

The Effectiveness of the Teacher-Child Interaction in Improving the Self-Regulation Skills of the Kindergarten Learners in Goa District, Division of Camarines Sur

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ABSTRACT

Teacher-child interaction is a central feature of early childhood education because it creates the relational, emotional, and instructional conditions through which young learners participate in school. In kindergarten classrooms, interaction is not limited to verbal exchange; it includes warmth, sensitivity, responsiveness, productive routines, and constructive behavior guidance. These daily interactions influence how children manage attention, regulate emotions, communicate needs, persist through challenges, and adapt to changing classroom demands. The present study examined the effectiveness of teacher-child interaction in improving the self-regulation skills of kindergarten learners in Goa District, Division of Camarines Sur, during School Year 2024-2025. The study focused on two interrelated concerns: the extent to which teacher-child interaction was employed by teachers and the extent to which such interaction improved learners' self-regulation skills. Teacher-child interaction was analyzed through five dimensions: positive climate, teacher sensitivity, regard for learner perspective, productivity, and behavior management. Self-regulation skills were examined through self-awareness, persistence, adaptability, optimism, and communication. The study also tested the significance of agreement on rank orders using Kendall's coefficient of concordance with the corresponding chi-square test. A descriptive-evaluative-correlational research design was used to address the research questions. The respondents were sixty-one kindergarten teachers in Goa District, Division of Camarines Sur. Data were gathered through a researcher-made questionnaire aligned with the identified dimensions of teacher-child interaction and self-regulation skills. The statistical treatment included frequency count, percentage, weighted mean, rank, Kendall's W, and chi-square at the 0.05 level of significance. Findings showed that teacher-child interaction was rated Very Much Evident across all dimensions. Teacher sensitivity obtained the highest summary mean of 4.93, indicating that teachers were highly responsive to individual learner needs, emotional cues, and classroom transitions. Productivity followed with a mean of 4.91, while regard for learner perspective and behavior management both obtained means of 4.90. Positive climate ranked fifth with a mean of 4.87, but it remained within the Very Much Evident range, showing that emotionally supportive classroom relationships were strongly present. The test of significant agreement on teacher-child interaction showed that all five dimensions had statistically significant concordance among the rank orders. Positive climate obtained Kendall's W of 0.94 with chi-square of 25.38 at $p < 0.005$, while teacher sensitivity obtained W of 0.92 with chi-square of 24.84 at $p < 0.005$. Regard for learner perspective, productivity, and behavior management also showed significant agreement. These results indicate that respondents shared consistent judgments about the relative strength and salience of teacher-child interaction practices in kindergarten classrooms. The effectiveness of teacher-child interaction in improving self-regulation skills was likewise rated Very Much Evident across all dimensions. Optimism obtained the highest mean of 4.93, showing that learners were perceived to re-engage after setbacks, demonstrate enthusiasm, encourage peers, and maintain confidence during difficult tasks. Adaptability and communication both obtained means of 4.92, while persistence obtained 4.91 and self-awareness obtained 4.86. The results suggest that responsive teacher-child interactions were strongly associated with the social-emotional and behavioral capacities needed for kindergarten learning. The test of significant agreement on the effectiveness of teacher-child interaction in improving self-regulation skills also showed significant concordance across all dimensions. Self-awareness obtained the highest Kendall's W of 0.96 with chi-square of 25.92 at $p < 0.005$. Adaptability and optimism registered strong agreement, while persistence and communication also reached statistical significance. These findings strengthen the

