



LIFELONG LEARNING ATTITUDES AND SOFT SKILLS OF KINDERGARTEN TEACHERS IN CARMEN DISTRICT, DAVAO DEL NORTE

Joanefeb C. Lobiano

Master of Arts in Educational Management, Rizal Memorial Colleges, Inc.

Article DOI: <https://doi.org/10.36713/epra27620>

DOI No: 10.36713/epra27620

ABSTRACT

This study aimed to determine the relationship between lifelong learning attitudes and soft skills of kindergarten teachers in Carmen District, Davao del Norte. Specifically, it assessed lifelong learning attitudes in terms of willingness to learn, belief in the benefits of learning activities for professional development, and awareness of personal learning skills, as well as soft skills in communication, problem-solving, teamwork, and leadership. It also examined the significant effect between these variables and identified which domains of lifelong learning attitudes influence soft skills. The study employed a quantitative descriptive-correlational design using the total enumeration technique, involving all fifty-eight (58) kindergarten teachers in the district. Data was gathered through a validated and reliable survey instrument and analyzed using descriptive and inferential statistics. Findings revealed that teachers demonstrated high levels of both lifelong learning attitudes and soft skills. A significant positive relationship was found between the variables, indicating that stronger lifelong learning attitudes are associated with better soft skills. Among the domains, belief in the benefits of learning activities for professional development significantly influenced soft skills, while willingness to learn, and awareness of personal learning skills did not. Despite high overall ratings, some indicators were rated moderate, particularly in performing difficult tasks in English, integrating new knowledge, accessing information beyond one's field, awareness of professional changes, research skills, and professional development planning. It is recommended that teachers may engage in continuous professional development with support in language and complex tasks. School heads may provide targeted training, while policymakers may strengthen lifelong learning frameworks.

KEYWORDS: kindergarten teachers; lifelong learning attitudes; soft skills

INTRODUCTION

Lifelong learning attitudes and soft skills are vital components of teachers' professional competence, particularly in early childhood education. Lifelong learning attitudes reflect teachers' commitment to continuous improvement, adaptability to educational changes, and willingness to engage in self-directed growth, while soft skills encompass communication, emotional intelligence, adaptability, and collaboration. These two attributes empower teachers to manage classroom challenges effectively, foster positive relationships, and sustain professional motivation, which in turn enhances the quality of learning experiences for young children

Globally, kindergarten teachers face persistent challenges in sustaining lifelong learning attitudes and developing essential soft skills. In many countries across Europe and the United States, insufficient institutional support, limited access to professional development, and increasing workloads reduce opportunities for continuous learning (Geraci et al., 2023; Lozano-Peña et al., 2021). These conditions weaken communication skills, which make it difficult for teachers to effectively interact with young learners, parents, and colleagues. Problem-solving skills are also affected as kindergarten teachers often have limited time and resources to respond to behavioral and instructional challenges in the classroom. Administrative demands and rising expectations further reduce their capacity to remain adaptable and resilient, which are essential traits for lifelong learning and personal growth (RAND Corporation, 2023).

In many Asian and European contexts, similar difficulties emerge. In China, high societal expectations and administrative pressure limit teachers' ability to manage stress and sustain motivation, which weakens their teamwork and leadership skills (Li et al., 2023). Even in countries with strong education systems, such as Finland, many teachers experience emotional exhaustion and struggle to balance instructional responsibilities with the socio-emotional needs of their students (Drouin-Rousseau et al., 2024). Across regions, professional development efforts often place greater emphasis on technical skills than on soft skills, which leave kindergarten teachers with fewer opportunities to strengthen communication, collaboration, and leadership abilities. As a result, they face greater difficulty adapting to changing educational demands and fostering supportive and inclusive learning environments (Nwoko et al., 2023; Angelini et al., 2024).



At the national level, kindergarten teachers in the Philippines face significant soft skills deficiencies largely rooted in weak lifelong learning attitudes and limited engagement in continuous professional development. Bernardo et al. (2024) pointed out that many Filipino educators lack essential competencies such as communication, adaptability, collaboration, and problem solving due to training systems that focus more on technical knowledge than interpersonal growth. Likewise, Santiago (2024) emphasized that insufficient participation in reflective and sustained learning limits teachers' ability to strengthen these critical skills. As a result, teachers struggle with managing classroom interactions, resolving conflicts, and building strong relationships with learners and parents. Heavy workloads, limited mentoring, and lack of structured professional support further discourage continuous learning, which leads to poor communication, weak teamwork, low adaptability, and reduced confidence in handling classroom challenges.

In Carmen District, Davao del Norte, kindergarten teachers face serious soft skills deficiencies that undermine their teaching effectiveness and professional growth, largely attributed to poor lifelong learning attitudes. As noted by Pagonzaga, et al. (2025), many exhibit weak communication, struggling to express ideas clearly and build relationships; poor teamwork, with limited collaboration and peer support; and low problem-solving skills in addressing classroom challenges and learner needs. These are further compounded by limited adaptability and emotional regulation, which hinder effective responses to stressful situations, and underdeveloped leadership, reflected in low confidence and minimal initiative in school activities. The lack of continuous engagement in professional learning, reflection, and skill enhancement contributes to these problems, resulting in ineffective communication, weak collaboration, poor problem solving, low adaptability, and limited leadership among teachers.

Despite the increasing global and national emphasis on lifelong learning and soft skills, significant contextual, methodological, and substantive gaps remain in the literature. Contextually, most studies are conducted in higher education or secondary school settings, with limited focus on kindergarten teachers, particularly in localized areas such as Davao del Norte. Methodologically, existing research often examines variables such as teacher competence, work engagement, or instructional effectiveness in isolation, rather than exploring the combined influence of lifelong learning attitudes and soft skills. Substantively, there is a lack of studies that directly investigate how these two constructs interact to shape instructional practices, as research in the Philippines tends to prioritize content-based professional development over interpersonal and dispositional competencies. As a result, there is insufficient empirical evidence that captures the integrated role of lifelong learning attitudes and soft skills in early childhood education, creating a clear gap that this study seeks to address.

The urgency of this study stems from the increasing demands on kindergarten teachers in Davao del Norte to demonstrate both professional adaptability and strong interpersonal competence in delivering quality early childhood education. Weak lifelong learning attitudes may limit teachers' responsiveness to change, while deficiencies in soft skills can impair communication, collaboration, and classroom management, ultimately affecting learners' foundational experiences. Examining the interplay of lifelong learning attitudes, soft skills, and instructional practices, provides critical evidence to inform targeted professional development, policy, and school-based interventions. Moreover, it contributes to the existing body of knowledge by offering context-specific insights and emphasizing the essential role of lifelong learning and soft skills in strengthening instructional practices among kindergarten teachers.

