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Student-Centric Pedagogy and Analytical Thinking Aptitude of Students in Davao Central District, Davao City

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Abstract. The study aimed to determine the influence of student-centric pedagogy on the analytical thinking aptitude of students. In this study, the researcher selected 200 elementary school teachers in selected public elementary schools in Davao Central District, Davao City, as the study's respondents. A stratified random sampling technique was utilized in the selection of the respondents. A non-experimental quantitative research design using a descriptive-correlational method was employed. The data collected were subjected to the following statistical tools: Mean, Pearson Moment Product Correlation, and Regression Analysis. Findings revealed that student-centric pedagogy and analytical thinking aptitude of students were rated as moderately extensive. Further, correlation analysis demonstrated that there was a significant relationship between student-centric pedagogy and the analytical thinking aptitude of students in Davao Central District, Davao City. Evidently, regression analysis proved that student-centric pedagogy in terms of learner empowerment, self-directed learning, and technology integration significantly influences the analytical thinking aptitude of students. Department of Education (DepEd) should develop policies prioritizing smaller class sizes and teacher-student ratios to facilitate personalized instruction and individualized student support. The study, therefore, was conducted for further utilization of findings through publication in a reputable research journal.

KEY WORDS

1. educational management 2. student-centric pedagogy 3. analytical thinking aptitude of students

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1. Introduction

The necessity to conduct a study on the influence of student-centric pedagogy on the analytical thinking aptitude of students arose from the growing emphasis on developing critical cognitive skills essential for success in the 21st century. As educational paradigms shifted towards more student-centered approaches, understanding how these methods impacted students' ability to analyze, evaluate, and synthesize information became crucial. Analytical thinking was fundamental not only for academic achievement but also for problem-solving and decision-making in real-world contexts. By investigating the effectiveness of student-centric pedagogy in enhancing these skills, educators could better design curricula and teaching strategies that foster deeper learning and prepare students for future challenges. This study aimed to provide empirical evidence on the benefits of student-centric teaching methods, thereby contributing to the broader discourse on educational innovation and effectiveness. One of the signifi-

cant challenges in the USA concerning the poor analytical thinking aptitude of students is the overemphasis on standardized testing. According to Hursh (2019), the focus on high-stakes testing has led to a curriculum that prioritizes rote memorization and test preparation over critical thinking and problem-solving skills. This narrow approach to education often limits opportunities for students to engage in activities that develop their analytical thinking, such as project-based learning and open-ended questioning. Another issue is the disparity in educational resources and opportunities. Reardon (2019) highlighted that socioeconomic factors play a significant role in educational outcomes in the USA. Students from low-income backgrounds often attend underfunded schools with limited access to advanced coursework and experienced teachers. This inequity affects their ability to develop strong analytical thinking skills, as they may not have the same exposure to challenging and enriching educational experiences as their more affluent peers. In many Asian countries, the education system's traditional focus on rote learning and memorization poses a significant challenge to developing students' analytical thinking skills. Tan (2020) notes that in countries like China, Japan, and South Korea, the cultural emphasis on exam success and high academic performance often leads to an educational environment that values factual recall over critical analysis and creative problem-solving. This approach can stifle students' ability to think independently and analytically. Additionally, Chang (2019) reported that the intense focus on academic achievement and entrance exams can create a high-stress environment that discourages students from taking intellectual risks or exploring subjects in depth. This environment is not conducive to developing analytical thinking skills, as students may prioritize getting the right answer over understanding the underlying concepts and engaging in critical analysis. In the Philippines, Tan (2019) noted that traditional pedagogical approaches dominate the Philippine educational system, where teachers primarily deliver content through lectures, leaving little room for student engagement and active learning. This lack of interactive and student-centered teaching strategies limits opportunities for students to develop their analytical thinking abilities. Additionally, Reyes (2021) reported schools in some underprivileged areas often lack the necessary tools and resources to implement effective teaching strategies that promote analytical thinking. Without access to up-to-date materials and digital technologies, students are deprived of opportunities to engage in activities that foster critical and analytical thinking skills. Despite the growing body of research highlighting the benefits of student-centric pedagogy in enhancing analytical thinking skills, most of these studies have been conducted in foreign settings, primarily in Western countries. Studies by Erikson and Erikson (2019) and Jin et al. (2022) have demonstrated that student-centered approaches significantly boost students' critical and analytical thinking capabilities. However, the educational contexts and cultural settings in these studies differ significantly from those in the Philippines. The specific educational challenges, resources, and cultural nuances present in the Philippine context necessitate a localized investigation to determine if similar benefits can be observed. The existing literature lacks comprehensive studies focused on the application and impact of student-centric pedagogy within the unique socio-cultural and educational framework of the Philippines, particularly in regions like Davao City. Given this gap, it is crucial to conduct a study that explores the influence of student-centric pedagogy on the analytical thinking aptitude of students in Davao City. The local educational system faces distinct challenges, such as overcrowded classrooms, limited resources, and traditional teaching methods, which may affect the imple-

