positive classroom climate in junior high schools. They may develop policies and guidelines that encourage and support schools in promoting parental engagement and creating conducive learning environments. Additionally, the department may provide training and resources for educators to enhance their understanding of the role of parental involvement and classroom climate in developing students' metacognitive skills.

The school heads are crucial in creating a supportive environment conducive to parental involvement and positive classroom climates. They may prioritize initiatives that strengthen partnerships between parents and teachers, such as organizing regular parent-teacher meetings and workshops. Moreover, school heads may ensure that teachers receive professional development opportunities focused on implementing strategies to nurture metacognitive skills through collaborative efforts with parents and by fostering a conducive classroom climate.

The teachers may actively involve parents in their child's learning process by communicating regularly about academic progress, providing opportunities for parental participation in school activities, and soliciting feedback from parents. Furthermore, teachers may create a classroom atmosphere that promotes student engagement, cooperation, and critical thinking. They can achieve this by implementing student-centered teaching strategies, fostering a sense of belonging and respect among students, and providing opportunities for self-reflection and metacognitive skill development.

The students may take advantage of self-reflection and self-regulated learning opportunities to enhance their metacognitive skills. They can do this by setting goals, monitoring their progress, and adjusting their learning strategies. Additionally, students may actively participate in classroom activities and discussions to benefit from a positive learning environment. They may also communicate with their parents about their academic experiences and seek support when needed.

The parents may actively engage in their child's education by showing interest in their academic progress, communicating with teachers, and participating in school-related activities. They may create a supportive home environment that encourages independent learning and critical thinking skills development. Additionally, parents may collaborate with teachers to reinforce classroom learning and provide additional support and resources as needed.

The future researchers may further investigate the mechanisms through which parental involvement and classroom climate influence metacognitive skills development in junior high school students. They can explore different approaches to enhancing parental engagement and creating positive classroom environments and their effects on students' metacognitive abilities. Moreover, researchers may examine the long-term impact of these factors on academic achievement and overall student success.

CONSENT

All authors declare that ‘written informed consent was obtained from the respondent (or other approved parties) for publication of this case report and accompanying images. A copy

of the written consent is available for review by the Editorial office/Chief Editor/Editorial Board members of this journal.

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