

# **Impact of School Environment, Teacher-Related Factors, and Student Dynamics on Developmentally Appropriate Practices (DAP) Implementation**

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## **ABSTRACT**

This study investigated the effect of school environment, teacher-related factors, and student dynamics on the use of Developmentally Appropriate Practices (DAP) in kindergarten classrooms within the Division of Mati City for School Year 2024–2025. Data were acquired by means of survey questionnaires using a quantitative design and total enumeration of 73 permanent kindergarten teachers. Results revealed that although DAP is being used successfully, its full implementation is hampered by issues like poor parental support, insufficient facilities, and misunderstandings of DAP concepts among teachers. While student involvement and good teacher practices made a big difference, problems including student preparedness and peer dynamics also influence results. There were strong relationships between DAP implementation and the three factors examined, with school environment emerging as the most significant. The study recommends implementing structured Social-Emotional Learning (SEL) programs, better infrastructure, child-centered leadership development, and focused professional development. Sustaining effective DAP implementation also depends critically on strengthening home-school-community ties and supporting policies.

**Keywords:** Developmentally Appropriate Practices (DAP), school environment, teacher- related factors, student dynamics

## **INTRODUCTION**

Learning institutions around the world are continuously striving to improve the quality of education they provide to young learners. One significant method of enhancement has been the implementation of Developmentally Appropriate Practice (DAP). This kind of approach emphasizes aligning teachers' lesson plans, teaching methods, and assessments with children's development and individual characteristics [1, 2].

Teachers played a vital part in the successful implementation of DAP, considering that they are the ones who craft a safe working environment and learning activities to cater to children's diverse learning needs [3, 4]. However, along with the implementation of the program, there are unexpected challenges.

For instance, in Ghana, preschool teachers expressed their hardships as they deal with pupil readiness, inadequate school facilities, lack of parental support, inadequate teaching and learning materials, insufficient support from the government, and school heads' attitudes [5].

Similarly, teachers in Zimbabwe have encountered challenges while implementing the program. Reports indicate that they struggle with large class sizes, excessive teaching loads, low motivation, and inadequate knowledge to effectively implement the program. Without adequate support from education authorities, these obstacles continue to hinder successful implementation of the program [6].

Like any other country, the Philippines is not exempted from the challenges. A recent study by Tariman (2022) disclosed that although Filipino kindergarten teachers understand the benefits of DAP, many among them are struggling to put it into practice due to large class sizes, limited instructional materials, and pressure in preparing pupils' standardized tests [7].

Hence, there is a need to conduct a study to assess the effectiveness of the implementation of DAP in kindergarten classrooms and gain a better view of the status of the program. This triggers the researcher to conduct this research to assess the impact of the school environment, teacher-related factors, and student dynamics on the implementation of DAP in the Division of Mati City to give valuable insights to policymakers and educational leaders, which will guide them in crafting interventions.

Moreover, the result of this study will also serve as a basis for other researchers to explore the implementation of DAP and improve the delivery of the program from a broader perspective.

## **Methodology**

This study utilized a quantitative descriptive-correlational design to explore the impact of school environment, teacher-related factors, and student dynamics on the implementation of DAP in the Division of Mati City. A quantitative method refers to the gathering and analysis of numerical data to answer the research questions scientifically [8]. Quantitative research aims to understand social phenomena using quantifiable data and measurable variables [9]. Descriptive correlational design is a type of quantitative research that attempts to describe relationships that exist among variables rather than attempting to infer causal relationships [10, 11].

This study employed complete enumeration, meaning all individuals in the target population were included in the research. Since the total number of participants is 74 kindergarten teachers from the Mati City Division, this approach ensures comprehensive data collection without the limitations of sampling variability. The actual number of respondents in this study is 73. The researcher, who is also a kindergarten teacher, intentionally excluded herself from participating to avoid potential bias and ensure the objectivity of the findings. This decision aligns with ethical research practices, practically the principles of integrity and impartiality. Complete enumeration, which is also known as a census, is preferable if the target population is small [12, 13]. Furthermore, various studies have also used this technique—for example, the study of Talahiban et al. (2022) with 78 teachers, as well as the study of Dotimas (2023) with 54 respondents, Abinan (2021) with only 60 senior high school teachers [14, 15, 16]. Complete enumeration is particularly suitable for this study because the population size is manageable, and capturing responses from all members enhances the accuracy and representativeness of the findings.