THE STUDY'S OBJECTIVES

The main objective of this study is to determine the relationship between lifelong learning attitudes and soft skills of kindergarten teachers. Specifically, the study aims to:

1. Assess the level of lifelong learning attitudes of kindergarten teachers in terms of:
 - 1.1 willingness to learn;
 - 1.2 belief in the benefits of learning activities for professional development; and
 - 1.3 awareness of personal learning skills.
2. Determine the level of soft skills of kindergarten teachers across the following dimensions:
 - 2.1 communication skills;
 - 2.2 problem-solving skills;
 - 2.3 teamwork; and
 - 2.4 leadership.
3. Examine the significant relationship between lifelong learning attitudes and soft skills of kindergarten teachers.
4. Identify which domains of lifelong learning attitudes significantly influence the soft skills of the respondents.

METHODOLOGY

This chapter explains the methods used in the study. It describes the research design, the respondents who provided the data, and the tools used to collect information. It also outlines the steps followed to gather data accurately and ethically. Furthermore, it explains how the data was analyzed to answer the research questions. The chapter is organized into key sections: Research Design, Ethical Considerations, Research Respondents, Research Instruments, Data Gathering



Procedure, and Data Analysis, all aimed at examining the relationship between lifelong learning attitudes and soft skills of kindergarten teachers.

Method Used

This study utilized a quantitative research approach, specifically a descriptive-correlational design, to examine the relationship between lifelong learning attitudes and soft skills of kindergarten teachers. Quantitative research involves systematic collection and analysis of numerical data to identify patterns, relationships, and trends among variables, which offers objective and generalizable insights (Thomas & Zubkov, 2023).

The descriptive-correlational design was particularly appropriate for this study because it allowed the researcher to describe the current status of the variables and explore the degree of association between them without manipulating any conditions (Thomas & Zubkov, 2023). The descriptive component focused on capturing the present state of kindergarten teachers' lifelong learning attitudes, including willingness to learn, belief in the benefits of learning activities, and awareness of personal learning skills, as well as their soft skills, which encompass communication, problem-solving, teamwork, and leadership.

The correlational component investigated the strength and direction of the relationship between lifelong learning attitudes and soft skills. Correlational research is essential for determining whether, and to what extent, changes in one variable are associated with changes in another, which provides insights into naturally occurring patterns within educational settings (Curtis et al., 2016; Thomas & Zubkov, 2023). Through this design, the study aimed to provide both descriptive and relational data that are crucial for understanding how kindergarten teachers' attitudes toward lifelong learning may influence the development and practical application of their soft skills. This approach ensured that data collection and analysis were conducted systematically, ethically, and rigorously, producing findings that are relevant to educational practice and professional development initiatives.

Sources of Data

The respondents of this study were all fifty-eight (58) kindergarten teachers from various elementary schools under Carmen District, Davao del Norte. To ensure comprehensive coverage of the target population, the study employed the total enumeration technique, including all identified kindergarten teachers in the district. This approach is considered appropriate and reliable, as it eliminates sampling bias and provides an accurate representation of the entire population (Etikan & Bala, 2017; Taherdoost, 2016).

The respondents were drawn from different geographical clusters within Carmen District to ensure balanced representation across the area. By using total enumeration, the study secured comprehensive data that reflects the perspectives of all kindergarten teachers in the district, thereby strengthening the validity and generalizability of the findings.

Data Gathering Instrument

The primary instruments for this study were structured questionnaires designed to measure the lifelong learning attitudes and soft skills of kindergarten teachers. These questionnaires consisted of closed-ended Likert-scale items that quantified teachers' perceptions and experiences. The instruments were divided into two parts: the first focused on lifelong learning attitudes, while the second measured soft skills.

The instrument on lifelong learning attitudes was adapted from Hursen (2016) and was structured around three dimensions: Willingness to Learn (7 items), Belief in the Benefit of Learning Activities for Professional Development (6 items), and Awareness of Personal Learning Skills (5 items). These dimensions provided a comprehensive view of how teachers approach lifelong learning in terms of motivation, belief in the value of professional growth, and self-awareness in learning processes.

To ensure validity, the instrument underwent expert validation to confirm its clarity, relevance, and alignment with the intended constructs. The overall expert rating was 4.04, described as very good, indicating that the instrument was valid and appropriate for use. The validators provided feedback that the instrument was "ready for administration," "for administration," and "okay for administration," indicating that the questionnaire items were clear, appropriate, and suitable for data collection with minimal or no revisions required.

Reliability was established through pilot testing conducted with a separate group of thirty (30) kindergarten teachers from a different district in Davao del Norte, not included in the actual study locale. The computed Cronbach's alpha was 0.712, which exceeds the 0.70 benchmark suggested by Taber (2018), indicating that the instrument is reliable.

Responses were interpreted using the following scale



Mean Interval	Descriptive Level	Descriptive Interpretation
4.20 - 5.00	Very High	Lifelong learning attitudes are always evident.
3.40 - 4.19	High	Lifelong learning attitudes are oftentimes evident.
2.60 - 3.39	Moderate	Lifelong learning attitudes are occasionally evident.
1.80 - 2.59	Low	Lifelong learning attitudes are seldom evident.
1.00 - 1.79	Very Low	Lifelong learning attitudes are never evident.

On the other hand, the instrument for soft skills was adapted from De Pietro and Altomari (2019) and encompassed four key dimensions: Communication Skills, Problem-Solving Skills, Teamwork, and Leadership, each consisting of 14 items. This instrument captured the essential soft skills required of kindergarten teachers in facilitating effective interaction, collaboration, decision-making, and guidance within the classroom.

The instrument's overall expert mean rating was 4.13, described as very good, which indicates that the instrument was valid and appropriate for use. Reliability was established through pilot testing with a separate group of thirty (30) kindergarten teachers. The computed Cronbach's alpha was 0.729, exceeding the 0.70 benchmark suggested by Taber (2018), which indicates that the instrument is reliable. Responses were interpreted using the following scale:

Mean Interval	Descriptive Level	Descriptive Interpretation
4.20 - 5.00	Very High	Soft skills are always evident.
3.40 - 4.19	High	Soft skills are oftentimes evident.
2.60 - 3.39	Moderate	Soft skills are occasionally evident.
1.80 - 2.59	Low	Soft skills are seldom evident.
1.00 - 1.79	Very Low	Soft skills are never evident.

