
Developmental Domains of Kindergarten Pupils using the Revised Philippine Early Childhood Development Checklist: Basis for Intervention Plan

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Abstract — Generally, this study was conducted to assess the readiness of kindergarten pupils in developmental domains using the Revised Philippine Early Childhood Development Checklist as input for the Intervention Plan during the School Year 2024-2025. This study employed a mixed-method approach using a sequential explanatory design. This design focused on collecting, analyzing, and mixing quantitative and qualitative data in a single study. In the quantitative phase, the respondents of this study were public kindergarten pupils of the sixteen (16) schools in Bacolor North District Division of Pampanga, with a total of 234 respondents, who were taken as the study sample. Meanwhile, in the qualitative phase, the study participants were selected kindergarten teachers who were chosen based on the researcher's qualifications. Based on the findings, the level of readiness of Kindergarten Pupils, along with Developmental Domains, transpired an overall mean of 123.14 with a verbal interpretation of approaching readiness. The accrued least mastered competencies of kindergarten pupils across the seven (7) developmental domains were as follows: demonstrate health habits that keep one clean and sanitary (65.44%), traces, copies, or write letters and numerals (63.60%), demonstrate skills needed for self-care/self-help such as tooth brushing, buttoning, screwing, and unscrewing lids using spoon & fork correctly (64.71%), demonstrates readiness in trying out new experiences, & self-confidence in doing task independently (65.07%), recalls details from stories/poems/songs listened to (62.09%), expresses personal interest and needs (66.44%), and lastly identify sounds of letters (using the alphabet of mother tongue (65.49%). The shared views on improving the least mastered

competencies of kindergarten pupils were as follows: Multi-Sensory Learning, The Use of Developmentally Appropriate Practice (DAP), Play-based Strategy, and Reiteration of Positive Reinforcement. The Project GROW intervention plan serves as a responsive developmental plan designed to uplift kindergarten pupils' foundational readiness. The proposed multi-sensory, play-based and DAP based lesson plans will attend to the least-mastered competencies described in the study to meet all children entering Grade 1 to learn, communicate, and care individually.

Keywords: Development, Domain, Kindergarten, Intervention Plan

I. INTRODUCTION

A child's first year in a real educational setting begins with kindergarten. Basic skills and concepts are taught during kindergarten in order for children to move forward. For this reason, it is vital to have a solid educational foundation, being ready for school, to gain and develop the learning competencies in kindergarten.

Essentially, these young learners need to establish their learning domains to support their subsequent learning in the years to come. The child's preparedness is of paramount importance in school readiness. Accordingly, children need to cultivate fundamental skills and behaviors that encompass pre-literacy and numeracy. In this sense, they require a certain degree of socio-emotional progress that enables them to control their actions and emotions (Aquino et al., 2019).

School preparedness can be enhanced with relatively little organization to ensure children consistently have the opportunity to develop skills that will promote efficient learning when they begin school. While a few people believe important school preparedness skills include such academic things as knowing how to write their own name, the number up to ten, or various colors, the school readiness skills include more than that.

Moreover, school readiness encompasses multiple dimensions. This encompasses the kid's preparedness for transitioning from the home or pre-primary setting to the official primary school classroom, the extent of familial support for the child's learning since birth, and

the readiness of schools to facilitate a seamless transfer for the child.

The Philippine Institute for Development asserts that school preparedness in Grade One signifies that children can write their names, understand letters and numbers, exhibit comfort in the classroom, and cultivate fine motor abilities. They are capable of socializing with others and undergoing potty training. Educators' perceptions of the predominantly enforced 6-year-old admission into Grade 1, rigorously implemented in most regions examined for this study, are negative.

As such, they observe that a six year old lacks the maturity to be without a parent in a school context. In addition, the focus and fine motor ability needed to hold a pencil and develop good writing skills are not present. These issues do not arise when children commence at ages 7 or 8 (David & Albert, 2012).

According to Sims and Waniganayake (2015), ECE lays the groundwork for schooling to produce employable, compliant, and responsible citizens. It reduces poverty, enhances intergenerational social mobility, and equalizes kindergarten students' learning domain competency (OECD, 2012).

Many countries have implemented preschool programs to strengthen the basic abilities of all children and provide a home and other learning environments. They believed child development had four dimensions: psychomotor (the ability to move and coordinate bodily movement), cognitive (the ability to think and reason), emotional (the ability to feel and build self-confidence), and social. These measurements should be considered together. To meet the needs of 21st-century education, the ASEAN Education Qualification Framework has improved the system. The country implements the K–12 Basic Education Program. The K to 12 system encompasses kindergarten followed by 12 years of elementary and secondary education. Kindergarten denotes the cohort of five-year-olds who engage with a standardized Kindergarten Curriculum.

The K to 12 program represents the Philippines' response to global challenges in early childhood education. The Kindergarten Education Act, also known as R.A. 10157, makes Kindergarten Education available and necessary for all five-year-olds in order to create equal

opportunity for all children.

Kindergarten is necessary for the development of every child in bridging children from home and or preschool and the new environment of school. At kindergarten, the child often goes to the school with much enthusiasm to learn who they are and the things they are up to. Kindergarten has been a significant part in the curriculum of national basic education. After mandatory Kindergarten has been instituted in the country in 2011, Philippines has significantly improve in providing equal access to early childhood education. (K to 12 Toolkit, 2012)

Prior to the implementation of the K to 12 curricula in the country, kindergartens were overseen by the Department of Social Welfare and Development (DSWD) under the authority of Local Government Units (LGUs). The nursery program is available in both public and private educational institutions. With the implementation of mandatory kindergarten in the enhanced primary education framework, policies and curricula are established to ensure the provision of quality early education. The curriculum delineates the learning domains that children are required to develop during this stage of education. Similarly, learning domains in nursery education are established to facilitate a seamless transition from nursery to kindergarten.

In 1999, the Philippine Government initiated a five-year Early Child Development (ECD) project. The project is designed to achieve the nation's human development objectives and alleviate poverty. This functioned as a mechanism to fulfill the government's obligations under the Convention on the Rights of the Child and served as a pilot for evaluating early childhood development structures and delivery systems.

Early Childhood Development (ECD) is an integral part of a broader initiative aimed at supporting the growth and mitigating the high risks faced by Filipino children due to poverty and marginalization.