Additionally, only teachers who voluntarily agreed to participate and provided informed consent were included in the study. Teachers who were not kindergarten teachers were excluded from the research. Non-teaching school personnel, such as administrators and counselors, were also excluded, as their roles do not directly involve kindergarten classroom instruction. These criteria ensured that the study focused on

relevant participants, further enhancing the validity and reliability of the findings. Surveys served as the primary data collection method in this study.

A structured questionnaire was adapted from Acheampong (2023), titled “Pre-school Teachers’ Perception about Developmentally Appropriate Practices in Early Childhood Settings in the GA North District” [5]. The survey consisted of Likert-scale questions assessing teachers’ understanding of DAP principles, their beliefs about its effectiveness, and the challenges in implementing the program. To ensure the validity and reliability of the questionnaire, it underwent local contextualization, expert validation, and pilot testing before its full implementation.

Before conducting the pilot test, the researcher sought formal permission from the Office of the Schools Division Superintendent, District Supervisors, and School Heads of selected elementary schools. A total of 30 kindergarten teachers from the Division of Davao Oriental were randomly selected as respondents for the pilot testing.

The reliability statistics presented in the table below indicate the internal consistency of various factors. Cronbach's Alpha, a widely used measure of reliability, demonstrates how closely related a set of items are within each category. The School Environment factor achieved an alpha of 0.939, suggesting excellent internal consistency, meaning that the items within this category are highly reliable in measuring the construct. Similarly, Student Dynamics showed a good level of reliability ( $\alpha = 0.899$ ), indicating that the items cohesively assess student-related interactions and behaviors. Teacher-Related Factors, with an alpha of 0.797, and DAP (Developmentally Appropriate Practices) Implementation, with an alpha of 0.719, fall within the acceptable range, suggesting moderate reliability. While these values indicate consistency, slight refinements in item selection or phrasing could further enhance reliability, especially for DAP Implementation. Thus, the results demonstrate that the instrument used to assess these educational factors is generally reliable, with most categories exhibiting strong internal consistency. The School Environment factor stands out as the most reliable, implying that the surveyed items effectively capture its dimensions. While the Teacher-Related Factors and DAP Implementation factors are acceptable, minor revisions to certain items could potentially improve their consistency. The Student Dynamics factor, though categorized as good, is close to the excellent range, reinforcing its reliability.

After the pilot test, the researcher requested approval from the Graduate School and the Research Ethics Committee to proceed with the study within the Mati City Division. Prior to data collection, additional permissions were obtained from the Schools Division Superintendent, District Supervisors, and School Heads within the Mati City Division. When all approvals were secured, the researcher personally visited the participants in their respective schools to orient them on the objectives of the study and assess their commitment and willingness to participate. During this orientation, participants also signed the informed consent form, ensuring voluntary participation. The session included a discussion of potential risks associated with the study, as outlined by Gençten (2021), including psychological, emotional, physical, financial, reputational, and legal risks [17]. Participants were assured that their participation was voluntary and that they had the right to withdraw at any time if they felt threatened. Furthermore, the researcher ensured strict adherence to the Data Privacy Act of 2012, guaranteeing that all collected data were used exclusively for research purposes and were not publicly disclosed. To maintain confidentiality, participants' responses were securely stored and disposed of after the study. Only individuals who signed the informed consent form were included in the research.

Upon the completion of all necessary documentation, data collection commenced through the individual distribution of the questionnaire to the respondents. The survey was administered through both face-to-

face interactions and online via Google Forms, to accommodate the availability and preferences of the participants. Usually, quantitative studies utilized numerical data, which were collected using standardized and structured instruments like surveys [9]. In this study, the researcher adapted the survey questionnaire formulated by Acheampong (2023), which was contextualized locally [5].

The survey questionnaire began with the teacher's demographic profile, such as their age, gender, education levels, teaching experience, and class size. Descriptive statistics such as frequencies and percentages were employed in analyzing the socio-demographic data.