Both instruments were contextualized to the objectives of this study. Comments and suggestions from the adviser, panel members, and expert validators were incorporated to refine the tools and ensure their validity.

Sampling Technique

The study employed a total enumeration sampling technique, wherein all identified kindergarten teachers in Carmen District, Davao del Norte, were included as respondents. This approach was deemed appropriate due to the relatively small and well-defined population of fifty-eight (58) teachers, ensuring that every member of the population had an opportunity to participate. By including the entire population, total enumeration eliminates sampling bias and enhances the accuracy and representativeness of the findings, as it captures the perspectives of all kindergarten teachers in the district rather than a selected subset (Etikan & Bala, 2017; Taherdoost, 2016).

Moreover, the use of total enumeration allowed for comprehensive coverage across different geographical clusters within Carmen District, which ensured balanced representation and reflecting the diversity of experiences, attitudes, and practices among the respondents. This technique strengthened the reliability and generalizability of the study's results within the context of the district, providing a holistic understanding of the relationship between lifelong learning attitudes and soft skills among kindergarten teachers.

Procedure of the Study

The data gathering process for this study followed a structured and ethically guided protocol to ensure accuracy, reliability, and validity of the results. The procedure was divided into the following stages: Ethics Review, Validation of Instrument, Endorsement from the Dean, Permit to Conduct the Study, and Data Gathering. All procedures were systematically designed to support the efficient collection of data from kindergarten teachers in Carmen District, Davao del Norte.

Ethics Review. Prior to data collection, the research proposal underwent an ethics review to ensure compliance with ethical standards for studies involving human participants. An Ethics Compliance Certificate was officially secured on November 11, 2025. Ethical principles such as voluntary participation, informed consent, confidentiality, and the right to withdraw without penalty were strictly observed throughout the study. Respondents were assured that all information gathered would remain confidential and used solely for academic purposes.

Validation of Instrument. Before administering the survey, the research instruments measuring lifelong learning attitudes and soft skills were subjected to expert validation on December 19, 2025. The validation process ensured the clarity, relevance, and appropriateness of the items for kindergarten teachers in Carmen District, Davao del Norte.

A pilot test was conducted with a group of 30 teachers outside the target area to determine the reliability of the instrument. Feedback from experts and the research adviser was carefully reviewed and incorporated to refine the instrument. The results confirmed that the tool was valid, clear, appropriate, and reliable prior to its administration in the main study.



Endorsement from the Dean. Following the ethics clearance and validation process, an endorsement letter from the Dean of the Graduate School of Rizal Memorial Colleges, Inc., Dr. Nelia Aga, was obtained on November 22, 2025. This endorsement affirmed that the study met the required academic and ethical standards and authorized the researcher to proceed with securing permits for data collection.

Permission to Conduct the Study. After obtaining Dean's endorsement, formal permission to conduct the study was secured on December 23, 2025, from the appropriate authorities, including the Schools Division Superintendent of Davao del Norte and the respective school heads in Carmen District. Official letters outlining the purpose of the study, target respondents, and data collection procedures were submitted and approved prior to the conduct of the study.

Data Gathering. Upon securing all necessary approvals, coordination with school heads and designated focal persons was undertaken to facilitate the smooth administration of the questionnaires. Letters to school principals and corresponding Certificates of Appearance were completed on the following dates: January 13, 2026 – Guadalupe Elementary School, San Isidro Elementary School, Tubod Elementary School, and Tuganay Elementary School; January 14, 2026 – Salvacion Elementary School and Carmen Central Elementary School SPED Center; January 15, 2026 – New Maligaya Elementary School and New Camiling Elementary School; and January 16, 2026 – Magsaysay Elementary School and Alejal Elementary School

The validated instruments were administered starting January 13 to January 16, 2026, to all qualified kindergarten teachers in the district. Prior to answering the questionnaire, respondents were oriented regarding the objectives of the study and the ethical considerations involved. Informed consent was obtained from all participants before participation.

The questionnaires were administered using both paper-based and digital formats, depending on the availability of resources and the preference of the respondents. All complete questionnaires were retrieved immediately after administration and were subsequently organized, encoded, and prepared for statistical analysis.

Appropriate statistical tools were employed to determine the levels of lifelong learning attitudes and soft skills among kindergarten teachers in Carmen District, Davao del Norte. All procedures were conducted in adherence to ethical standards to ensure the integrity, validity, and reliability of the research findings.

Statistical Treatment

For a comprehensive interpretation of the data collected from kindergarten teachers in Carmen District, Davao del Norte, several statistical tools were employed, each corresponding to the study's research questions

To address the first two research questions, which focused on determining the level of lifelong learning attitudes and the level of soft skills of kindergarten teachers, the weighted mean and standard deviation were utilized. The weighted mean summarized the general responses of the participants, while the standard deviation indicated the consistency or variability of their answers. These descriptive statistics provided a clear overview of the trends and distribution of lifelong learning attitudes and soft skills among the respondents.

For the third research question, which sought to determine whether a significant relationship existed between lifelong learning attitudes and soft skills, the Pearson Product-Moment Correlation Coefficient (r) was employed. This test measured the strength and direction of the linear relationship between the two continuous variables, allowing the researcher to examine whether higher levels of lifelong learning attitudes were associated with higher levels of soft skills.

To answer the fourth research question, which aimed to identify which dimensions of lifelong learning attitudes significantly influenced the soft skills of kindergarten teachers, multiple regression analysis was conducted. This analysis assessed the individual contribution of each dimension of lifelong learning attitudes on the soft skills of kindergarten teachers.

Ethical Consideration

This study ensured that kindergarten teacher-respondents were treated with respect, fairness, and care throughout the research process. Ethical principles such as informed consent, confidentiality, risk minimization, and transparency guided the study to protect participants' rights and well-being.

Social Value. The study sought to examine the relationship between lifelong learning attitudes and soft skills of kindergarten teachers, which aimed to provide insights that strengthen professional growth, teaching effectiveness, and overall school performance. The findings hold significant value for educational stakeholders by offering evidence-based recommendations that promote continuous teacher development and interpersonal competence. This study contributed to enriching classroom experiences and improving outcomes for young learners. Beyond the local context, results may also inform teacher training and development strategies in early childhood education settings elsewhere.



Informed Consent. Informed consent was obtained prior to participation. Kindergarten teachers were fully informed about the study's purpose, objectives, and procedures. They were assured that participation was voluntary, with no risks involved, and that they could withdraw at any time without negative consequences. Consent documents used clear and accessible language, and participants were encouraged to ask questions before signing.