The government made the program official in 2002 by establishing the Early Child Care and Development (ECCD) Act. This statute established regulations and procedures for caring for and raising children from birth to age six. The Council for the Welfare of Children (CWC) is the primary organization that develops rules for children. The overall aim of the ECCD program is to

enhance and extend the life and health span of poor and vulnerable children. It aims to remove the risks to health that exist among very young children, foster understanding of child development among parents and community members and promote involvement and support for policy on children, improved and increased human service provider skills and attitudes, and better resource utilization and secure long term financing for ECCD.

Significant financial resources have been allocated to the ECCD Longitudinal Study in the Philippines by the Philippine Department of Education, UNICEF and the Australian government. This study examines the effects of the Philippines' addition of kindergarten to the K-12 Basic Education System. This study examined the Philippines' Mother Tongue-Based Multilingual Education (MTB-MLE) and the important language transition moments for Kindergarten to Grade 4 pupils.

In line with the Education for All (EFA) initiative and Education Work Plan 2016-2020, the Philippines is committed to addressing challenges related to SDG target 4.2. "Ensure all girls and boys have quality early childhood development, care, and pre-primary education by 2030 to prepare them for primary education." Philippines 2015 EFA Report.

ECCD sets measurable goals to reduce child mortality and increase immunization rates. Using a Revised ECD Checklist, the initiative assessed child development across many areas. The data indicated an apparent positive effect of the program. The measured weight and height of children aged one to four suggest that the program has not resulted in improvements in this domain (Bherman, 2014).

Osborn and Milbank (2007) identify three primary factors contributing to a successful preparatory school experience: well-equipped, well-trained teachers; a conducive environment; and developmentally appropriate tasks. They elaborated that these factors can significantly influence a child's development and determine their academic and life outcomes.

Early childhood education receives 0.1% of the education budget, or P1.8 billion. Schneider et al. (2019) asserted that every child constructs a schema, albeit at varying paces and qualities, among children and cultures.

According to Cortazar (2015), early childhood education can lead to substantial improvements in reading and math skills that contribute to ongoing academic development for all children. In addition, a report commissioned by the Global Child Development Group (2011) indicated that children who attended school for longer durations demonstrated better academic results in school. In this regard, children gain fundamental learning basics from attending an high quality early childhood education. As stated by Philipps and Meloy (2012), the integration of early childhood care and education can lead to greater brain development and establish a foundation for learning throughout the lifespan.

There are also numerous techniques which can be employed, according to Fernandez (2017). It would be advisable to adapt lesson plans, worksheets and teaching materials for these children. Therefore, there is already a similar concept within the school system that may relate to them in the future, and by following this principle, valuable skills are imparted for later life. Through the different teaching methods, they gain better linguistic, conversational and coordination skills. The school curriculum nationwide has led to children learning through the use of software that has been developed for children of this age and for domestic use as well.

According to Berk (2015), children need to understand their capabilities and how those talents might be relevant in 21st-century learning, such as the ability to pay attention, problem-solve critically, grasp essential language, and exercise self-control and the capacity for effective communication. These programs and actions could assist children by increasing their awareness, informing teachers of new technologies available, and joining forces with community members. Medium to excellent social-emotional abilities are found in most students. However, annual growth is expected to be low.

The distinction will be substantial in terms of foundational skills. Students in conflict-affected school communities and those from low socioeconomic status backgrounds begin their education at a significant disadvantage compared to their peers in other contexts, exhibiting markedly lower levels of literacy, mathematics, and social-emotional skills.

At the conclusion of Grade 1, students from conflict-affected school communities exhibited performance levels comparable to those of the broader sample at the kindergarten level. This suggests an estimated two-year achievement disparity between students in conflict-affected

and non-conflict-affected educational environments. The trend persisted throughout the study.

A large body of research has suggested that high-quality kindergarten programs have a lasting positive effect on academic achievement. In a high-quality kindergarten setting, children think of themselves as competent learners and are more likely to confront new and difficult situations with courage.

Both personal and professional dimensions require development at the kindergarten level. Educators can adhere to and fulfill the requirements set forth by the K to 12 Curriculum. Teachers generally believe that the recently implemented Universal Kindergarten program will enhance children's readiness for school, contingent upon the use of developmentally and age-appropriate teaching and learning methods in kindergarten. The new DepEd Kindergarten curriculum incorporates play and active learning as essential components of the learning process.

Numerous educators assert that providing pre-primary education, including certain daycare center services, to all students aged six will adequately prepare them for Grade 1. DCC workers report that children participate in activities within DCCs designed to promote school readiness. Children between the ages of 3 and 4.5 years in Developmental Child Care settings are instructed in socialization skills within a classroom context, as well as in recognizing letters, numbers, and colors.

Values are imparted, fine motor skills are developed, and positive behavior is encouraged within a context of storytelling and play. Parents and educators recognize that this prepares children for formal education; however, not all children have access to daycare.

In 2009, approximately 19.5% of children aged three to four years were enrolled in DCCs, whereas 20.7% of the 2.4 million five-year-old children attended DCCs. The

2008 APIS indicates that almost all children aged three to four years are not enrolled in school due to perceptions of their age, with merely 1.1% not attending because of accessibility issues (David & Albert, 2012).

Parents with greater household wealth, higher education levels, and improved health generally have children who exhibit superior physical development (i.e., increased height and

weight) and achieve higher scores in cognitive, language, and motor development. A one-standard deviation increase in household assets leads to an 18 percent increase in the levels of cognitive, linguistic, and motor development and 0.9 percentage increase in the level of physical development.

The study concludes that children benefit from mother's physical size, determined by either the mother's Body Mass Index, weight or height, and mothers' education. The constructivist approach is driven by a child's interest, social life, play, and need to develop. Constructivists believe that children learn by recreating concepts while seeking expertise. Constructivism is advocated by Friedrich Frbel who is a German developer of the kindergarten (a children's garden) and other researchers such as John Dewey, Jean Piaget, and L.S. Vygotsky (Nellhaus, 2008).

A teacher's motivation, interests, persistence, and regulation of emotions have a critical role in children's development. Teachers have the role of providing children with learning experiences. Parents and teachers can optimize the development of children's brain during this critical time through experiences and activities that children love with parental or teacher guidance while children pursue their interests and play games.

The cognitive development activities for preschool are varied in effectiveness and quality. Preschool teachers must select appropriate exercises to foster optimal toddler development. Preschools are important for building skills that are crucial for the remainder of K-12 education. Preschool children will engage in more purpose driven play during early development.