## Results and Discussion

### Socio-Demographic Profile of the Participants

**Table 1. Socio- Demographic Profile of the Participants**

		Frequency	Percentage
Age	20-30 years	15	20.5
	31-40 years	29	39.7
	41-50 years	23	31.5
	51 years and above	6	8.2
Sex	Female	69	94.5
	Male	4	5.5
Educational Attainment	Bachelor's Degree	46	63
	Doctorate Degree	2	2.7
	Master's Degree	25	34.2
Teaching Experience in Kindergarten Level	0-2 years	17	23.3
	3-5 years	16	21.9
	6-10 years	25	34.2
	11-15 years	13	17.8
	More than 15 years	2	2.7
<b>Total</b>		<b>73</b>	<b>100</b>

The table 1 shows many of the participants were 31-40 years old (39.7%), suggesting that most teachers are in their prime working years, likely bringing energy and openness to implementing Developmentally Appropriate Practices. In contrast, only 8.2% were 51 years old and above, indicating fewer older, possibly more traditional educators in the group. In terms of gender, the participants were predominantly female (94.5%), while male teachers made up only 5.5%. This strong female representation is typical in early childhood education and supports nurturing classroom environments, a key aspect of DAP. For their educational attainment, most participants held a bachelor's degree (63%), while very few (2.7%) had attained a Doctorate Degree. While majority meet the basic educational requirements, the relatively low number of doctorate holders suggests a potential area for further academic growth to strengthen DAP knowledge and leadership. For teaching experience in kindergarten, the highest group had 6-10 years of experience (34.2%), providing a solid foundation for understanding and applying DAP principles. However, only 2.7% had more than 15 years of experience, which may limit the available mentorship and deep expertise often needed for mastering DAP over time.

## School Environment

**Table 2. Challenges Affecting the Implementation of Developmentally Appropriate Practices in Kindergarten Classrooms in Mati City Division in terms of School Environment**

	Mean	Descriptive Interpretation
Lack of parental support challenges the implementation to developmentally appropriate practices	3.04	High
Inadequate teaching and learning materials challenge the implementation to developmentally appropriate practices	3.00	High
Lack of Curriculum materials challenges the implementation to developmentally appropriate practices	2.82	High
Inadequate government support challenges the implementation to developmentally appropriate practices	2.99	High
The attitudes of school heads challenge the implementation to developmentally appropriate practice	2.77	High
Inadequate school facilities challenges the implementation to developmentally appropriate practices	2.97	High
<b>School Environment</b>	<b>2.93</b>	<b>High</b>

The findings in Table 2 reveal that kindergarten teachers perceive multiple school environment factors as challenges to the successful implementation of Developmentally Appropriate Practices (DAP), with an overall mean of 2.93, interpreted as high.

Specifically, the lack of parental support emerged as the most significant obstacle ( $M = 3.04$ ), followed closely by inadequate teaching and learning materials ( $M = 3.00$ ) and insufficient government support ( $M = 2.99$ ). Consequently, these results underscore a pressing need for stronger home-school collaboration and institutional backing. Moreover, the dominant concern regarding parental support aligns with the findings of Keung and Cheung (2019) and Nolde (2023), both of whom emphasize that parent involvement is a pivotal factor in effective DAP implementation [18, 19]. In fact, existing literature suggests that insufficient parental engagement significantly hampers play-based and child-centered learning strategies. Similarly, Ahmad et al. (2017) asserted that active parental praise, encouragement, and guidance contribute immensely to student success in developmentally appropriate settings [20].

In addition, the ongoing concern about limited teaching resources is consistent with the study by Misahun et al. (2024), which highlights the importance of sufficient materials—such as books, toys, and manipulatives—in fostering an engaging and supportive classroom aligned with DAP [4].

Furthermore, Ahonen (2019) and Mengstie (2023) pointed out that the lack of support from both administrators and government institutions diminishes teachers' ability to maintain developmentally appropriate environments [21, 22].

On the other hand, the lowest-rated factor was the attitude of school heads ( $M = 2.77$ ), although it still received a “high” interpretation. While this may not be the most pressing issue, it remains evident that administrators play a crucial role.

As Hujala (2013) and Ritter (2019) have observed, school leaders significantly influence DAP success through their advocacy, resource allocation, and overall support for early childhood educators [23, 24]. Ultimately, these findings reinforce the notion that DAP implementation is deeply affected not only by physical and instructional resources but also by the broader support network comprising families, administrators, and policymakers.