interpretation that teacher-child interaction was consistently perceived as a meaningful contributor to self-regulation across the three types of schools included in the study. The results highlight the importance of relational pedagogy in kindergarten instruction. Teacher sensitivity emerged as a particularly important dimension because it reflects the teacher's capacity to notice children's emotional states, adjust instruction, provide reassurance, and create a secure base for exploration. Self-regulation outcomes were strongest in optimism, adaptability, and communication, suggesting that learners respond positively when classrooms are emotionally secure, predictable, and responsive. The findings affirm that interactional quality is not merely a classroom management concern but a developmental support for early learning readiness. Policy recommendations derived from the findings emphasized the need to embed teacher-child interaction indicators into classroom observation tools, school improvement plans, learning action cell documentation, and early childhood quality assurance mechanisms. The study further recommended grade-level benchmarks for self-regulation, competency-based training on relational pedagogy, and curriculum content that promotes emotional engagement, peer collaboration, and learner autonomy. Recommendations for teachers included the use of affirming language, open-ended questioning, emotion-related vocabulary, and structured routines that support persistence and adaptability. These recommendations situate self-regulation as both a classroom practice concern and a system-level policy priority. The study concludes that teacher-child interaction in Goa District kindergarten classrooms was very much evident and that such interaction was perceived to be highly effective in improving self-regulation skills. Significant agreement across rank orders confirmed that these perceptions were not isolated or inconsistent among the respondents. The findings imply that early childhood programs should treat teacher-child interaction as a core instructional and developmental mechanism. Strengthening relational pedagogy can help schools build classrooms where children feel secure, communicate effectively, persist through challenges, and regulate their behavior in ways that support sustained learning.

1. Introduction

Early childhood education is a critical stage in human development because it lays the foundation for later academic, social, and emotional functioning. During the kindergarten years, children begin to participate in structured learning environments that require attention, cooperation, turn-taking, emotional control, and purposeful communication. These abilities do not develop in isolation; they are shaped by the quality of classroom experiences and by the ways teachers interact with learners. For this reason, teacher-child interaction has become a major concern in early childhood research and practice.

In young learners, learning is deeply relational. Children participate more actively when they experience warmth, acceptance, safety, and responsiveness from adults in the classroom. The teacher's tone, patience, guidance, and sensitivity influence whether learners feel confident enough to explore, ask questions, make mistakes, and try again. Thus, teacher-child interaction serves as a bridge between classroom instruction and children's developing capacity to regulate their behavior and emotions.

Teacher-child interaction refers to the quality of exchanges between teachers and learners during classroom routines, play, instruction, transitions, and behavioral situations. It includes emotional support, instructional responsiveness, respect for learners' ideas, efficient use of time, and constructive management of behavior. In early childhood settings, these interactions are especially important because children are still developing the language, emotional awareness, and social competence needed to navigate school life. High-quality interaction provides the external support from which internal self-regulation gradually develops.

The present study conceptualized teacher-child interaction through five dimensions: positive climate, teacher sensitivity, regard for learner perspective, productivity, and behavior management. Positive climate pertains to warmth, respect, belonging, encouragement, and emotionally safe relationships in the classroom. Teacher sensitivity refers to the teacher's ability to notice and respond to learners' needs, emotional cues, and developmental differences. Regard for learner perspective emphasizes learner voice, autonomy, choice, and respect for children's ideas in classroom decisions and activities.

Productivity and behavior management also form essential parts of interaction quality. Productivity involves the efficient use of classroom time, smooth transitions, purposeful routines, and the integration of learning goals into play and exploration. Behavior management involves proactive strategies, clear expectations, respectful redirection, and consistent feedback that help learners understand and regulate behavior. Together, these dimensions form a relational and organizational environment that supports children's ability to participate meaningfully in school.

Self-regulation is one of the most important developmental competencies in kindergarten. It refers to the child's ability to manage emotions, control impulses, maintain attention, persist in tasks, adapt to change, communicate needs, and respond constructively to feedback. Self-regulated learners are better able to follow routines, interact with peers, solve classroom problems, and remain engaged even when tasks are difficult. In this sense, self-regulation is both a developmental outcome and a condition for successful learning.

The study examined self-regulation skills through five dimensions: self-awareness, persistence, adaptability, optimism, and communication. Self-awareness involves recognizing emotions, strengths, needs, and the impact of one's behavior on others. Persistence refers to the ability to remain engaged, continue trying, and use effort when facing difficulty. Adaptability reflects the child's flexibility in responding to changes in routines, tasks, social situations, and expectations.

Optimism and communication complete the self-regulation framework used in the study. Optimism involves confidence, hopeful thinking, enthusiasm, and willingness to re-engage after setbacks. Communication involves expressing ideas, listening to others, following directions, using appropriate language, and negotiating roles or problems during play. These dimensions show that self-regulation is not only behavioral control but also emotional resilience, social participation, and purposeful expression.