Vulnerability of Respondents. While teachers are not considered a vulnerable group, answering questions about lifelong learning attitudes and soft skills may have prompted some to reflect on personal or professional challenges. To address this, the study ensured that participation remained non-intrusive, as data was gathered only through survey questionnaires. Respondents were free to omit any item they were not comfortable answering, and they could withdraw from the study at any point without any negative consequence.

Privacy and Confidentiality. Protecting the privacy of respondents was a top priority. All data was anonymized, and identifying information was removed from reports. Collected data were stored securely in password-protected files accessible only to the researcher. In compliance with the Data Privacy Act of 2012, strict confidentiality protocols were followed throughout the research process.

Risk, Benefits, and Safety. The study posed minimal risk since it used non-invasive methods such as survey questionnaires. However, discussing professional growth and soft skills may have caused slight discomfort for some participants. To minimize this, teachers were given the freedom to skip any item they found uncomfortable. The benefits of the study outweigh the risks, as the findings can enhance teacher development programs, promote lifelong learning, and strengthen kindergarten teachers' communication, leadership, problem-solving, and teamwork skills. Participants were also given access to the results for their own professional growth.

Justice. The principle of justice was upheld by ensuring that all kindergarten teachers had equal opportunity to participate. Selection was conducted free from bias, and findings will be fairly shared with all stakeholders so that no group is disproportionately excluded from the study's benefits.

Transparency. Transparency was ensured throughout the research process. Teachers were informed of the study's purpose, procedures, potential risks, and benefits prior to participation. Relevant stakeholders were updated on the progress, and upon completion, results will be shared with teachers, schools, and education policymakers to encourage application of findings in practice.

Qualification of the Researcher. The researcher possessed an understanding of ethical principles, including informed consent, confidentiality, and data protection, which ensures that the study was conducted with integrity, competence, and respect for participants. The researcher also had practical experience as a kindergarten teacher, which provided firsthand knowledge of classroom dynamics, teacher-student interactions, and the professional challenges faced by early childhood educators.

Furthermore, the researcher's preparation for this study was strengthened through continuous learning from experienced teachers, guidance from mentors, collaboration with co-researchers, and support from the research adviser and graduate school subject teachers. This combination of practical experience, mentorship, and academic guidance equipped the researcher with the skills necessary to design effective research tools, conduct systematic data collection, and analyze findings within the context of early childhood education.

Conflict of Interest. The researcher declared no conflict of interest. The study was conducted independently and free from any personal or financial bias. Should any conflict arise, it will be disclosed to both participants and stakeholders.

Adequacy of Facilities. Data collection was carried out in a safe and conducive environment, whether in quiet school spaces or through secure online platforms, depending on the context. Proper facilities such as survey tools and secure storage were ensured for accuracy, comfort, and confidentiality.

Community Involvement. The study valued the participation of the educational community by aligning its objectives with the professional growth needs of kindergarten teachers and school leaders. Feedback from stakeholders was considered in refining the research instrument. Upon completion, findings will be disseminated to teachers, administrators, and policymakers to spark dialogue and guide strategies for fostering lifelong learning and soft skills in early childhood education.

Results

The findings revealed that kindergarten teachers demonstrated a **high level of lifelong learning attitudes**. Among the domains, **awareness of personal learning skills** obtained the highest mean ($M = 3.73$), followed by **willingness to learn** ($M = 3.42$) and **belief in the benefits of learning activities for professional development** ($M = 3.41$). This indicates that



teachers generally recognize the importance of continuous learning, self-motivation, and professional growth in improving their teaching practices.

The level of teachers' **soft skills** was also rated **high**. Communication skills recorded the highest mean ($M = 3.85$), followed by teamwork ($M = 3.77$), leadership ($M = 3.66$), and problem-solving skills ($M = 3.59$). These results suggest that kindergarten teachers frequently demonstrate effective communication, collaboration, leadership, and decision-making skills, which are essential in supporting classroom management and learner development.

Correlation analysis showed a **strong and significant relationship** between lifelong learning attitudes and soft skills ($r = 0.812$, $p = 0.000$). This means that teachers with stronger lifelong learning attitudes tend to exhibit better soft skills. Specifically, teachers who are willing to learn, value professional development, and are aware of their learning skills are more likely to communicate effectively, solve problems, work collaboratively, and demonstrate leadership.

Regression analysis further revealed that lifelong learning attitudes significantly influenced soft skills ($R = 0.857$, $R^2 = 0.734$, $F = 49.944$, $p = 0.000$), explaining **73.4% of the variance** in teachers' soft skills. Among the domains, only **belief in the benefits of learning activities for professional development** significantly predicted soft skills ($B = 0.615$, $p = 0.000$). Meanwhile, willingness to learn and awareness of personal learning skills did not significantly predict soft skills. Overall, the findings imply that kindergarten teachers' soft skills are strengthened when they recognize the value of professional development activities. Thus, schools should provide meaningful, relevant, and continuous learning opportunities that enhance teachers' communication, problem-solving, teamwork, and leadership competencies. These results emphasize the importance of professional development in improving teacher effectiveness and supporting quality early childhood education.

Summary

The findings of the study were summarized as follows: Kindergarten teachers exhibited a high level of lifelong learning attitudes across all dimensions, including willingness to learn ($M = 3.42$, $SD = 0.56$), belief in the benefits of learning activities for professional development ($M = 3.41$, $SD = 0.68$), and awareness of personal learning skills ($M = 3.73$, $SD = 0.61$). This indicated that teachers generally demonstrated positive attitudes toward continuous learning, recognized the importance of professional development activities, and maintained strong awareness of their own learning processes, although some aspects of willingness and perceived benefits were rated at a moderate level.

Further, kindergarten teachers exhibited a high level of soft skills across all dimensions, including communication skills ($M = 3.85$, $SD = 0.74$), problem-solving skills ($M = 3.59$, $SD = 0.39$), teamwork ($M = 3.77$, $SD = 0.60$), and leadership ($M = 3.66$, $SD = 0.48$). This indicated that teachers generally demonstrated strong interpersonal communication, effective problem-solving abilities, collaborative teamwork, and leadership skills, although some specific aspects within these domains were rated at a moderate level.

The results revealed that lifelong learning attitudes had significant relationships with the soft skills of kindergarten teachers across all dimensions. Willingness to learn showed moderate to strong positive correlations with communication ($r = 0.654$), problem-solving ($r = 0.587$), teamwork ($r = 0.598$), and leadership ($r = 0.756$), all with $p = 0.000$. Similarly, belief in the benefits of learning activities for professional development demonstrated strong relationships with all soft skill areas, particularly leadership ($r = 0.874$). Awareness of personal learning skills also showed moderate significant correlations across all domains. Overall, lifelong learning attitudes were strongly and significantly related to soft skills ($r = 0.812$, $p = 0.000$), which indicated that higher levels of lifelong learning attitudes were associated with better communication, problem-solving, teamwork, and leadership skills among kindergarten teachers.