Therefore, strengthening these interconnected factors is essential to ensuring that developmentally appropriate practices are successfully implemented in kindergarten classrooms.

## Teacher-Related Factors

**Table 3. Challenges Affecting the Implementation of Developmentally Appropriate Practices in Kindergarten Classrooms in Mati City Division in terms of Teacher-Related Factors**

	Mean	Descriptive Interpretation
I use all aspects of the development in teaching.	3.55	Very High
I promote a positive climate for teaching and learning.	3.59	Very High
I assess and evaluate children's learning progress while providing a safe environment and age-appropriate supervision.	3.62	Very High
I use enough teaching and learning materials.	3.40	Very High
My teaching experience has prepared me well to implement DAP.	3.32	Very High
I am confident in my ability to implement DAP in my classroom.	3.40	Very High
I regularly participate in professional development activities related to DAP.	3.26	Very High
I believe that DAP is an effective approach for teaching young children.	3.51	Very High
I have a limited understanding of DAP principles.	2.90	High
Teacher attitudes challenge the implementation to developmentally appropriate practice	3.03	High
<b>Teacher-Related Factors</b>	<b>3.36</b>	<b>Very High</b>

As shown in Table 3, the overall mean for teacher-related factors is 3.36, interpreted as very high. This indicates that teachers in the Division of Mati City perceive themselves as highly competent in applying Developmentally Appropriate Practices (DAP). Notably, the highest-rated item was, “I assess and evaluate children's learning progress while providing a safe environment and age-appropriate supervision” ( $M = 3.62$ ). This underscores the strong commitment of teachers to continuous assessment and child safety.



Likewise, other highly rated indicators include promoting a positive learning climate ( $M = 3.59$ ) and using all aspects of child development in instruction ( $M = 3.55$ ). Moreover, these findings strongly align with the literature. Specifically, Ritter (2019) asserts that DAP requires teachers to be facilitators who understand each child's developmental needs and provide hands-on, child-directed experiences [24]. Similarly, the high ratings for strategies related to creating a safe and positive learning climate reflect the principles emphasized by Barnes (2022) [25]. According to Barnes (2022), understanding each child's cognitive, emotional, and social needs is fundamental in early childhood settings [25].

However, despite the overall high rating, the statement, "I have a limited understanding of DAP principles," received a mean score of 2.90. Although this is still rated as high, it is notably the lowest among the items. Therefore, it suggests room for growth in deepening teachers' theoretical and practical understanding of DAP concepts. In fact, Tours (2017) and Acheampong (2023) highlight that while teachers often endorse DAP philosophically, their actual practices may fall short due to gaps in training or conflicts with rigid curricula [26, 5].

In addition, the statement "I participate in professional development related to DAP" received a strong rating ( $M = 3.26$ ), demonstrating that many educators are actively engaging in further learning. This finding corresponds with Christopher and Newman (2022), who emphasize that ongoing, context-specific professional development is essential for maintaining effective DAP practices [27]. Nonetheless, as Wagner (2024) points out, professional development must be sustained and relevant to classroom realities; otherwise, teachers may revert to traditional methods even after training [28].

Ultimately, while teachers in the study exhibit high levels of self-efficacy and commitment to child-centered practices, strengthening foundational knowledge and providing targeted professional development opportunities remain necessary. Consequently, supporting teachers with continuous, practical training will further solidify their role as effective DAP implementers.

## Student Dynamics

**Table 4. Challenges Affecting the Implementation of Developmentally Appropriate Practices in Kindergarten Classrooms in Mati City Division in terms of Student Dynamics**

	Mean	Descriptive Interpretation
My students are generally engaged and motivated to learn.	3.40	Very High
The students in my class have a positive and supportive classroom community.	3.40	Very High
Students in my class generally get along well with each other.	3.52	Very High
I incorporate hands-on learning experiences in my classroom frequently.	3.53	Very High
I understand and incorporate my students' interests into my teaching.	3.58	Very High
Positive interactions between me and my students are common in my classroom.	3.59	Very High
I provide choices for students in their learning activities regularly.	3.47	Very High

Students in my class are comfortable collaborating with different classmates.	3.49	Very High
When students have strong, positive relationships with each other, it is easier to implement DAP effectively.	3.51	Very High
Conflict or negative social dynamics among students make it more challenging to implement DAP as intended.	3.34	Very High
Lack of pupils' readiness challenges the implementation to developmentally appropriate practice	3.12	High
<b>Student Dynamics</b>	3.45	Very High

As shown in Table 4, student dynamics received an overall mean of 3.45, which falls under the “Very High” interpretation. This suggests that teachers in the Mati City Division generally perceive student behaviors, engagement, and social interactions as highly supportive of Developmentally Appropriate Practices (DAP) implementation.