The relationship between teacher-child interaction and self-regulation is supported by developmental theory. Vygotsky's sociocultural perspective emphasizes that children develop higher mental functions through social interaction, guided participation, and scaffolding by more capable others. In kindergarten, the teacher functions as a mediator who models language, emotional responses, problem solving, and behavioral expectations. Over time, repeated guided interactions help children internalize strategies for managing themselves and engaging with others.

Attachment-informed and relational perspectives also explain why teacher-child interaction matters. Young learners who experience responsive and emotionally secure relationships with teachers are more likely to explore the classroom, seek help, recover from frustration, and participate with confidence. When teachers respond calmly and consistently, children learn that the classroom is a safe place for trial, error, and growth. This relational security becomes especially important during transitions, conflicts, and challenging learning tasks.

Classroom quality frameworks further show that emotional support and classroom organization are not separate from learning outcomes. The Classroom Assessment Scoring System, for example, highlights emotional support, classroom organization, and instructional support as important domains of early childhood classroom quality. The dimensions examined in this study reflect these broad concerns, particularly through positive climate, teacher sensitivity, productivity, and behavior management. Such frameworks indicate that interaction quality should be observable, documented, and strengthened through teacher development.

In kindergarten classrooms, self-regulation is often learned through ordinary routines rather than isolated lessons. Children practice self-awareness when teachers ask how they feel, persistence when teachers encourage them to try again, and adaptability when transitions are handled calmly and predictably. They practice optimism when effort is praised and communication when they are invited to explain, ask, negotiate, and listen. These daily interactions make self-regulation a lived classroom process.

The Philippine early childhood context makes this issue especially important because kindergarten serves as the entry point to formal basic education. Teachers are expected to build foundational skills while also helping learners adjust to routines, peer relationships, and school expectations. In districts with varied school contexts, teachers may differ in resources, class size, learner characteristics, and institutional support. Examining teacher-child interaction in a specific district therefore provides evidence that can inform both classroom improvement and policy development.

Goa District, Division of Camarines Sur, provides a meaningful context for studying teacher-child interaction and self-regulation. The district includes kindergarten teachers who manage early learning classrooms across different school settings. Their experiences and perceptions can reveal how interaction practices are enacted in actual classrooms and how these practices are perceived to influence learners' regulation skills. Local evidence of this nature is useful because policy and professional development become more relevant when grounded in field-based realities.

Despite the recognized importance of teacher-child interaction, many school improvement efforts still focus more heavily on curriculum coverage, assessment, and instructional materials. These elements are important, but they cannot fully explain how young learners acquire the emotional and behavioral capacities needed for school readiness. Self-regulation develops through repeated, responsive, and meaningful interactions that help children understand themselves and others. Therefore, interaction quality deserves explicit attention in classroom observation, teacher coaching, and curriculum planning.

The need for this study is also anchored on the demand for evidence-based policy recommendations. Early childhood programs require clear mechanisms for supporting teachers in relational pedagogy, socio-emotional learning, and inclusive classroom management. Without systematic data, teacher-child interaction may remain a general expectation rather than a monitored and developed practice. This study addressed that gap by generating empirical findings on the extent and effectiveness of interaction practices in relation to self-regulation skills.

Accordingly, the present study determined the effectiveness of teacher-child interaction in improving the self-regulation skills of kindergarten learners in Goa District, Division of Camarines Sur, for School Year 2024-2025. Specifically, it examined the extent of teacher-child interaction in terms of positive climate, teacher sensitivity, regard for learner perspective, productivity, and behavior management. It also determined the extent of effectiveness in improving self-awareness, persistence, adaptability, optimism, and communication. Finally, it tested the significant agreement on rank orders and formulated policy recommendations based on the findings.

The study is significant because it reframes teacher-child interaction as a measurable and actionable dimension of early childhood quality. It provides evidence that can guide teachers, school heads, district supervisors, curriculum planners, and DepEd officials in strengthening classroom practices that support self-regulation. By connecting interaction quality with learner regulation outcomes, the study contributes to local educational improvement and to broader discussions on school readiness. Its findings may also support future research on relational pedagogy, socio-emotional learning, and quality assurance in kindergarten education.