As preschoolers explore their environment, they gain a new understanding of it. Preschoolers are curious and they want to know more about their world. Spreeuwenberg (2019) will enumerate the activities designed to promote cognitive development in preschoolers. Memory-matching games and simple card games, such as Go Fish, enable preschoolers to engage in cognitive problem-solving to arrive at answers or solutions. Puzzles enable children to develop problem-solving skills by determining the correct placement of pieces. Preschoolers are instructed in problem-solving and logical thinking skills.

Preschoolers' cognitive development benefits from classification. Sorting helps children identify similarities and differences among items. This logical reasoning underpins future

mathematical concepts and practical activities. Preschoolers often use their routines to understand events and recall sequences. Individuals possess a general understanding of time; for instance, the term “yesterday” may refer to any event in the past. Enhancing sequencing skills can improve time perception. Children's cognitive development in preschool is enhanced by parent-child symbolic play.

Preschoolers can increase their curiosity, problem-solving skills and attention Span through play-based activities and imaginative play. The Approaches to Learning competencies that K-3 children learn are related to their cognitive and social-emotional competencies, but are distinct. Engagement is crucial to children's learning and development. Children who are strongly engaged in learning are emotionally invested in their learning.

Children's cognitive ability to identify, focus on, and solve learning issues also affects engagement. Approaches to Learning skills are important enough to warrant their unique place in children's development (Hyson, nd). Developmentally appropriate teaching methods encompass a range of skills and strategies tailored to an individual's age, development, unique traits, and family context. The loving ties educators build with each child and family, as well as among all children and families, form each child's social and cultural context.

The teaching methods promote child development and learning in all subjects and domains. Teaching approaches capitalize on each child's strengths and combat bias. Teachers who provide students choice and agency in a structured setting that supports learning and meaningful goals are intentional. Teachers know that children learn best by beginning and directing their learning and socializing.

Play helps children sense joy and wonder; therefore, early childhood educators incorporate it into their lessons. They want to learn in a way that is self-directed and direct. For kids from birth to age 8, teachers provide kids more chances to pick their own resources, friends, themes, and ways to do things throughout the day. After observing what kids choose to play with, teachers provide them with items and resources to enhance their play experience. Children have active agency in adult-guided activities because educators scaffold and prolong their interest, engagement, and learning.

The following instructors' acts demonstrate developmentally appropriate teaching for infants to primary school children. Teachers' actions, attitudes, and inquiry show their dedication to a caring learning community. Teachers recognize their role in shaping children's attitudes, confidence and approach to learning for life. Teaching expertise means that they know each child and family, making learning accessible, appropriate and responsive. They use their interactions with each kid, family, and educator to construct learning activities that represent each child's life and culture.

Hence, to realize the study's objectives, this study primarily focused on assessing the readiness of kindergarten pupils in the developmental learning domains using the Early Childhood Care and Development Checklist (ECCD) as the basis for the proposed intervention plan. These young learners need to develop their learning domains to support their future learning. Suppose the multi-faceted needs of the learners are not sufficiently and substantially met or addressed by the professional requirements or skills of the teachers.

In that case, a learning gap will undoubtedly arise, potentially affecting both the teaching and learning processes. Therefore, it is deemed necessary to anticipate and resolve the problems at the kindergarten level to provide the best quality education for the young and impressionable minds of 21st-century learners.

Conceptual Framework

Using the IPO model to illustrate the data collected, the input stage described the use of Readiness of Kindergarten Pupils test which measures developmental areas through the use of ECCD checklist which includes gross motor, fine motor, self-help, receptive language, expressive language, social and emotional and cognitive domains. The link between readiness and demographic profile was explored in order to find correlation between the readiness and demographic profile. Finally, the perspective of the participants was identified and provided recommendations to improve the least mastered competencies of kindergarten pupils in the qualitative component.

The process phase encompassed preparing, collecting, analyzing, and interpreting the needed data using quantitative and qualitative methods. The following steps were taken to facilitate the explicit interpretation of meanings. In the quantitative phase, request approval from the Division Office, distribute the survey questionnaire, organize the data, subject it to statistical analysis, and undertake data analysis and interpretation.

In the qualitative phase, development and validation of the interview guide, conduct of structured interviews to generate qualitative responses from participants through discussion, transcribe the obtained responses, code and categorize them, and develop themes for interpretation were done. Discussions on the findings of the qualitative themes were also conducted.

Finally, the output of this study was a proposed intervention plan for kindergarten teachers and parents as well. This was a result of combining and corroborating the quantitative and qualitative findings of the study. Table 1 presents the conceptual model of the study.