The highest-rated statement was “Positive interactions between me and my students are common in my classroom” ( $M = 3.59$ ), followed closely by “I understand and incorporate my students' interests into my teaching” ( $M = 3.58$ ) and “I incorporate hands-on learning experiences in my classroom frequently” ( $M = 3.53$ ). These findings underscore the importance of warm student-teacher relationships, interest-based instruction, and active learning—hallmarks of DAP. According to Brown and Mowry (2021) and Wood et al. (2016), emotionally supportive interactions enhance learning by making students feel secure and valued [29, 30].

Moreover, the very high ratings on statements about student collaboration ( $M = 3.49$ ) and providing learning choices ( $M = 3.47$ ) emphasize that teachers are fostering autonomy and cooperative learning environments. This aligns with the studies of Ferguson-Patrick (2020) and Oktaviani et al. (2023), who highlighted how cooperative strategies and learner-centered flexibility enhance engagement and socio-emotional growth in early learners [31, 32]. However, some challenges persist. The “Lack of pupils' readiness” ( $M = 3.12$ ) was rated the lowest, followed by the statement “Conflict or negative social dynamics among students make it more challenging to implement DAP as intended” ( $M = 3.34$ ). Despite still receiving “High” and “Very High” interpretations respectively, these results indicate that many children may not possess the foundational skills or behaviors expected when they enter formal schooling, which can limit teachers' capacity to effectively apply DAP strategies. This finding aligns with the work of Pianta et al. (2020), who emphasized that children's developmental readiness is critical for the success of early childhood education programs [33]. Furthermore, behavioral disruptions and developmental delays—although less frequent—still hinder DAP efforts. This is consistent with Liem and Chong (2020), who found that while positive peer relationships support classroom engagement, unresolved conflicts can undermine the flow of child-centered learning [34]. Overall, the data reflect a very strong classroom foundation for implementing DAP. Teachers are clearly integrating the principles of positive interaction, active participation, and developmental responsiveness. These practices are deeply rooted in Vygotsky's (1978) Sociocultural Theory, especially the role of the teacher in scaffolding students within their Zone of



Proximal Development [35]. Still, targeted support in managing occasional conflict and addressing school readiness would further optimize implementation.

## Level of Developmentally Appropriate Practices (DAP) implementation

**Table 5. Level of Implementation of DAP in Kindergarten Classrooms**

	Mean	Descriptive Interpretation
DAP principles are effectively implemented in my classroom.	3.27	Very High
I face the following challenges in implementing DAP: limited resources.	3.26	Very High
I face the following challenges in implementing DAP: inadequate training.	2.97	High
I face the following challenges in implementing DAP: conflicting expectations.	2.96	High
The following support from school would improve the implementation of DAP: resources.	3.49	Very High
The following support from school would improve the implementation of DAP: training	3.47	Very High
The bachelor's degree affects the implementation of DAP.	2.88	High
<b>Level of DAP Implementation</b>	<b>3.19</b>	<b>High</b>

Table 5 presents the results related to the overall level of Developmentally Appropriate Practices (DAP) implementation in kindergarten classrooms in Mati City Division. The overall mean was 3.19, interpreted as High, which suggests that teachers consistently apply DAP strategies but continue to face some systemic and institutional challenges.

The highest mean scores were recorded under items referring to the support they receive or need from the school, such as resources ( $M = 3.49$ ) and training ( $M = 3.47$ ), as well as the teacher affirmation of using DAP principles ( $M = 3.27$ ). These results suggest that while teachers are committed to DAP, they are keenly aware of the need for continuous institutional backing. According to Dickinson and Caswell (2007), effective implementation of DAP relies heavily on both adequate training and material support, reinforcing that DAP cannot be sustained through personal commitment alone—it requires organizational alignment [36].