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mentation and effectiveness of student-centered approaches. By focusing on Davao City, the study can provide valuable insights into how these pedagogical strategies can be adapted to fit the local context and address specific educational needs. This research will not only fill a critical gap in the literature but also provide practical recommendations for educators and policymakers in the Philippines, aiming to enhance teaching practices and improve student outcomes in analytical thinking and overall academic performance.

2. Methodology

This section contains the research design, research respondents, research instrument, data gathering procedure, and data analysis.

2.1. Research Design—In this study, the researcher utilized a quantitative research approach, precisely the descriptive-correlational technique, to gather data, ideas, facts, and information related to the study. As characterized by Creswell and Creswell (2018), methodologies and strategies were employed to systematically and impartially gather and scrutinize numerical data, aiming to comprehend phenomena, correlations, or trends. These methods entailed employing statistical analysis to extract insights and make deductions from the data. Quantitative research involves collecting and analyzing numerical data to examine various aspects of phenomena, relationships, or patterns within a structured framework. This type of research relied heavily on quantifiable measures and statistical techniques to draw objective conclusions based on empirical evidence. Researchers often employed surveys, experiments, or observational studies to gather data, which was then subjected to statistical analysis to identify trends, correlations, or significant differences. On the one hand, Siedlecki (2020) defined descriptive research techniques as strategies that involved methods utilized to depict, observe, and analyze the characteristics, behaviors, or phenomena of interest without exerting influence or manipulation. The primary objective was to offer a comprehensive portrayal of the subject being studied, prioritizing the depiction of existing conditions rather than delving into causality. Descriptive research typically employs a range of observational approaches, surveys, case studies, and archival investigations. Additionally, descriptive research enabled researchers to delineate and characterize various attributes, traits, or features of a population, group, or phenomenon, including demographic particulars, behaviors, attitudes, and other pertinent factors. On the other hand, Cohen, Manion, and Morrison (2018) characterized correlational research design as a form of non-experimental research employed to investigate the connection between two or more variables. This method entailed gauging the degree to which alterations in one variable corresponded with alterations in another without manipulating either variable. The aim was to ascertain whether there existed a statistical correlation between the variables and to discern the direction and magnitude of this association. Correlational research was vital in advancing knowledge across diverse domains by unveiling relationships between variables, generating hypotheses, and informing practical applications and interventions. Despite the limitations inherent in correlational studies, such as the inability to establish causality, they furnished valuable insights that complemented experimental research endeavors and enriched our comprehension of intricate phenomena. In this study, the researcher examined teachers' student-centric pedagogy and students' analytical thinking aptitude. A descriptive-correlational research ap-

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proach was deemed appropriate for investigating the relationships among these variables without manipulating them. In this context, the student-centric pedagogy of teachers and the analytical thinking aptitude of students were naturally occurring variables that were assessed and analyzed to determine their correlations. Moreover, when employed thoughtfully and mindful of its constraints, a descriptive-correlational research design had the potential to yield valuable insights into the intricate dynamics among student-centric pedagogy of teachers and the analytical thinking aptitude of students within educational contexts.