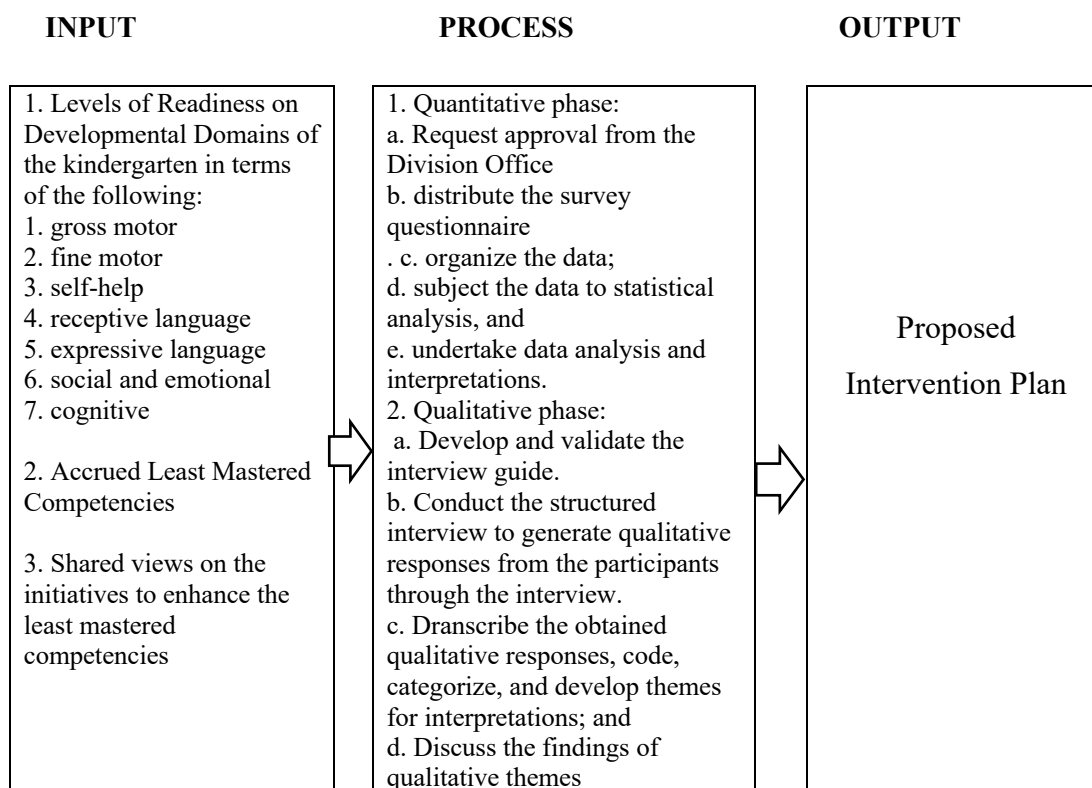


FIGURE 1
CONCEPTUAL MODEL OF THE STUDY

Statement of the Problem

Generally, this study was conducted to assess the readiness of kindergarten pupils in developmental domains using the Early Childhood Care and Development Checklist as input for the Intervention Plan during the School Year 2024-2025.

Specifically, this study sought to answer the following questions:

1. How may the level of readiness of the kindergarten pupils be described along with the following learning domains:
 - 2.1 Gross Motor;
 - 2.2 Fine Motor;
 - 2.3 Self-Help;
 - 2.4 Receptive language;
 - 2.5 Expressive language;
 - 2.6 Social and Emotional; and
 - 2.7 Cognitive?
2. What are kindergarten pupils' accrued least mastered competencies across the seven (7) developmental domains?
3. How do the teachers describe their views on improving the least mastered competencies of kindergarten pupils, along with the developmental domains?
4. What intervention plan can be proposed based on the findings?

Significance of the Study

The results of the study would be of great benefit to the following:

School Administrators. To effectively manage school kindergarten education programs, the results could serve as a guide for School Principals and Administrators in strengthening instructional strategies.

Teachers. The assessment results would benefit grade I teachers by providing them with the kindergarten readiness profile, which is crucial for addressing their specific learning needs. Kindergarten Teachers, on the other hand, would have the basis for an intervention plan.

Kindergarten Teachers. The results can be used to provide technical assistance and an intervention plan to school heads and kindergarten teachers. The findings could serve as a basis for assessing and improving the Kindergarten Curriculum.

Parents. The results of this undertaking would enable parents to identify their children's strengths and weaknesses in learning competencies. Through this undertaking, they would evaluate their performance and implement relevant and appropriate interventions to address the identified knowledge gap. Additionally, they can make informed follow-up and home interventions based on this assessment.

Future Researchers. The study's findings will serve as a basis for exploring relevant topics related to kindergarten pupils' learning competencies across different domains, thereby confirming or refuting the investigation's results.

Scope and Delimitation

This study focused mainly on assessing the readiness of kindergarten pupils in their learning domains using the Early Childhood Care and Development Checklist as input for the intervention plan, during the School Year 2024-2025.

The areas of concern for this study were delimited in assessing the readiness of kindergarten pupils in developmental domains using the ECCD Checklist and the following learning domains: Gross Motor, Fine Motor, Self-Help, Receptive Language, Expressive Language, Social and Emotional, and Cognitive.

Moreover, the pupils' most and least mastered competencies will be evaluated, and the kindergarten teachers' shared views on the initiative to improve the least mastered competencies. The outcome of this study was a proposed intervention plan for kindergarten teachers.

Furthermore, the researcher limited his study to the kindergarten teachers in the sixteen (16) schools in Bacolor North District, Division of Pampanga. The needed data were gathered using research instruments that the respondents answered.

Definition of Terms

To ensure a better understanding on the part of the reader, the following standard or operational definitions of selected terms used in this study were given:

Developmental Domains. These refer to specific aspects of growth and changes in children (K to 12 Curriculum). In this manner, these pertain to the seven learning domains: fine motor, gross motor, self-help, receptive language, expressive language, social-emotional, and cognitive domains of the kindergarten pupils.

Readiness. This can be defined generally as the skills, knowledge, and abilities that children need to succeed in formal schooling, which, for most, begins at kindergarten (Snow, 2006). This refers to the specific skill levels in the various developmental domains of kindergarten pupils, as measured by the Early Childhood Care and Development Checklist.

Kindergarten Pupils. This entails a class or small school for young children, typically between four and six years old, to prepare them for primary education

(Dictionary.com). In this context, the grade 1 entrants are referred to as the study's respondents.

II. METHODOLOGY

This chapter presents the research design, the respondents of the study, the data collection procedure, and the research instruments used in this study. The treatment of the data gathered was also discussed in this chapter.

Research Design

This study employed a mixed-method approach defined by a sequential explanatory design. This design emphasized the collection, analysis, and integration of both quantitative and qualitative data within a single study. This design integrates quantitative and qualitative data to enhance the understanding of the problem's nature. (Creswell & Clark, 2011). Data collection occurs in two successive phases within the sequential explanatory design framework. Consequently, a researcher initially gathers and examines the quantitative data. The second phase of the study involves qualitative data, which are complementary to the initial quantitative phase (Kennedy & Edmonds, 2017).

In this study, the initial step in the investigation is to deal with quantitative data by assessing the readiness of kindergarten pupils relative to the seven (7) developmental domains for the school year through document analysis. The qualitative phase followed after collecting, analyzing, and interpreting the data. This process was facilitated through virtual interviews with the selected teacher-participants to explore their initiative to improve the least mastered competencies. Finally, an intervention plan was proposed based on the findings.

Respondents

In the quantitative phase, the respondents of this study were public kindergarten pupils from the sixteen (16) schools in Bacolor North District, Division of Pampanga. A total of 594 kindergarten pupils were enrolled during the previous year. The selection of respondents in the quantitative phase was facilitated using Calmarin's formula. Out of the total population, 234 respondents were taken as the study sample. Then, a systematic selection method was used to randomly choose the people who would answer the questions. In this design, the researcher determined the total population and the samples extracted from the individuals. Table 1 presents the distribution of the kindergarten pupils in the district.

In the qualitative phase, the study participants consisted of kindergarten teachers.