Despite these positive ratings, the results also show that teachers encounter significant challenges, especially related to limited resources ( $M = 3.26$ ), inadequate training ( $M = 2.97$ ), and conflicting expectations ( $M = 2.96$ ). These findings are consistent with Ahonen (2019) and Acheampong (2023), who identified these issues as recurrent barriers to DAP [21, 5]. Conflicting expectations may arise from pressures to meet academic standards not aligned with child-centered approaches, a problem that Christopher and Newman (2022) observed in public early childhood settings [27].

Another item of interest is the influence of having a bachelor's degree on DAP implementation, which scored 2.88, indicating that teachers see higher education as a positive, though not decisive, factor. This

aligns with the views of Yoshikawa et al. (2021), who emphasized the role of teacher education in enhancing both knowledge and self-efficacy related to DAP strategies [37].

In summary, while teachers demonstrate strong engagement with DAP principles, the data suggest that resource limitations, lack of targeted training, and administrative clarity are crucial gaps that must be addressed. Institutional support systems—particularly those involving professional development and classroom resources—must be enhanced to fully realize the vision of a developmentally appropriate early childhood education program.

## The relationship between the school environment, teacher-related factors, student dynamics, and the implementation of DAP

**Table 6. Relationship Between the School Environment, Teacher-Related Factors, Student Dynamics, and the Implementation of DAP in Kindergarten Classrooms**

		Level of DAP Implementation
School Environment	Pearson Correlation	.584**
	Sig. (2-tailed)	.000
Teacher-Related Factors	Pearson Correlation	.557**
	Sig. (2-tailed)	.000
Student Dynamics	Pearson Correlation	.565**
	Sig. (2-tailed)	.000

As shown in Table 6, all three independent variables—school environment, teacher-related factors, and student dynamics—exhibited statistically significant positive correlations with the implementation of Developmentally Appropriate Practices (DAP) in kindergarten classrooms. These findings underscore the multifaceted nature of DAP implementation and confirm that these three components are all meaningfully linked to successful classroom practices.

The school environment produced a strong positive correlation with DAP implementation among the three variables, with a Pearson correlation coefficient of  $r = .584$  and a p-value of .000. This result leads to the rejection of the null hypothesis ( $H_{01}$ ), which stated that there is no significant relationship between school environment and DAP implementation. The findings suggest that when the school environment is characterized by adequate resources, positive leadership, and parental involvement, teachers are more likely to implement DAP effectively. This supports previous literature by Acheampong (2023) and Perez (2022), who emphasized that school infrastructure and family involvement are foundational to child-centered education [5, 38].

The teacher-related factors showed moderate positive correlation, with a Pearson correlation coefficient of  $r = .557$  and a p-value of .000. Consequently,  $H_{02}$  was rejected. This implies that teacher-related variables—such as their knowledge of DAP, pedagogical strategies, participation in professional development, and confidence—have the most substantial impact on the degree to which DAP is applied in the classroom. These results affirm the conclusions of Yoshikawa et al. (2021) and Christopher and Newman (2022), who found that teacher capacity-building is critical for promoting appropriate early childhood pedagogy [37, 27].

Finally, student dynamics also showed a moderate positive correlation, with a Pearson correlation coefficient of  $r = .565$  and a  $p$ -value of  $.000$ , thereby prompting the rejection of the third hypothesis ( $H_{03}$ ). This means that student behaviors—such as engagement, cooperation, and peer relationships—are significantly associated with DAP implementation. These findings support those of Liem and Chong (2020) and Brown & Mowry (2021), who reported that positive student interactions contribute to a classroom climate that supports child-initiated, exploratory learning [34, 29]. In conclusion, all three variables—school environment, teacher-related factors, and student dynamics—demonstrated significant positive correlations with DAP implementation.

Among them, school environment had the strongest influence because it provides the structural, emotional, and instructional support necessary for child-centered teaching. One study shows that well-organized and resource-rich physical environment allows for hands-on, exploratory learning experiences [39]. The results emphasize that for DAP to be fully realized, support must be systemic—encompassing teacher training, school-level resource allocation, and the cultivation of responsive and cooperative classroom environments.