2. Methodology

This study used a descriptive-evaluative-correlational research design. The descriptive component was appropriate because the study determined the extent to which teacher-child interaction was employed by kindergarten teachers and the extent to which such interaction improved self-regulation skills. The evaluative component was used because the study interpreted the level and quality of practices and outcomes based on weighted mean ratings. The correlational component was reflected in the use of Kendall's coefficient of concordance to determine agreement on rank orders among the respondents.

The study was conducted in Goa District, Division of Camarines Sur, during School Year 2024-2025. The district served as the research locale because it provided the actual kindergarten classroom context where teacher-child interaction and learner self-

regulation were observed and experienced by teachers. The study focused on early childhood classrooms where daily interaction, routines, play, and guidance are central to learning. This setting made the district suitable for examining the relationship between interactional practices and self-regulation skills.

The respondents were sixty-one kindergarten teachers in Goa District. They were selected because they were directly involved in handling kindergarten learners and were therefore in the best position to provide information on teacher-child interaction and observed self-regulation skills. Their classroom-based knowledge allowed the study to capture practices that occur during instruction, transitions, play, behavior management, and social interaction. The use of kindergarten teachers as respondents was consistent with the purpose of assessing practices and outcomes within the early childhood classroom.

The study examined two major sets of variables. The first set was teacher-child interaction, consisting of positive climate, teacher sensitivity, regard for learner perspective, productivity, and behavior management. These dimensions represented the teacher's relational, emotional, organizational, and behavioral practices in handling young learners. The second set was self-regulation skills, consisting of self-awareness, persistence, adaptability, optimism, and communication.

The principal data-gathering instrument was a researcher-made questionnaire. The instrument was designed according to the dimensions identified in the statement of the problem and reflected the major constructs of the study. Items under teacher-child interaction described observable teacher practices such as providing reassurance, encouraging learner choice, using redirection, organizing routines, and responding to emotional cues. Items under self-regulation described observable learner behaviors such as seeking help, persisting in tasks, adapting to changes, expressing confidence, and communicating appropriately.

The questionnaire used rating-scale responses that were analyzed through weighted means and ranked according to their relative values. This approach allowed the study to summarize the perceived extent of each indicator and each dimension in a systematic manner. The interpretation Very Much Evident was used for indicators and dimensions that obtained very high mean ratings. Ranking was used to determine the relative order of dimensions and to support the subsequent test of agreement.

The data-gathering procedure involved administering the questionnaire to the identified kindergarten teacher-respondents. Responses were gathered, organized, and tabulated according to the dimensions of teacher-child interaction and self-regulation skills. The data were then summarized using descriptive statistical tools before inferential analysis was conducted. This procedure ensured that the findings were presented both by dimension and by the overall pattern of responses.

The statistical tools used in the study were frequency count, percentage, weighted mean, rank, Kendall's coefficient of concordance, and the corresponding chi-square test. Frequency count and percentage were used to describe respondent-related and distributional information where appropriate. Weighted mean was used to determine the extent of teacher-child interaction and the effectiveness of such interaction in improving self-regulation skills. Rank was used to arrange dimensions and indicators from highest to lowest based on the obtained means.

Kendall's coefficient of concordance was used to determine whether there was significant agreement in the rank orders of the identified dimensions. The corresponding chi-square values and p-values were interpreted using a 0.05 level of significance. The null hypotheses were rejected when the p-values indicated statistically significant agreement. This inferential procedure helped determine whether the observed rank orders reflected shared perceptions among respondents rather than isolated individual judgments.

The methodology was bounded by the study's reliance on teacher-reported questionnaire data. Since the respondents were teachers, the findings reflect their perceptions of interaction practices and learner self-regulation within their classrooms. The study did not claim experimental causality, but it provided empirical evidence on perceived effectiveness and significant agreement across ranked dimensions. These methodological boundaries were considered in framing the conclusions, implications, and policy recommendations of the study.