TABLE 1
FREQUENCY DISTRIBUTION OF RESPONDENTS ACCORDING TO SCHOOL

District	Frequency	Percentage
School 1	30	12%
School 2	47	18%
School 3	40	16%
School 4	207	82%
School 5	6	2%
School 6	45	18%
School 7	47	19%
School 8	110	43%
School 9	22	9%
School 10	40	15%
Total	594	234

Further, the researcher employed a non-probability sampling design, particularly purposive sampling. This is the intentional selection of informants based on their ability to elucidate a specific phenomenon (Sicat, 2008). In this method, the participants were chosen using the following criteria: a) must be a public kindergarten teacher in Bacolor North District; b) must be an outstanding kindergarten teacher awardee; c) have five years or more of teaching experience as a kindergarten teacher at the school level. d) attended various training and seminars related to the kindergarten curriculum at least the division level.

Research Instrument

The following instruments were used in gathering the needed data:

1. Early Childhood Care and Development Checklist. The researcher utilized the Philippine Early Childhood Development (Phil. ECD) framework. The goal is to determine if the child is developing normally or if there is an increased risk of delays in development. The Checklist items were categorized into seven domains: 1) gross motor, 2) fine motor, 3) self-help, 4) receptive language, 5) expressive language, 6) cognitive, and 7) social-emotional. The selection of items was grounded in statistical validation. This tool is designed to monitor the specific needs of Filipino children.

2. Semi-structured interview. The researcher conducted a virtual interview using a pre-prepared interview guide to capture kindergarten teachers' views on their initiatives in helping pupils improve their developmental skills. The interview guide was subjected to a series of validations by the researcher's adviser and experts in the field to ensure the research questions' responsiveness to the research objective, coherence, and appropriateness of the language used in the interview guide questions. Their valuable insights and suggestions were highly regarded and incorporated into the final form of the interview guide questions.

Data Collection

The researcher initially sought permission from the Office of the Schools Division Superintendent (SDS) of Pampanga to conduct the investigation. After obtaining official approval, the researcher prepared and presented the plan of activities for the actual data-gathering phase using available offline or online platforms, as approved by the school heads of each participating school within the district. The researcher directly communicated with the teacher-respondents through virtual meetings to collect pertinent data about the current study. After gathering the necessary information, a document analysis was conducted. This was to obtain relevant information concerning the developmental domains of the kindergarten pupils since the assessment had already been conducted during the previous year. The data were then fully described and analyzed within the learning areas for kindergarten students.

In the qualitative part, the interviewer complied strictly with ethical practices while performing the online interviews. Participants were informed of the interview and had agreed beforehand. Afterward, the researcher discussed the purpose of the interviews with the participants, which was facilitated through a virtual discussion. A semi-structured interview revealed emergent themes through a thematic analysis of the participants' views on their initiatives to improve the least mastered competencies of kindergarten pupils.

Ethical Considerations

The researcher strictly adhered to the ethical standards when conducting the study. Initially, the respondents and participants provided informed consent, indicating that participation in the study was voluntary. Also, the participants' identities, including their responses to the research instruments, were kept confidential. This was to ensure the protection and privacy of research participants. Finally, the study results were treated with complete objectivity, reflecting professional respect.

Data Analysis

The researcher processed the gathered data using the following statistical tools and thematic analysis to yield the findings of this investigation.

1. The quantitative data was treated using the following statistical tools:

- a) Frequency and percentage. This was used to describe kindergarten pupils' least mastered and most mastered competencies.
- b) Weighted mean. This tool was used to describe the developmental domains of kindergarten pupils using the ECCD checklist. The following scales were used to provide a meaningful interpretation of the kindergarten developmental domains.

Interpretations of the scaled score in every developmental domain were given below:

Scaled Score	Verbal Description	Interpretation
1 – 3	Suggest a significant delay in the overall development	Developing Readiness
4 – 6	Suggest a slight delay in the overall development	
7 – 13	Average development	Approaching Readiness
14 – 16	Suggest slightly advanced development	Ready
17 – 19	Suggest highly advanced development	

Interpretation of the standard score of the overall developmental domain were also provided below:

Standard Score	Verbal Description	Interpretation
69 and below	Suggest significant delay in the overall development	Developing Readiness
70 - 79	Suggest a slight delay in the overall development	
80 - 119	Average overall development	Approaching Readiness
120 - 129	Suggests slightly advanced development	Ready
130 and above	Suggest highly advanced development	

c) Pearson Chi-square Test. This tool was used to test the significant relationship between the level of readiness of kindergarten pupils across their profiles.

2. In qualitative data, on the other hand, the researcher adopted Braun and Clarke's Model of Thematic Analysis (2016) in analyzing the obtained data. The steps will be enumerated as follows: 1. Transcription of Participants' responses, 2. Identifying Key points through Segmentation of texts, 3. Formulating codes derived from key points, 4. Combining and aggregating similar and related codes, and 5 generating Themes/ categories. Figure 2 describes the thematic analysis model of data analysis.

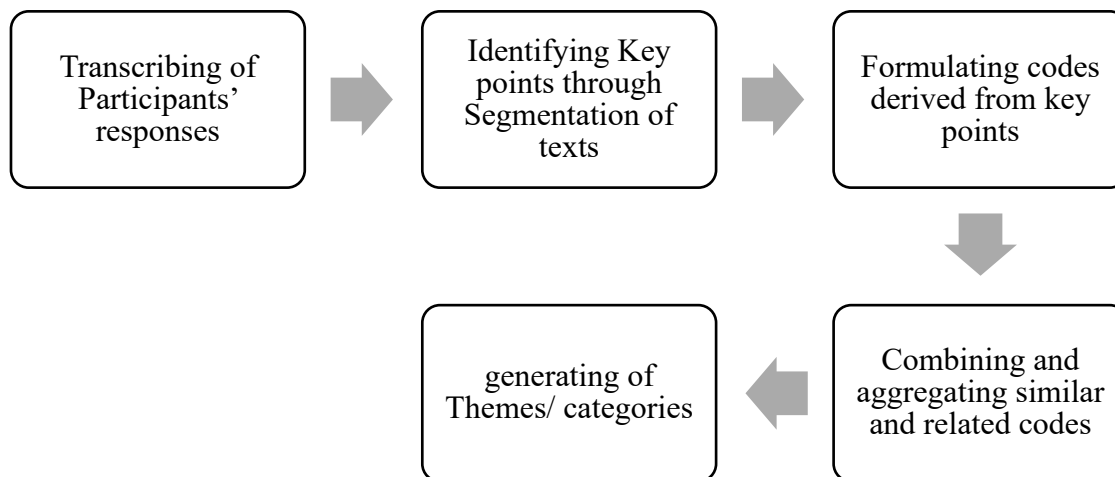


FIGURE 2
VISUAL MODEL OF THEMATIC ANALYSIS

III. RESULTS AND DISCUSSION

This chapter elaborates on the analysis and interpretation of gathered data using the assessment tools in answering the specific objectives presented in Chapter 1.