2.2. Research Respondents—The respondents of the study were elementary school teachers in Davao Central District in Davao City. In this study, the 200 respondents were selected through a stratified random sampling technique. Stratified random sampling involved the division of a population into smaller subgroups known as strata. According to Taherdoost (2016), in stratified random sampling, or stratification, the strata were formed based on members' shared attributes or characteristics such as income or educational attainment. Stratified random sampling was appropriate in this study because there was heterogeneity in the population that could be classified with ancillary information. In this study, certain inclusion criteria were implemented to determine the respondents. The inclusion criteria were as follows: teachers had to be currently employed in public or private schools within the Davao Central District, Davao City; teachers needed to have a minimum of two years of teaching experience to ensure they had sufficient expertise to implement and reflect on student-centric pedagogy; teachers had to be actively implementing student-centric pedagogical methods in their teaching practices, including approaches such as project-based learning, inquiry-based learning, and cooperative learning; and teachers had to provide informed consent to participate in the study and be willing to complete surveys, participate in interviews, or engage in focus group discussions. However, teachers who were on temporary contracts or serving as substitutes were excluded from the study to ensure the focus was on those with ongoing instructional responsibilities.

2.3. Research Instrument—The study made use of adapted and modified survey questionnaires to suit the current investigation. The first part was about the student-centric pedagogy of teachers, which was conceptualized by Marzano et al. (2001) and composed of was divided into the domains, namely learner empowerment, self-directed learning, active learning engagement, and technology integration. The reliability of the scale obtained a Cronbach's alpha value of 0.954, which was described as excellent and interpreted as very reliable. This means that the scale exhibits a very high level of reliability, indicating that the items consistently reflect the measured construct. This high level of reliability ensures that the results obtained from the scale are dependable and can be trusted to represent the intended measurement accurately. As a guide in determining the extent of the student-centric pedagogy of teachers, the researcher used a range of means, descriptions, and interpretations as presented below.

The second part of the instrument concerns the analytical thinking aptitude of students adapted from the study of Bonato et al. (2014), which consists of statements that were divided into indicators, namely: domain knowledge, attention to detail, adaptability, and time management. The reliability of the scale obtained a Cronbach's alpha value of 0.976, described as excellent and interpreted as very reliable. This high reliability indicates that the scale is ex-

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Range of Mean, Description, and Interpretation of Student-Centric Pedagogy

Range of Mean	Description	Interpretation
4.20 – 5.00	Very Extensive	The student-centric pedagogy of teachers is always observed.
3.40 – 4.19	Extensive	The student-centric pedagogy of teachers is oftentimes observed.
2.60 – 3.39	Moderately Extensive	The student-centric pedagogy of teachers is sometimes observed.
1.80 – 2.59	Less Extensive	The student-centric pedagogy of teachers is seldom observed.
1.00 – 1.79	Not Extensive	The student-centric pedagogy of teachers is never observed.

tremely dependable and that the responses are consistent across different items. Consequently, any conclusions drawn from the data collected using this scale can be made with a high degree of confidence in the accuracy and consistency of the measurements. Such a high alpha value assures that the scale provides stable and reliable results, which enhances the credibility of the study's findings. As a guide in determining the extent of the analytical thinking aptitude of students, the researcher used a range of means, descriptions, and interpretations as presented below.

Range of Mean, Description, and Interpretation of Analytical Thinking Aptitude

Range of Mean	Description	Interpretation
4.20 – 5.00	Very Extensive	The analytical thinking aptitude of students is always manifested.
3.40 – 4.19	Extensive	The analytical thinking aptitude of students is oftentimes manifested.
2.60 – 3.39	Moderately Extensive	The analytical thinking aptitude of students is sometimes manifested.
1.80 – 2.59	Less Extensive	The analytical thinking aptitude of students is seldom manifested.
1.00 – 1.79	Not Extensive	The analytical thinking aptitude of students is never manifested.