The multiple regression analysis showed that the domains of lifelong learning attitudes significantly influenced the soft skills of kindergarten teachers, with the model explaining 73.4% of the variance ($R = 0.857$, $R^2 = 0.734$, $F = 49.944$, $p = 0.000$). Among the domains, only belief in the benefits of learning activities for professional development emerged as a significant predictor of soft skills ($B = 0.615$, $\beta = 0.806$, $t = 6.447$, $p = 0.000$), while willingness to learn ($B = -0.032$, $p = 0.778$) and awareness of personal learning skills ($B = 0.102$, $p = 0.191$) were not significant. This indicated that teachers' recognition of the value of learning activities for professional growth strongly contributed to the enhancement of their soft skills.

Conclusions

Based on the findings of the study, the following conclusions are drawn: Teachers consistently exhibited a high level of lifelong learning attitudes, as reflected in their strong willingness to learn, belief in the benefits of learning activities for professional development, and awareness of their personal learning skills, which together supported their commitment to continuous growth and professional improvement. This aligns with Lifelong Learning Theory (Jarvis, 2006), which emphasizes continuous and experience-based learning across the lifespan.



Teachers consistently exhibited a high level of soft skills, as reflected in their strong communication, problem-solving, teamwork, and leadership abilities, which together enhanced their overall professional performance. These competencies supported their capacity to effectively convey ideas, address challenges, work collaboratively, and demonstrate leadership in managing classroom interactions and promoting a positive learning environment. This is supported by Social Learning Theory (Bandura, 1986), which highlights that skills are developed and strengthened through observation, interaction, and modeling within social environments.

There is a significant positive relationship between lifelong learning attitudes and soft skills of kindergarten teachers, which indicates that teachers with stronger lifelong learning orientations tend to demonstrate higher levels of soft skills. Each dimension of lifelong learning attitudes such as willingness to learn, belief in the benefit of learning activities for professional development, and awareness of personal learning skills is strongly associated with communication, problem-solving, teamwork, and leadership skills, which highlights the crucial role of continuous learning in enhancing teachers' professional competencies. This finding is consistent with Self-Determination Theory (Deci & Ryan, 1985), which explains that intrinsic motivation and perceived competence foster continuous engagement and skill development.

Belief in the benefit of learning activities for professional development significantly influences the soft skills of kindergarten teachers. In contrast, willingness to learn and awareness of personal learning skills do not exhibit a significant influence. Overall, lifelong learning attitudes serve as strong predictors of teachers' soft skills, which emphasizes the crucial role of professional development beliefs in shaping their communication, problem-solving, teamwork, and leadership abilities. This is supported by Adult Learning Theory (Knowles, 1980), which emphasizes that adult learning is most effective when it is perceived as relevant, meaningful, and directly applicable to professional practice.

Recommendations

In the light of the foregoing findings and conclusions, the following recommendations are offered.

Kindergarten teachers may continuously engage in professional development activities to further strengthen their soft skills, particularly in communication, teamwork, problem-solving, and leadership, which may enhance their classroom effectiveness and learner engagement. Since some indicators on communication skills (e.g., being willing to help others by going beyond the required commitment and having no difficulty understanding the intentions of others) were rated as moderate, targeted training such as active listening, empathy development, and interpersonal communication enhancement may be provided to address these areas.

Learners may be encouraged to actively participate in interactive and collaborative classroom activities, which may help them develop confidence and benefit from their teachers' enhanced soft skills.

School heads may provide sustained support through capacity-building programs, training, and workshops that focus on fostering lifelong learning attitudes and enhancing soft skills among teachers. Since several indicators on lifelong learning attitudes were rated as moderate such as displaying eagerness to perform difficult learning tasks in English, relating new subjects to prior knowledge, spending time accessing information beyond one's professional field, awareness of constant changes in the field, research skills, and planning for professional development, school heads may strengthen targeted interventions such as language enhancement programs, reflective teaching seminars, interdisciplinary learning activities, and structured professional development planning.

Furthermore, since some indicators under problem-solving and teamwork (e.g., finding new and useful ways to solve problems, resorting to direct intervention in problem situations, and sharing personal progress in group work) were rated as moderate, additional workshops on creative problem-solving, collaborative decision-making, and team-based learning strategies may also be conducted.

Educational policymakers may consider integrating lifelong learning frameworks into teacher development initiatives and curriculum policies to ensure continuous professional growth and skill enhancement. Since certain indicators related to research engagement and professional development planning were rated as moderate, policies may also prioritize strengthening research culture among teachers and institutionalizing clear professional growth pathways.

Future researchers may explore similar studies in different educational contexts or incorporate additional variables to broaden the understanding of how lifelong learning attitudes influence teachers' professional competencies. Since several indicators yielded moderate ratings across domains, future studies may also further examine underlying factors affecting these specific areas to generate more targeted interventions.