1. The Level of Readiness of the Kindergarten Pupils along with the Developmental Domains

Table 2 presents the level of readiness of Kindergarten Pupils along with Developmental Domains. As reflected in Table 3, the overall mean obtained by the kindergarten pupils was 123.14 with a verbal interpretation of *approaching readiness*. The findings indicate that the kindergarten pupils exhibit some of the foundational skills and behaviors relative to developmental domains that prepare them for the kindergarten curriculum based on the curriculum standards.

Further analysis revealed that the pupils' gross and fine motor skills were rated as ready, with the highest mean scores of 18.12 and 17.20. This implies that the pupils have already developed their fine and gross motor skills effectively and efficiently as they engage in wholesome physical and health activities.

Additionally, responsive pupils may advance to a more advanced level of learning orientation and skills, including composition and manipulation. This study aligns with the findings of Marr et al. (2023), which indicate that kindergarten students allocate a significant portion of the school day (46%) to fine motor activities, including eating, drawing, cutting, and writing, among others.

Meanwhile, the rest of the developmental domains were rated as approaching readiness according to the highest mean scores. This shows the different levels of development and learning: receptive language (mean = 15.97), expressive language (mean = 15.62), social/emotional (mean = 14.68), cognitive (mean = 14.17), and self-help (mean = 12.98). Self help was scored the lowest with a mean of 12.98; the pupils appear to be able to participate in many things with moderate ability like learning to get dressed, to feed themselves, to go to the toilet, brush their teeth, wash, and tie their shoes, although will probably need the support of a teacher or parent.

In summary, the data indicates that kindergarten children are ready in most areas of development, but still need to have some strengths across all the developmental domains in order to be fully school-ready. These data confirm that school readiness is a multifactoral concept that includes children's physical, language and communication, social-emotional, cognitive, and self-help skills that support readiness for learning in kindergarten. Following the proposed framework of school readiness from Perrin et al. (2019), children who are strong in all developmental domains have better school adjustment and school success. In a similar vein, Nurse et al. (2023) confirmed that language, cognitive, social, and physical skills are predictive of future school achievement.

In addition, Othman and Abu Bakar (2024) reported that motor, language, emotional, and social readiness skills provide children with basic competencies needed to be effective learners. Thus, working in partnership with parents, teachers, and schools will foster many of the developmental domains and ensure children are school-ready.

TABLE 2
LEVEL OF READINESS OF THE KINDERGARTEN PUPILS' DEVELOPMENTAL DOMAINS

Domains of Learning	Mean	Sd	Interpretation
Gross Motor	17.20	2.76	Ready
Fine Motor	18.12	0.91	Ready
Self-Help	12.98	0.81	Approaching Readiness
Receptive language	15.97	0.83	Approaching Readiness
Expressive language	15.62	0.98	Approaching Readiness
Social and Emotional	14.68	1.01	Approaching Readiness
Cognitive	14.17	0.90	Approaching Readiness
Average Standard Score	123.14	0.97	Approaching Readiness

2. Accrued Least Mastered Competencies of Kindergarten Pupils and the Developmental Domains.

Table 3 shows kindergarten pupils' accrued least mastered competencies across the seven (7) developmental domains. As shown in the table, teachers described the least-mastered competencies of kindergarten pupils according to percentage. To wit: Demonstrate health habits that keep one clean and sanity (65.44%), Traces, copies or writes letters and numerals (63.60%),

and Demonstrate skills needed for self-care/self-help such as tooth brushing, buttoning, screwing, and unscrewing lids using spoon & fork correctly (64.71%), Demonstrates readiness in typing out new experiences, & self-confidence in doing task independently (65.07%), Recalls details from stories/poems/songs listened to (62.09%), Expresses personal interest and needs (66.44%), and lastly Identify sounds of letters (using the Alphabet of Mother Tongue (65.49%).

The least mastered competencies obtained by the respondents suggest the learning gaps identified by the kindergarten teachers that necessitate appropriate intervention strategies to support the development and acquisition of essential learning competencies of the kindergarten pupils.

The Department of Education (DepEd) asserts that kindergarten serves as the transitional phase from informal to formal literacy (Grades 1–12), emphasizing that age five (5) falls within critical developmental years where positive experiences are essential for ensuring school readiness (K to 12 Kindergarten Curriculum Guide, 2016).

The least learned skills mastered by respondents showed learning needs for relevant instructional strategies appropriate to promote kindergarten children. Some children did not yet possess all the self-help, language, cognitive, and social-emotional skills the children need in relation to school readiness. This would be a validation to the statement of the Department of Education (2016) that kindergarten is a transition period of developing positive attitudes for more effective learning in preparation for primary school. Moreover, Perrin et al. (2019) have stated that physical, language, cognitive, and social-emotional are necessary skills in promoting readiness for school. In support, a partnership of school and home and age-appropriated learning activities may be a contributing factor to increase their competency level in school readiness skills.

TABLE 3
ACCRUED LEAST MASTERED COMPETENCIES OF KINDERGARTEN PUPILS
ACROSS THE DEVELOPMENTAL DOMAINS

Domains	Least Mastered Competencies	%
Gross Motor	Demonstrate health habits that keep one clean and sanity.	65.44
Fine Motor	Traces, copies or writes letters and numerals	63.60
Self-Help	Demonstrate skills needed for self-care/self-help such as tooth brushing, buttoning, screwing, and unscrewing lids using spoon & fork correctly	64.71
Receptive Language	Demonstrates readiness in trying out new experiences & self-confidence in doing tasks independently.	65.07
Expressive Language	Recalls details from stories/poems/songs listened to	62.09
Social and Emotional	Expresses personal interests and needs.	66.44

3. Shared Views on Improving the Least Mastered Competencies of Kindergarten Pupils and the Developmental Domains.

The quantitative part of this study was primarily focused on the learning strategies of the kindergarten teachers in helping their pupils to improve the identified least mastered competencies. The in-depth analysis of the data from the participants' transcripts paved the way to surface the effective learning strategies of kindergarten teachers. Their views were utilized in the diagrammatic emergence of themes, namely: 1) Multi-Sensory Learning, 2) The Use of Developmentally Appropriate Practice (DAP), 3) Play-based Strategy, and 4. Reiteration Positive Reinforcement.