2.4. Data Gathering Procedure—After the validation of the research questionnaire, the researcher proceeded with the steps required to conduct the study. The steps were narrated as follows: The researcher secured permission to conduct the study. The researcher secured the endorsement from the Dean of the Graduate School in The Rizal Memorial Colleges, Inc., Davao City, and the ethical clearance certificate from the RMC-Research Ethics Committee (RMC-REC). The endorsement letter from the Dean of the Graduate School in The

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Rizal Memorial Colleges, Inc., Davao City; and the ethical clearance certificate from the RMC-Research Ethics Committee (RMC-REC) were attached to the permission letters to be endorsed to the school principals of the selected public schools in Cluster 3 Public Secondary Schools in Davao City. Prior to data collection, the researchers obtained informed consent from all participants, explaining the purpose of the study, the voluntary nature of participation, and the confidentiality of their responses. Respondents were given the opportunity to ask questions and clarify any concerns before agreeing to take part in the study. The researcher explained that the survey questionnaires measure students' perceptions of teacher-centric pedagogy and analytical thinking aptitude. The survey questionnaires were designed to gather information on various aspects related to teacher-centric pedagogy and students' analytical thinking aptitude. The data collected through these questionnaires served as the basis for analyzing the influence of teacher-centric pedagogy on students' analytical thinking aptitude. The collected survey questionnaires from elementary school teachers in Davao Central District in Davao City were carefully organized and compiled. Each questionnaire response was entered into a database or spreadsheet software for systematic management. Once the data was collated, statistical analyses were conducted to examine the relationships between variables. This included techniques such as correlation analysis to explore the associations between teachers' student-centric pedagogy and students' analytical thinking aptitude. Further, regression analysis was employed to investigate the influence of the student-centric pedagogy of teachers on the analytical thinking aptitude of students. This involved using specialized statistical methods to assess the indirect effects of the independent variable (student-centric pedagogy of teachers) on the dependent variable (analytical thinking aptitude of students). The results of these statistical analyses provided insights into the complex dynamics between the variables studied and helped draw conclusions about the influence of the student-centric pedagogy of teachers on the analytical thinking aptitude of students.

2.5. Data Analysis—The following were the statistical tools utilized by the researcher in processing the gathered data: Mean. This was useful in characterizing the student-centric pedagogy and analytical thinking aptitude of students in Davao Central District, Davao City. Mean is descriptive statistics that tend to measure how the score clustered. This was used to supply answers to objectives 1 and 2. Pearson Product Moment Correlation. This was utilized to determine the significance on the relationship between student-centric pedagogy and analytical thinking aptitude of students in Davao Central District, Davao City. It is a statistical measure of the strength of a linear relationship between paired data. This was used to supply answers to objective 3. Multiple Linear Regression Analysis. It was applied to evaluate the significance which domains of independent (student-centric pedagogy) variable signiifcantly influence the dependent (analytical thinking aptitude of students).

3. Results and Discussion

This chapter presents the results generated from the data gathered. It is sequenced based on the study's objectives, as explained in the first chapter. Thus, it presents the extent of student-centric pedagogy and analytical thinking aptitude of students, the significant relationship between student-centric pedagogy and analytical thinking aptitude of students, and the influence of student-centric

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pedagogy towards analytical thinking aptitude of students.