REFERENCES

1. Adeoye, M. A. (2025). Soft skills as pillars of success in educational leadership: An in-depth analysis. *Jurnal Penelitian Pendidikan*, 28(1), 1–23. <https://doi.org/10.20961/Paedagogia.v28i1.99059>
2. Ahmed, R., & Lopez, M. (2025). Emotional responsiveness and developmental outcomes in early childhood classrooms. *Journal of Early Childhood Education Research*, 18(2), 45–60.
3. Almerich, G., Orellana, N., Suárez-Rodríguez, J. M., & Díaz-García, I. (2020). Teachers' information and communication technology competencies: A structural approach. *Computers & Education*, 146, 103761. <https://doi.org/10.1016/j.compedu.2019.103761>
4. Al-Mohammadi, A. (2025). A framework for developing soft skills among kindergarten teachers. *ResearchGate*. https://www.researchgate.net/publication/359306818_A_Framework_for_Developing_Soft_Skills_among_Kindergarten
5. Anderson, P., & White, K. (2021). School culture and teacher collaboration in primary education. *Educational Management Review*, 29(4), 112–126.
6. Angelini, G., Rossi, P., & Bianchi, M. (2024). Teacher resilience and professional growth in post-pandemic education. *European Journal of Educational Research*, 13(2), 155–170. <https://doi.org/10.1234/ejedres.2024.132155>
7. Aquino-Mendoza, R., & Elepaño, M. L. (2023). Work motivation and occupational resilience of Filipino teachers. *Philippine Journal of Educational Studies*, 19(1), 45–62. <https://doi.org/10.5678/pjes.2023.19145>
8. Arskieva, Z. A. (2024). Development of teacher communication skills as the basis for the formation of professional competence. *SHS Web of Conferences*, 106, 06006. <https://doi.org/10.1051/shsconf/202410606006>
9. Avalos, B. (2019). Teacher professional learning and development: An international review of the literature. *Educational Research*, 61(2), 117–137. <https://doi.org/10.1080/00131881.2019.1585426>
10. Aziz, H. (2025). Embedding effective communication in early childhood education. *Journal of Early Childhood Education*, 33(2), 123–135. <https://doi.org/10.1080/13575279.2024.2333721>
11. Bakker, A. B., & Demerouti, E. (2007). The job demands–resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309–328. <https://doi.org/10.1108/02683940710733115>
12. Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.
13. Bascopé, M., Perrotta, D., & Rojas-Barahona, C. (2020). Teachers as lifelong learners: The role of continuous professional development in soft skills growth. *Teaching and Teacher Education*, 96, 103181. <https://doi.org/10.1016/j.tate.2020.103181>
14. Bernardo, A. B. I. (2024). Teaching Philippine English through schoolscapes. *World Englishes*. <https://doi.org/10.1111/weng.12673>
15. Brookes Publishing. (2024). Five success factors for collaborative early childhood teams. Brookes Publishing. <https://brookespublishing.com/5-success-factors-for-collaborative-early-childhood-teams/>
16. Brown, L., & Taylor, S. (2021). Soft skills development in early childhood teacher preparation. *Early Education and Development Journal*, 32(3), 210–225.
17. Burns, S. (2025). A systematic review and meta-analysis of approaches to teaching problem-solving skills to children in early childhood education. *Review of Education*. <https://doi.org/10.1002/rev3.70079>
18. Cameron, J., & Molina, R. (2023). Teacher soft skills and classroom engagement outcomes. *International Journal of Teaching and Learning*, 15(1), 33–48.
19. Candrawinata, N., Erlina, & Ulfah. (2024). The relationship between metacognitive ability and self-directed learning of prospective teachers. *Hydrogen: Jurnal Kependidikan Kimia*, 12(1), 1–9. <https://e-journal.undikma.ac.id/index.php/hydrogen/article/view/12349>
20. Chin, J. M., Ching, G. S., del Castillo, F., Wen, T.-H., Huang, Y., del Castillo, C. D., Gungon, J. L., & Trajera, S. M. (2022). Perspectives on the Barriers to and Needs of Teachers' Professional Development in the Philippines during COVID-19. *Sustainability*.
21. Choi, E., Mamlok-Naaman, R., & Hofstein, A. (2023). Efficacy and professional learning: A meta-analysis of teacher training effects. *Journal of Teacher Education*, 74(1), 3–21. <https://doi.org/10.1177/00224871211047749>
22. Cruz, A., & Bautista, M. (2024). Leadership culture and teacher interpersonal practice in schools. *Asian Journal of Educational Studies*, 12(2), 88–101.
23. Curtis, W., Reese, M., & Hanley, C. (2016). *Theories of learning: An introduction to lifelong learning*. Sage.
24. Czerkawski, B. C. (2021). Lifelong learning in the digital age: The role of self-directed learning and social-emotional skills. *International Review of Research in Open and Distributed Learning*, 22(1), 89–105. <https://doi.org/10.19173/irrod.v22i1.5225>
25. Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2019). Implications for educational practice of the science of learning and development. *Applied Developmental Science*, 23(2), 97–140. <https://doi.org/10.1080/10888691.2018.1537791>
26. Davis, H., & Morgan, T. (2023). Pedagogical knowledge and soft skills integration in teaching effectiveness. *Journal of Curriculum and Instruction*, 20(3), 55–70.
27. Dayagbil, F., & Alda, R. (2024). Continuing professional development opportunities: Teachers' motivation and perceived effectiveness. *International Journal of Education and Practice* 3(5), 89–94. <https://doi.org/10.18488/61.v12i3.3733>
28. De Pietro, O., & Altomari, N. (2019). Teachers' soft skills: A study on lifelong learning attitudes. *Journal of Educational Research and Practice*, 9(2), 1–10. <https://doi.org/10.5590/JERAP.2019.09.2.01>
29. Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Springer.
30. Dela Cruz, J., & Ramirez, P. (2024). Collaborative teaching practices in basic education. *Philippine Journal of Educational Research*, 16(2), 101–115.
31. Delgado-Iglesias, J., Reinoso-Tapia, R., & Bobo-Pinilla, J. (2024). Estimating the competence of preservice primary teachers to use inquiry and their willingness to apply it in the classroom. *International Journal of Science and Mathematics Education*, 22, 469–490. <https://doi.org/10.1007/s10763-023-10377-8>
32. Demirel, M., & Akkoyunlu, B. (2021). Lifelong learning tendencies as predictors of teachers' collaboration and problem-solving skills. *Journal of Education and Learning*, 10(2), 45–57. <https://doi.org/10.5539/jel.v10n2p45>
33. Desimone, L. M., & Pak, K. (2017). Instructional coaching as high-quality professional development. *Theory Into Practice*, 56(1), 3–12. <https://doi.org/10.1080/00405841.2017.1241947>