Theme 1. Multi-Sensory Learning. The more senses there are, the more effective learning will be. This allows pupils to improve their crucial literacy skills through activities that appeal to several areas of the brain. Pupils can easily recognize the task or performance when the directions given engage various senses. Likewise, this touches on the child's multiple intelligence, including differentiated instruction. These are some of the participants' transcripts:

pagpapakita ng totoong halimbawa o bagay (real objects)(P1a2)

Gumamit ng mga larawan upang mas lalong maintindihan ang talakayan (P9a10)

Ang pag-awit ng bata ng mga nursery rhymes ay isang paraan na nakakatulong sa kanyang vocabulary development(P5a5)

Gumamit ng kanta, sayaw, audio-visual(P10a11)

Supporting this observation, Shams & Seitz (2008) reiterated the advantage of multisensory learning in that the acquisition of knowledge is much more effective when the information can be perceived through more than one sensory channel because it will enhance learners' higher order cognitive processing as well as improve learning. For example, Moreno and Mayer (2007) also concluded that combining visual and audio information together was more beneficial for young learners in both comprehension and retention than using one single modal learning.

Theme 2. The Use of Developmentally Appropriate Practice. Children are being recognized as unique individuals with different styles, preferences, needs, strengths, motivations, and the like. Thus, as an educator, it is imperative to design, implement, and ascertain a learning environment to help children achieve their full potential across all domains of development by building and supporting each child's strengths through culturally, linguistically, and ability practices appropriate for each child. Quoted below were some of the participants' actual responses:

Una ay bigyan ang mga bata ng mga aktibidad na angkop sa kanilang kakayahan at edad o ang tinatawag na DAP- Developmentally Appropriate Practice (P6a5)

pagpapatupad ng differentiated instruction, kung saan iba't ibang activities ang ihahanda sa mga mag-aaral batay sa kanilang kakayahan at interest.(P6a7)

Paggamit ng mga iba't-ibang uri instructional materials na akma sa kanilang edad at kakayahan(P7a8)

These findings confirm the principles of DAP that learning experiences should be sensitive to the children's developmental needs and variations among children. Teaching in development appropriate ways enhances child learning (Coppole and Bredekamp, 2009), because it is consistent with the children's developmental stages. Similar findings were revealed by Piasta et al. (2020) in which children's engagement and learning in early childhood classrooms were higher in settings that used developmentally appropriate and individualized instructions.

Theme 3. Play-based Strategy. It is often stated that enjoyment enhances the learning process. Kids naturally want to play. So, learning through play is a good way to encourage this desire to learn. They actively explore their surroundings through play. Kids learn by playing with ideas, moving things around, acting out roles, and trying out different materials. The actual responses from the participants shown below back up this analysis.

Pagtuturo na gamit o may kahalang laro.(P4a2)

pag-integrate ng mga hindi gaanong kabisadong kakayahan sa pamamagitan ng paglalaro (P6a6)

Maaari din gamitin ang pretend play strategy sa pagdevelop ng mga domains ng bata, siguraduhin lamang na angkop ang laro sa kakayahan at edad ng bata (P6a8)

This study's finding of play based pedagogies helping children learn cognitively, linguistically, socially and emotionally and in a positive manner is similar to Pyle et al. (2017). Weisberg et al. (2016) concluded guided play facilitated cognitive and developmental learning through integration of child led play and adult involvement.

Theme 4. Reiteration of Positive Reinforcement. In psychology, positive reinforcement is defined as following the behavior with a reward to increase the likelihood of behavior occurring

in the future. It is a good way to encourage child behavior, such as completing chores, homework, or engaging in various activities, in an argumentative-free manner. To illustrate this idea, below is the highlight of the actual response of the participant.

“Kapag napupuri ko po siya tuwing natatapos niya ang assignment niya, mas ginaganahan siyang mag-aral ulit. Parang mas gusto niyang makuha ‘yung papuri ko.” (P1c4)

Minsan binibigyan ko siya ng sticker o maliit na treat kapag nagsipag siyang mag-review. Nakikita ko na mas nagiging eager siya sa susunod.” (P2c4)

Kapag pinupuri namin kahit sa simpleng accomplishment lang, mas tumataas ang kumpiyansa nila. Kahit mahirap, gusto nilang subukan ulit.” (T3c4)

This result is in line with Skinner's operant condition theory (1953) stating that any reinforced behavior will be likely to occur again. Also, positive reinforcement procedures (e.g., praise, rewards) lead to better child motivation, behavior in classroom and child engagement (Simonsen et al., 2008).

4. Proposed Intervention Plan

Project GROW (Guided Readiness Opportunities for Wellness): Strengthening Kindergarten Developmental Domains through Targeted Intervention

I. RATIONALE

From the readiness assessment, Kindergarten children were determined to be at the 'approaching readiness' level in most developmental areas; fine motor skills and gross motor skills were areas of strength. Self-help skills, expressive language skills, receptive language skills and social-emotional skills were areas of weakness. The lowest acquired competencies were in the areas of self-help routines; expressive, receptive language and early literacy skills like tracing, retell details, letter sounds.

This discrepancy points to the importance of developing an intervention program geared toward a well-rounded child through multi-sensory, play-based, and age-appropriateness approach in the establishment of independence, confidence and basic skills ready for formal education. This intervention follows the framework for DepEd's Kindergarten Curriculum (2016), which states that the age of five (5) is a time for rapid development and learning and that positive learning experience should be developed in the very early stage for lifetime readiness.

II. OBJECTIVES

1. To improve self-help skills through structured routines and guided self-care activities
2. To develop fine motor skills and pre-writing competencies through manipulative play and tracing.
3. To develop expressive and receptive language through storytelling, rhymes, and play.
4. To develop social and emotional awareness through group interaction, self-expression, and self-confidence.
5. To encourage parents to work on readiness skills at home to support classroom instruction.

III. TARGET LEARNERS

Kindergarten children classified as "approaching readiness" for self-help, expressive language, receptive language, and socio-emotional development.