Table 1 shows the summary on the extent of student-centric pedagogy in Davao Central District, Davao City. As shown in the table, student-centric pedagogy obtained an overall mean score 3.23, descriptively rated as moderately extensive and interpreted as sometimes observed. This implies that the approach to teaching and learning that prioritizes the individual needs, interests, and strengths of each student is sometimes manifested among teachers. The outcome aligns with Weimer's (2002) assertion that in a pedagogical approach centered around learners, educators engage students in actively shaping their learning experiences, promoting autonomy, critical thinking, and a feeling of ownership over the learning process. This approach acknowledges the diverse backgrounds, abilities, and learning preferences of students. Mohammed (2022) asserted that student-centric pedagogy allows for personalized learning, where instruction is tailored to meet the individual needs, interests, and learning styles of each student. Teachers can provide differentiated instruction and utilize various assessment methods to ensure that all students can succeed.

Table 1. Summary on Student-Centric Pedagogy in Davao Central District, Davao City

Indicators	**Mean**	**Descriptive Equivalent**
Learner Empowerment	3.19	Moderately Extensive
Self-Directed Learning	3.24	Moderately Extensive
Active-Learning Engagement	3.27	Moderately Extensive
Technology-Integration	3.22	Moderately Extensive
Overall	3.23	Moderately Extensive

The table further indicates that student-centric pedagogy in terms of active-learning engagement acquired the highest mean score of 3.27 described as moderately extensive and interpreted as sometimes observed, while, student-centric pedagogy in terms of learner empowerment acquired the lowest mean score of 3.19 described as moderately extensive and interpreted as sometimes observed. According to Kaya and Öçal (2018), learner-oriented instruction fosters intrinsic motivation, which is driven by the inherent satisfaction of learning and personal growth. When learners are intrinsically motivated, they are more likely to be self-driven and engaged in the learning process.

The summary of the extent of analytical thinking aptitude of students in Davao Central District in Davao City is shown in Table 2. The table shows that the overall mean analytical thinking aptitude is 3.35, which is moderately extensive. For students with a moderate level of analytical thinking aptitude, developing these skills is crucial in fostering their critical thinking abilities. Students learn to break down complex information, evaluate different perspectives, and draw logical connections between concepts at this level.

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Table 2. Summary on Analytical Thinking Aptitude of Students in Davao Central District, Davao City

Indicators	**Mean**	**Descriptive Equivalent**
Domain Knowledge	3.29	Moderately Extensive
Attention to Detail	3.32	Moderately Extensive
Adaptability	3.43	Extensive
Time-Management	3.36	Moderately Extensive
Overall Mean	3.35	Moderately Extensive

This process sharpens their analytical skills and significantly enhances their overall cognitive capabilities. This aligns with Hussain et al.'s (2017) notion that nurturing analytical thinking aptitude enhances critical thinking skills. Students learn to dissect information, consider various viewpoints, and establish logical relationships, boosting their cognitive abilities. Additionally, analytical thinking enables them to interpret and apply data effectively, which is crucial for academic success. As they hone these skills, students become more capable of understanding complex information and making sound judgments, becoming more well-rounded. This development benefits their academic pursuits and equips them with the necessary tools to navigate everyday challenges with greater confidence and competence. This supports Yuanxiang's (2017) assertion that analytical thinking aptitude is vital for students' academic achievement, critical thinking, problem-solving, and decision-making skills. These competencies enable students to understand and utilize data effectively, making them more knowledgeable and versatile individuals in both their academic endeavors and daily activities.

Significant Relationship Between Student-Centric Pedagogy and Analytical Thinking Aptitude of Students in Davao Central District, Davao City

The results of the analysis of the relationship between student-centric pedagogy and analytical thinking aptitude of students in Davao Central District, Davao City, are presented. Bivariate correlation analysis using Pearson product-moment correlation was used to determine the relationship between the mentioned variables. Table 3 shows that student-centric pedagogy has a significant positive relationship with the analytical thinking aptitude of students in Davao Central District in Davao City with a p-value of .000 that is less than .05 level of significance (two-tailed) ($r = 0.622$, $p < 0.05$). When students are actively involved in analyzing and interpreting data through engaging methods, they are more likely to be focused and motivated. This heightened engagement makes the learning process more enjoyable and strengthens their ability to think analytically. Gurung (2018) suggested that student-centric pedagogy incorporates interactive and practical activities that immerse students in data analysis and interpretation. This increased engagement results in better focus and motivation, enhancing their analytical thinking skills.