34. Dignath, C., Buettner, G., Langfeldt, H. P., & Veenman, M. (2021). Supporting self-regulated learning in teacher practice: Intervention strategies and effects. *Educational Psychology Review*, 33(4), 1021–1048.
35. Doove, B. M., et al. (2021). Preschool communication: Early identification of concerns. *Pediatrics*, 148(2), e2021051234. <https://doi.org/10.1542/peds.2021-051234>
36. Drouin-Rousseau, S., Tremblay, M., & Gagné, C. (2024). Teacher professional development and self-efficacy: A longitudinal analysis. *Teaching and Teacher Education*, 128, 104130. <https://doi.org/10.1016/j.tate.2024.104130>
37. Dyah, A. D., & Setiawati, F. A. (2019). The problem-solving skills in kindergarten students based on the stages of problem solving. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 3(1), 274–282. <https://doi.org/10.31004/obsesi.v3i1.160>
38. Elbertson, N. A. (2025). The role of educators in school-based social and emotional learning programs. *Journal of School Psychology*, 77, 1–10. <https://doi.org/10.1016/j.jsp.2025.03.001>
39. Etikan, I., & Bala, K. (2017). Sampling and sampling methods. *Biometrics & Biostatistics International Journal*, 5(6), 215–217. <https://doi.org/10.15406/bbij.2017.05.00149>
40. Felix, K. J. T., & Abrogena, L. G. (2023). Science Teachers' Perceptions on Continuing Professional Development (CPD), Self-Efficacy, and Instructional Performance. *American Journal of Multidisciplinary Research and Innovation*, 3(5), 111–117.
41. Flores, A., & Tan, L. (2024). Creative instructional strategies in early childhood education. *Journal of Early Learning Studies*, 9(1), 22–38.
42. Gangmei, N., & Thomas, K. A. (2025). Teachers' technology proficiency for quality learning and teaching – A scoping review. *Jurnal Pendidikan Anak Usia Dini*, 3(1), 274–282. <https://doi.org/10.31004/obsesi.v3i1.160>
43. Garcia, M., & Lim, J. (2023). Emotional intelligence and classroom climate in primary education. *Teaching and Teacher Education Journal*, 41(2), 77–92.
44. Gardner-Neblett, N., et al. (2025). Aligning early childhood science teaching beliefs, practices, and children's learning outcomes: the impact of a professional development program. *Frontiers in Psychology*, 9(6), 69–78.
45. Geraci, M., Liu, H., & Wong, S. (2023). Teacher stress, resilience, and job satisfaction in global contexts. *International Review of Education*, 69(5), 643–662. <https://doi.org/10.1007/s11159-023-10076>
46. Ghamrawi, N. (2024). Cultivating teacher leadership: Evidence from a professional development model. *Journal of Educational Leadership*, 36(4), 45–60. <https://doi.org/10.1080/13632434.2024.2328056>
47. Gomez, R., & Tran, P. (2025). Teacher adaptability in dynamic classroom environments. *International Review of Education Studies*, 14(1), 58–72.
48. Granone, F. (2025). Facilitating children's communication in problem-solving play-based activities with coding toys. *Frontiers in Psychology*, 21(4), 56–65. <https://doi.org/10.3389/fpsyg.2024.1426165>
49. Güley, B., & Keskinçilic, A. (2024). The effect of project approach-based science education program on problem-solving skills of preschool children. *Humanities and Social Sciences Communications*, 11(1), 940. <https://doi.org/10.1057/s41599-024-03444-0>
50. Güley, E. (2024). Investigating the relationship between work engagement and occupational resilience of teachers. *Journal of Educational Psychology Research*, 46(1), 75–92. <https://doi.org/10.5678/jepr.2024.46175>
51. Gür Erdoğan, D., & Şahin, M. (2021). Preschool teachers' lifelong learning tendencies and their relationship with communication skills. *Early Child Development and Care*, 191(16), 2549–2561. <https://doi.org/10.1080/03004430.2020.1716742>
52. Harris, D., & Lee, S. (2022). Instructional flexibility and teacher responsiveness in classrooms. *Educational Psychology Quarterly*, 11(3), 95–109.
53. Heikkinen, K. M. (2024). Leadership as a profession in early childhood education and care centers. *European Early Childhood Education Research Journal*, 32(1), 1–15. <https://doi.org/10.1080/00131881.2024.2371352>
54. Ibrahim, N., & Hussein, H. (2023). Lifelong learning attitudes and soft skills among preschool teachers in Malaysia. *Asia Pacific Education Review*, 24(2), 317–330. <https://doi.org/10.1007/s12564-023-09738-5>
55. Jarvis, P. (2006). Towards a comprehensive theory of human learning: Lifelong learning and the learning society (Vol. 1). Routledge. <https://doi.org/10.4324/9780203016169>
56. Johnson, E., & Miller, T. (2022). Barriers to soft skills application in teaching practice. *Journal of Educational Development*, 25(4), 120–134.
57. Kamola, M. (2024). A study on coding toy activities in Norwegian early childhood education centers. *Journal of Early Childhood Education*, 33(2), 123–135. <https://doi.org/10.1080/1350293X.2024.2319783>
58. Karakuş, M., & Aksoy, E. (2022). Lifelong learning tendencies and professional competencies of teachers. *Education and Information Technologies*, 27(6), 8545–8561. <https://doi.org/10.1007/s10639-022-11021-7>
59. Kazu, İ. Y., & Erten, P. (2020). The relationship between lifelong learning tendencies and problem-solving skills of teachers. *International Journal of Progressive Education*, 16(6), 35–50. <https://doi.org/10.29329/ijpe.2020.280.3>
60. Knowles, M. S. (1980). *The modern practice of adult education: From pedagogy to andragogy*. Cambridge Books.
61. Koç, M. H. (2024). Lifelong learning tendencies of teachers and their professional adaptability in early childhood education. *Journal of Education and Learning*, 13(1), 45–58.
62. Kraft, M. A., Blazar, D., & Hogan, D. (2018). The effect of teacher coaching on instruction and achievement: A meta-analysis. *Review of Educational Research*, 88(4), 547–588. <https://doi.org/10.3102/0034654318796167>
63. Kratumnok, P. (2024). Empowering teachers' learning to strengthen students' teamwork skills. ERIC. <https://files.eric.ed.gov/fulltext/EJ1441439.pdf>
64. Kunter, M., & Holzberger, D. (2022). Motivation and emotion in teachers: The role of lifelong learning attitudes. *Educational Psychologist*, 57(1), 1–16. <https://doi.org/10.1080/00461520.2021.2011156>
65. Layden, S. J., Crowson, T. G., & Hayden, K. E. (2023). A 30-year systematic review of self-monitoring as a strategy to improve teacher performance. *The Journal of Special Education*, 57(1), 3–15. <https://doi.org/10.1177/00224669221113542>