Based on the data presented in Table 6 and the results of the statistical analysis, all three null hypotheses were rejected. The first hypothesis ( $H_{01}$ ), which stated that there is no significant relationship between the school environment and the implementation of Developmentally Appropriate Practices (DAP) in kindergarten classrooms, was rejected as the Pearson correlation coefficient was  $r = .584$  with a  $p$ -value of  $.000$ , which is less than the  $0.05$  level of significance. This indicates a significant positive relationship between the school environment and the implementation of DAP, suggesting that a more supportive and better-organized school environment contributes to higher levels of DAP implementation.

Moreover, the second hypothesis ( $H_{02}$ ), which posited that there is no significant relationship between teacher-related factors and DAP implementation, was also rejected. The statistical result showed a Pearson correlation coefficient of  $r = .557$ , with a  $p$ -value of  $.000$ , indicating the strongest positive correlation among the three variables. This implies that teacher-related factors such as qualifications, attitudes, and competencies play a crucial role in the effective implementation of DAP in kindergarten classrooms. Similarly, the third hypothesis ( $H_{03}$ ), which stated that there is no significant relationship between student dynamics and DAP implementation, was rejected as well. The Pearson correlation coefficient was  $r = .565$  with a  $p$ -value of  $.000$ , signifying a significant positive relationship. This result suggests that positive student behaviors, motivation, peer interactions, and classroom engagement are associated with successful DAP practices.

In summary, the findings confirmed that the school environment, teacher-related factors, and student dynamics are all significantly and positively correlated with the implementation of DAP in kindergarten classrooms. Among these, school environment factors have the strongest positive correlation with DAP implementation ( $r = .584$ ,  $p = .000$ ) hence, emerged as the most influential, emphasizing that a supportive and developmentally informed school context enables educators to meet the diverse needs of young learners more effectively. Additionally, student dynamics have moderate positive correlation with DAP implementation ( $r = .565$ ,  $p = .000$ ), which is the proof that good student behaviors and interactions can be the reason of the successful DAP practices. Lastly, the teacher-related factors have also moderate positive correlation with DAP implementation ( $r = .557$ ,  $p = .000$ ) and thus teacher qualifications, attitudes, and competencies are among the essential elements that must be possessed for dealing with DAP.

The results show that the three elements—school environment, teacher-related factors, and student dynamics—are all closely related with the successful implementation of DAP in the kindergarten

classroom, of which school environment factor is the most influential one. A supportive school environment contributes significantly as it boosts child-centered practices by means of resources that are adequate, administrative support, and appropriate physical settings. On the other hand, teacher-related factors show the need of the teacher training and professional development to foster the application of DAP. Besides, student dynamics are something that must be understood and managed, given that, in enhancing the effectiveness of DAP, positive peer relationships and active engagement are very important to students.

Perez (2022), who emphasized that it is the physical learning environments that are needed to engage students and develop them [38]. A statistical analysis was done, and it revealed a significant correlation among all the three variables and DAP teaching strategy. School environment factors had the highest correlation ( $r = .584$ ,  $p = .000$ ), followed by student dynamics ( $r = .565$ ,  $p = .000$ ) and teacher-related factors ( $r = .557$ ,  $p = .000$ ). These findings suggest that well-supported teachers with adequate training and resources are better equipped to implement DAP effectively, as highlighted by Yoshikawa et al. (2021) [37].

### Conclusions

Based on the findings, it is concluded that while DAP is being effectively implemented in kindergarten classrooms within the Division of Mati City, several interconnected factors influence its success. The study strongly supports Sociocultural Theory, which emphasizes the role of social interactions in shaping learning experiences. School environment emerged as the most significant predictor of DAP effectiveness. The available resources, administrative support, and parents' involvement are the main supporters of the child-centered learning environment. Most of the teachers who do not get support from these aspects might find it difficult to achieve DAP implementation effectively even if they are excellently prepared.

Furthermore, it is true that the teacher-related factors have a very significant role in the support of DAP implementation underscoring the need for continuous professional development to refine educators' skills and deepen their understanding of developmentally appropriate practices.

Lastly, student dynamics, which consist of engagement and peer relations, are extremely important for the DAP environment's health. DAP works better when there are positive student and teacher interactions, as well as learner-centered collaborations. Hence, creating a conducive teaching environment where meaningful student involvement is encouraged is the key to maximizing the benefits of the teaching methodologies in which developmental appropriateness is emphasized.

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