The table also shows that student-centric pedagogy in terms of learner empowerment; self-directed learning, active-learning engagement, and technology-integration have a significant relationship with the analytical thinking aptitude of students with a p-value of .000

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Table 3. Significant Relationship Between Student-Centric Pedagogy and Analytical Thinking Aptitude of Students in Davao Central District, Davao City

Variables	***r*-value**	***p*-value**	**Decision**
Learner Empowerment	0.489*	0.000	Reject H0
Self-Directed Learning	0.567*	0.000	Reject H0
Active-Learning Engagement	0.661*	0.000	Reject H0
Technology-Integration	0.433*	0.000	Reject H0
Overall Student-Centric Pedagogy	0.622*	0.000	Reject H0

*Significant @ $p < 0.05$

Legend: Perfect Correlation for $r = 1.00$; Strong Correlation for $0.7 \leq r < 1.00$; Moderate Correlation for $0.3 \leq r < 0.7$; Weak Correlation for $0.3 > r > 0.00$; No Correlation for $r = 0.00$

that is less than .05 level of significance (two-tailed) (r = 0.489, p < 0.05), (r = 0.567, p < 0.05), (r = 0.661, p < 0.05), and (r = 0.433, p < 0.05). This finding emphasizes the importance of personalization in education. By allowing students to learn and apply data analysis techniques in a manner that suits their individual preferences and speed, student-centric pedagogy helps them grasp complex concepts more effectively. Rajaram and Rajaram (2021) discovered that student-centric pedagogy enables students to explore data analysis methods tailored to their unique learning styles and pace. This personalized approach to learning has been shown to enhance students' comprehension and retention of data interpretation principles.

Significance on the Influence of Student-Centric Pedagogy on the Analytical Thinking Aptitude of Students in Davao Central District, Davao City

Table 4 shows the results of the regression analysis. In a singular capacity, the student-centric pedagogy in terms of learner empowerment significantly influenced the analytical thinking aptitude of students with a p-value that is then the .05 level of significance (2-tailed) (p < .05) with a positive standardized beta value of .188. It means that for every unit increase in the value of the extent of student-centric pedagogy in terms of learner empowerment, there is a corresponding increase of .188 in the importance of the analytical thinking aptitude of students. Students become more engaged in their learning processes by fostering a sense of autonomy and intrinsic motivation. This engagement is crucial for analytical thinking as it drives students to go beyond surface-level understanding to critically examine the subject matter, formulate questions, and independently search for answers. Active involvement in their learning journey helps them develop greater analytical skills essential for academic success and lifelong learning. The findings support Erikson and Erikson's (2019) viewpoint that empowerment fosters autonomy and intrinsic motivation, prompting students to actively participate in their learning. This heightened engagement is essential for the development of analytical thinking skills, as it encourages students to explore topics more deeply, pose questions, and independently seek answers.

Further, in a singular capacity, student-centric pedagogy in terms of self-directed learning significantly influenced the analytical thinking aptitude of students with a p-value that is less than the .05 level of significance (2-tailed) (p<.05) with a positive beta value of .157. This

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Table 4. Significant Influence of Student-Centric Pedagogy on the Analytical Thinking Aptitude of Students in Davao Central District, Davao City

Indicators of Student-Centric Pedagogy	**B**	***p*-value**	**Decision**
Learner Empowerment	.188*	.000	Reject H0
Self-Directed Learning	.157*	.000	Reject H0
Active-Learning Engagement	-.057	.113	Accept H0
Technology-Integration	.163*	.002	Reject H0
R^2	0.406		
F-value	6.824*		
***p*-value**	0.000		