66. Lee, Y., & Park, H. (2024). Teacher competencies and learner engagement in modern classrooms. *Asian Education Review*, 19(1), 15–30.
67. Li, X., Zhang, H., & Wu, J. (2023). Digital learning and teacher resilience: Mediating role of professional identity. *Computers & Education*, 200, 104790. <https://doi.org/10.1016/j.compedu.2023.104790>
68. Li, Y., & Wang, J. (2023). Lifelong learning mindset and soft skills among early childhood educators in China. *Asia-Pacific Journal of Teacher Education*. Advance online publication. <https://doi.org/10.1080/1359866X.2023.2197431>
69. Lim, C., & Chua, N. (2024). Sustained application of soft skills in teaching practice. *International Journal of Teacher Development*, 13(2), 66–80.
70. Lozano-Peña, G., Ramírez, C., & Torres, J. (2021). Teacher burnout and resilience factors in Latin America. *Journal of Educational Research*, 114(2), 178–190. <https://doi.org/10.1080/00220671.2021.1872509>
71. Martin, G., & Clark, R. (2023). Teacher collaboration and instructional improvement. *Journal of School Leadership*, 28(3), 140–155.
72. Mezirow, J. (1991). *Transformative dimensions of adult learning*. Jossey-Bass.
73. Monteiro, V., Simões, C., & Costa, C. (2021). Reflective practice and metacognitive awareness in teacher education. *Teaching and Teacher Education*, 102, 103–340. <https://doi.org/10.1016/j.tate.2021.103340>
74. Nguyen, P., & Carter, J. (2024). Emotional intelligence and learner responsiveness in education. *Educational Studies and Research*, 17(2), 90–104.
75. Ningtyas, D. P. (2024). Enhancing early childhood problem-solving abilities through computational thinking strategies and game-based learning. *Golden Age: Journal of Early Childhood Education*, 1(1), 1–10. <https://doi.org/10.1234/goldenage.v1i1.8394>
76. Nissim, Y. (2024). Kindergarten teachers' leadership during the Covid-19 pandemic: Managerial practices and professional attitudes. *Journal of Early Childhood Education*, 52(3), 123–135. <https://doi.org/10.1080/13537121.2024.2318166>
77. Nwoko, C., Adeyemi, K., & Okoro, J. (2023). Professional development and teacher resilience in Nigerian secondary schools. *African Journal of Educational Studies*, 18(3), 305–320. <https://doi.org/10.7890/ajes.2023.183305>
78. Oclarit, R., & Agoylo, C. (2024). Teachers' social-emotional competence as a buffer to work-related stress. *Asian Journal of Education and Social Studies*, 45(3), 1–12. <https://doi.org/10.9734/ajess/2024/v45i31093>
79. Opfer, V. D., & Pedder, D. (2019). Conceptualizing teacher professional learning. *Review of Educational Research*, 89(6), 875–915. <https://doi.org/10.3102/0034654319877153>
80. Pagonzaga, C. P., Opina, M. F. D., & Prado, N. I. (2025). Instructional leadership practices, communication skills, collaborating skills, and performance of early childhood educators: A causal model. *International Journal of Research in Social Science*, 9(26), 8560–8584.
81. Perez, L., & Alvarez, S. (2023). Institutional constraints in teacher soft skills development. *Journal of Educational Policy and Practice*, 21(2), 73–88.
82. RAND Corporation. (2023). *Teachers' workplace experiences and challenges in sustaining professional growth*. RAND Corporation. <https://doi.org/10.7249/RRA1234-1>
83. Ridley, T. I. (2024). Kindergarten teachers' experiences on strategies to increase student engagement. Walden University Dissertations. <https://scholarworks.waldenu.edu/dissertations/16702/>
84. Rivera, K. C. (2024). Online teaching-learning practices in Philippine higher education. *Journal of Educational Science and Technology*, 10(3), 172–187. <https://doi.org/10.26858/est.v10i3.66231>
85. Roberts, M., & Kim, S. (2021). Creativity in early childhood teaching practices. *Journal of Early Childhood Research*, 14(2), 40–55.
86. Romorosa, Q., & Uchang, J. (2024). Professional Development in the Lens of Public School Teachers. *International Journal of Research in Education and Science*, 10(3), 29–38. doi:10.46328/ijres.3540
87. Santiago, M. (2024). SEL-related practices and teacher behavior: Insights from Philippine elementary classrooms. *Journal of Educational and Human Resource Development*, 12(2), 23–36.
88. Santos, J., & Reyes, V. (2024). Communication effectiveness in early childhood classrooms. *Philippine Journal of Education*, 30(1), 25–39.
89. Singh, A., & Patel, R. (2024). Integration of pedagogical and soft skills in teaching performance. *International Journal of Education and Practice*, 16(1), 44–59.
90. SkilTrak. (2024). The importance of soft skills in early childhood education. SkilTrak. <https://www.skiltrak.com.au/blogs/the-importance-of-soft-skills-in-early-childhood-education>
91. Smith, J., Thompson, J., Jones, L., & Johnson, K. (2022). Mental health support and employee well-being during the COVID-19 pandemic. *Journal of Occupational Health Psychology*, 27(2), 278–289. <https://doi.org/10.1037/ocp0000260>
92. Spiel, C., Paechter, M., & Holzinger, A. (2023). Perceptions on and attitudes towards lifelong learning in the educational system. *Social Sciences & Humanities Open*, 8, Article 100534. <https://doi.org/10.1016/j.ssaho.2023.100534>
93. Sustainability. (2024). Empowering teachers: Self-regulated learning strategies for sustainable professional development. *Sustainability*, 16(7), 3021. <https://www.mdpi.com/2071-1050/16/7/3021>
94. Tang, S. Y. F., & Choi, P. L. (2021). Lifelong learning orientations and soft skills of early childhood teachers in Hong Kong. *Journal of Early Childhood Teacher Education*, 42(3), 299–314. <https://doi.org/10.1080/10901027.2020.1832634>
95. Thomas, J., & Zubkov, D. (2023). Quantitative research designs. ResearchGate. Retrieved from https://www.researchgate.net/publication/370630979_Quantitative_Research_Designs
96. Thwe, T. T., & Kálmán, O. (2024). Teachers' lifelong learning attitudes and the challenges of professional development in changing educational environments. *Education Sciences*, 14(2), 156.
97. Trust, T., & Whalen, J. (2020). Remote learning and teacher experiences in professional development. *Journal of Technology and Teacher Education*, 28(2), 189–199.
98. Van Horne, C. (2024). Teamwork made in China: Soft skill development with a team-based project. MDPI. <https://www.mdpi.com/2227-7102/14/3/248>



99. Walker, D., & Evans, K. (2022). *Consistency in soft skills application among teachers. Teaching Practice and Development Review*, 10(3), 88–102.
100. Wang, L. (2024). *Teacher leadership and professional growth in early childhood education. Journal of Early Childhood Teacher Development*, 11(1), 15–28.
101. Wilson, B., & Green, T. (2022). *Communication skills in early childhood education. Journal of Child Development Studies*, 18(1), 50–64.
102. Zhang, H. (2025). *Emotional intelligence and early childhood teaching effectiveness. Journal of Early Childhood Education Research*, 14(3), 201–220.
103. Zimmerman, B. J. (2002). *Becoming a self-regulated learner: An overview. Theory Into Practice*, 41(2), 64–70.
https://doi.org/10.1207/s15430421tip4102_2