IV. INTERVENTION STRATEGIES / THEMATIC APPROACHES

Theme / Strategy	Description / Sample Activities	Target Domain
Multi-Sensory Learning	Use songs, tactile letters, sound-matching games, and object-based storytelling to reinforce letter-sound association and vocabulary.	Expressive & Receptive Language
Developmentally Appropriate Practice (DAP)	Differentiated tasks (e.g., buttoning clothes for fine motor; group discussion for language) tailored to pupils' ability levels.	Self-Help, Fine Motor
Play-Based Strategy	Integrate play into learning: 'Clean and Play Corners,' 'Story Dramatization,' 'Alphabet Treasure Hunt,' 'Role-play Market Day.'	Social & Emotional, Cognitive
Positive Reinforcement	Use praise tokens, reward charts, and verbal affirmations to build motivation and self-confidence.	All Domains

V. WORK PLAN / ACTIVITY MATRIX

Activity	Objectives Addressed	Strategy / Method	Persons Involved	Time Frame	Resources Needed	Success Indicators
I Can Do It Myself! Routine Program	Enhance self-help and hygiene habits	Demonstration , Guided Practice, Role Play	Teacher, Pupils, Parents	Week 1–2	Hygiene kits, visuals, mirror	Pupils can independently perform basic self-care routines
Fine Motor Fun Zone	Improve fine motor coordination	Manipulative games, tracing letters, and clay modeling	Teacher, Pupils	Week 3–4	Tracing sheets, crayons, and clay	Improved handwriting control and letter formation
Listen and Tell Story Time	Develop receptive & expressive language	Storytelling, Question-Answer, Retelling	Teacher, Pupils	Week 5–6	Storybooks , puppets, charts	Pupils recall and express details from stories
Sound Hunt Adventure	Enhance phonemic awareness	Alphabet games, sound-object matching	Teacher, Pupils	Week 7–8	Letter cards, sound boxes	Pupils identify letter sounds correctly
Clean Hands, Healthy Me! Campaign	Raise awareness about hygiene and health	Song & Dance Routine, Demonstration	Teacher, Pupils, Parents	Week 9	Posters, soap, visuals	Pupils demonstrate healthy habits confidently
Play to Learn Corners	Foster social & emotional growth	Cooperative games, pretend play, and role-play	Teacher, Pupils	Ongoing	Play materials, costumes	Increased confidence and cooperation in peer interaction
Home Reinforcement Program	Engage parents in continued learning	Home activity sheets, parent coaching	Teacher, Parents	Continuous	Parent guide, feedback log	Active home participation and learner improvement

VI. MONITORING AND EVALUATION

Tool / Method	Frequency	Responsible Person	Indicator of Success
Observation checklist per domain	Weekly	Teacher	Improvement in task performance
Parent feedback log	Biweekly	Parent/Teacher	Positive behavioral changes at home
Portfolio of pupils' outputs	Monthly	Teacher	Increased mastery of tasks
Post-assessment of readiness	End of program	Teacher, School Head	Increased readiness rating from 'approaching' to 'ready'

VII. EXPECTED OUTPUTS

Improvement in kindergarten pupils' readiness scores across the least mastered domains.

Increased pupil confidence, independence, and engagement during class activities.

Strengthened teacher-parent collaboration in early learning support.

IV. CONCLUSIONS AND RECOMMENDATIONS

This chapter highlights the summary of findings, the conclusions drawn, and the recommendations offered.

Summary of Findings

Based on the previous analysis and interpretation, the following were the summary:

1. The level of readiness of Kindergarten Pupils, along with Developmental Domains, transpired an overall mean of 123.14 with a verbal interpretation of approaching readiness.
2. The accrued least mastered competencies of kindergarten pupils across the seven (7) developmental domains were as follows: demonstrate health habits that keep one clean and sanitary (65.44%), traces, copies, or write letters and numerals (63.60%), demonstrate skills needed for self-care/self-help such as tooth brushing, buttoning, screwing, and unscrewing lids using spoon & fork correctly (64.71%), demonstrates readiness in trying out new experiences, & self-confidence in doing task independently (65.07%), recalls details from stories/poems/songs listened to (62.09%), expresses personal interest and needs (66.44%), and lastly identify sounds of letters (using the alphabet of mother tongue (65.49%).
3. The shared views on improving the least-mastered competencies of kindergarten pupils and the developmental domains have surfaced four (4) emerging themes.
4. The proposed intervention plan was crafted based on the quantitative and qualitative findings.

Conclusions

Based on the previous summary, the following were the conclusions drawn:

1. The approaching readiness level suggested that pupils exhibit some foundational skills and behaviors relative to developmental domains that prepare them for the kindergarten curriculum based on the curriculum standards.
2. The least mastered competencies obtained by the respondents suggest the learning gaps identified by the kindergarten teachers that necessitate appropriate intervention strategies to support the development and acquisition of essential learning competencies of the kindergarten pupils.
3. The shared views on improving the least mastered competencies of kindergarten pupils were as follows: Multi-Sensory Learning, The Use of Developmentally Appropriate Practice (DAP), Play-based Strategy, and Reiteration of Positive Reinforcement.
4. The Project GROW intervention plan serves as a responsive developmental plan designed to uplift kindergarten pupils' foundational readiness. By implementing all three integrated multi-sensory, play-based, and DAP approaches all areas of least mastery in the study are met, and all children entering Grade 1 are ready to learn, to communicate and to care independently.

Recommendations

Based on the conclusions drawn, the following recommendations are hereby presented.

1. Kindergarten educators may implement enrichment activities to improve foundational skills across all developmental areas of the kindergarten. Similarly, a home-based readiness program may be enforced to ensure the continuity of skill development beyond the classroom environment.

2. School Heads may consider incorporating teaching approaches and strategies through the school-based learning action cell (LAC) session to target the least mastered competencies to enhance kindergarten pupils' learning outcomes.

3. Kindergarten teachers are encouraged to sustain their adaptation of developmental and appropriate pedagogical strategies such as deductive and guided approaches and other teacher-centered strategies to attain meaningful learning and engagement among kindergarten pupils.

4. The proposed intervention plan may be adopted and implemented to evaluate its effectiveness, relevance, and sustainability.

5. Future researchers may conduct similar studies to further substantiate the current investigation. Likewise, additional variables may be included to enrich the study's findings.

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