*Significant @ $p < 0.05$

means that for every unit increase in the extent of student-centric pedagogy in terms of self-directed learning, there is a corresponding increase of .157 in the importance of students' analytical thinking aptitude. Student-centric pedagogy emphasizes self-directed learning, where students take charge of their educational paths. This autonomy requires them to make informed decisions about their learning strategies and resources. Such decision-making processes inherently enhance their analytical thinking skills. Jin et al. (2022) asserted that self-directed learning necessitates students taking control of their educational journey, involving decision-making about what and how to learn. This decision-making process boosts their analytical thinking skills. As students evaluate different learning resources and strategies, they hone their ability to critically assess the effectiveness and relevance of information, which is a fundamental aspect of analytical thinking. Furthermore, in a singular capacity, student-centric pedagogy in terms of technology integration significantly influenced the analytical thinking aptitude of students with a p-value that is less than the .05 level of significance (2-tailed) (p<.05) with a positive beta value of .163. It means that for every unit increase in the extent of student-centric pedagogy in terms of technology integration, there is a corresponding increase of .157 in the extent of analytical thinking aptitude of students. The use of technology within student-centric pedagogy significantly enhances students' analytical thinking skills by providing interactive and engaging learning experiences. Educational software, simulations, and virtual labs allow students to actively engage with the material, experiment with different scenarios, and deeply explore complex concepts. These interactive tools require students to apply their analytical skills to understand and manipulate the subject matter, promoting deeper cognitive engagement and critical thinking. Farjon et al. (2019) emphasize that integrating technology creates engaging and interactive learning environments that encourage active learning. Tools like educational software, simulations, and virtual labs enable students to experiment, explore, and understand complex concepts. Significantly, of the three domains, learner empowerment had a greater impact on the analytical thinking aptitude of students than self-directed learning and technology integration. Additionally, the combined influence of the domains of student-centric pedagogy towards the analytical thinking aptitude of students is significant (F = 6.824, p< 0.05).

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Meanwhile, the model explains 40.60 percent of the variance of the analytical thinking aptitude of students based on the independent variable explored in this study as indicated by R2= .406. This means that 59.40 percent of the variance in the analytical thinking aptitude of students can be attributed to other factors aside from the student-centric pedagogy. This denotes that student-centric pedagogy significantly enhances the analytical thinking aptitude of students when viewed through the lens of Kolb's Experiential Learning Theory (1984) that through activities such as project-based learning, simulations, and real-world problem solving, students apply theoretical concepts in practical contexts, facilitating deeper understanding and critical analysis. Reflective observation and abstract conceptualization follow, where students review their experiences, evaluate outcomes, and formulate new ideas or modify existing concepts. This cyclical process not only reinforces the material but also hones students' abilities to think analytically, assess various perspectives, and develop innovative solutions.

4. Conclusions and Recommendations

This part of the paper presents the researcher's conclusions and recommendations. The discussions were supported by the literature presented in the first chapters, and the conclusions were in accordance with statements of the problem presented in this study.

4.1. Findings—The study delved to determine which domains of student-centric pedagogy significantly influence the analytical thinking aptitude of students utilizing non-experimental quantitative design using correlation technique. The researcher selected 200 elementary school teachers in Davao Central District, Davao City, as the respondents through a random sampling method. The researcher made use of modified and enhanced adapted survey questionnaires, which were pilot-tested in a nearby school to ensure high reliability and internal consistency of the items in the instrument. Student-centric pedagogy in Davao Central District in Davao City has an overall mean of 3.23 and a descriptive rating of moderately extensive. Meanwhile, student-centric pedagogy in learner empowerment, self-directed learning, active-learning engagement, and technology integration obtained mean scores of 3.19, 3.24, 3.27, and 3.22, respectively. The analytical thinking aptitude of students in Davao Central District in Davao City has an overall mean of 3.35 and a descriptive rating of moderately extensive. Also, the analytical thinking aptitude of students in terms of domain knowledge, attention to detail, adaptability, and time management obtained mean scores of 3.29, 3.32, 3.43, and 3.36, respectively. Student-centric pedagogy has a significant positive relationship with the analytical thinking aptitude of students in Davao Central District in Davao City with a p-value of .000 that is less than the .05 level of significance (two-tailed) ($r = .622$, $p<0.05$). More so, student-centric pedagogy in terms of learner empowerment, self-directed learning, active-learning engagement, and technology integration has a significant positive relationship with the analytical thinking aptitude of students with a p-value of .000 that is less than .05 level of significance (two-tailed) ($r = 0.489$, $p < 0.05$), ($r = 0.567$, $p < 0.05$), ($r = 0.661$, $p < 0.05$), and ($r = 0.433$, $p < 0.05$), respectively. Student-centric pedagogy in terms of learner empowerment, self-directed learning, and technology integration significantly influences the analytical thinking aptitude of students in Davao Central District in Davao City, as evidenced by the F-value of 6.824 and $p<0.05$. The r2 value of 0.406 indicated that student-centric pedagogy

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have contributed significantly to the variability of analytical thinking aptitude of students in Davao Central District in Davao City by 40.60

4.2. Conclusions—Several conclusions were generated based on the findings of this study and within the limitations and restrictions. Student-centric pedagogy was sometimes observed by junior high school students in public secondary schools in Davao Central District in Davao City. This implies that the approach to teaching and learning that prioritizes each student's needs, interests, and strengths sometimes manifests among students. Meanwhile, student-centric pedagogy in learner empowerment, self-directed learning, active learning engagement, and technology integration were also sometimes observed. Students' analytical thinking aptitude was sometimes manifested in Davao Central District in Davao City. This denotes their ability to analyze, evaluate, and draw meaningful insights and conclusions from data presented in various forms, such as charts, graphs, tables, and numerical data. Student-centric pedagogy has a significant positive relationship with the analytical thinking aptitude of students in Davao Central District in Davao City. This demonstrates that by delivering personalized learning experiences tailored to students' individual needs and interests, educators can elevate student engagement and motivation, resulting in deeper understanding and the development of analytical skills. Student-centric pedagogy in terms of learner empowerment, self-directed learning, and technology integration significantly influences the analytical-interpretation aptitude of junior high school students in Davao Central District in Davao City. This implies that student-centric pedagogy positively influences the analytical thinking aptitude of students by providing customized learning experiences, promoting active engagement and participation, supporting metacognitive skills development, implementing differentiated instruction, fostering inquiry-based learning, and cultivating critical thinking skills.

4.3. Recommendations—The Department of Education (DepEd) may create policies prioritizing smaller class sizes and teacher-student ratios to enable personalized instruction and individualized student support. Additionally, the Department of Education (DepEd) may allocate resources and funding for professional development programs that emphasize student-centric pedagogy and effective teaching strategies aimed at enhancing students' analytical thinking aptitude. School heads may provide ongoing support and training opportunities for teachers to implement student-centric pedagogy techniques effectively in the classroom. They should also allocate time for collaborative planning sessions where teachers could develop and refine instructional strategies that promote analytical interpretation aptitude. Teachers may incorporate a variety of instructional methods, such as inquiry-based learning, cooperative learning, and project-based learning, to engage students and promote analytical thinking. They should also offer regular feedback and opportunities for reflection to support students' metacognitive development and analytical skills enhancement. Students should take an active role in their learning by participating in discussions, asking questions, and seeking clarification when needed. They should also embrace challenges as opportunities for growth and practice persistence when faced with complex tasks that require analytical interpretation. Lastly, researchers may conduct further analysis on the factors that influence students' analytical thinking aptitude since student-centric pedagogy only contributed 40.60 of the total variability. Researchers should collaborate with educators and stakeholders to disseminate research findings and best practices through conferences, publications, and professional development initiatives.

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