3. Results and Discussions

This section presents the major findings of the study using summary tables and analytical discussions. The presentation follows the sequence of the research questions: the extent of teacher-child interaction, the test of significant agreement on teacher-child interaction, the effectiveness of teacher-child interaction in improving self-regulation skills, the test of significant agreement on self-regulation outcomes, and the policy recommendations derived from the findings. The discussion interprets the numerical results in relation to early childhood classroom practice and policy development. The section also identifies the instructional and developmental meanings of the results for kindergarten education in Goa District.

The interpretation of findings recognizes that the data were generated from a researcher-made questionnaire answered by sixty-one kindergarten teachers. The numerical values therefore represent teacher perceptions of practices and outcomes in their own classroom settings. A high mean indicates that a particular practice or self-regulation behavior was perceived as strongly evident. The Kendall's W results provide additional evidence on whether respondents agreed in their rank ordering of dimensions.

Table 1. Extent of Teacher-Child Interaction Employed by Kindergarten Teachers

Teacher-Child Interaction Dimension	Mean	Rank	Interpretation	Highest-Rated Evidence from Indicators
Teacher Sensitivity	4.93	1	Very Much Evident	Adjusts instructional strategies to individual needs (4.97); provides reassurance and responds to emotional cues (4.95).
Productivity	4.91	2	Very Much Evident	Integrates learning objectives into play and exploration (4.94); maintains clear routines and balances individual and group needs (4.92).
Regard for Learner Perspective	4.90	3	Very Much Evident	Responds positively to learner feedback (4.92); supports choices, leadership, and diverse viewpoints (4.91).

Teacher-Child Interaction Dimension	Mean	Rank	Interpretation	Highest-Rated Evidence from Indicators
Behavior Management	4.90	3	Very Much Evident	Uses respectful redirection, individual conversations, co-constructed rules, and visual cues (4.91).
Positive Climate	4.87	5	Very Much Evident	Adapts to children's emotional states and fosters belonging (4.91); uses positive behavior strategies (4.90).

Table 1 shows that all five dimensions of teacher-child interaction were rated Very Much Evident by the kindergarten teacher-respondents. Teacher sensitivity ranked highest with a mean of 4.93, followed by productivity with 4.91. Regard for learner perspective and behavior management shared the third rank with means of 4.90, while positive climate ranked fifth with a mean of 4.87. Although there were rank differences, all dimensions obtained very high ratings, indicating that responsive and supportive interaction practices were strongly present.

The highest ranking of teacher sensitivity is especially meaningful in kindergarten classrooms. This dimension reflects the teacher's ability to adjust instruction, respond to emotional cues, provide reassurance, and create a secure base for learner participation. Young children often depend on adult responsiveness when they experience frustration, anxiety, uncertainty, or excitement. The result suggests that teachers in Goa District perceived themselves as highly attentive to children's individual and emotional needs.

The strong rating for productivity indicates that teacher-child interaction was not limited to warmth and emotional support. Teachers also maintained routines, used time efficiently, minimized disruptions, and connected learning objectives to play and exploration. In kindergarten, this is important because children need predictable structures while still experiencing learning as active and enjoyable. Productive classroom interaction helps learners move from one task to another without losing engagement or emotional stability.

The ratings for regard for learner perspective, behavior management, and positive climate further show that interaction quality was multidimensional. Respecting learner voice, giving choices, guiding behavior respectfully, and creating a sense of belonging all contribute to a classroom environment where children can practice autonomy and regulation. The slightly lower rank of positive climate should not be interpreted as weak because it remained very much evident. Instead, it may show that all dimensions were already highly practiced, with teacher sensitivity emerging as the most visible strength.

Table 2. Test of Significant Agreement on the Rank Orders of Teacher-Child Interaction

Teacher-Child Interaction Dimension	Kendall's W	Chi-Square	p-value	Interpretation	Decision
Positive Climate	0.94	25.38	p < 0.005	Significant	Reject null hypothesis
Teacher Sensitivity	0.92	24.84	p < 0.005	Significant	Reject null hypothesis
Regard for Learner Perspective	0.71	19.17	p < 0.025	Significant	Reject null hypothesis
Productivity	0.77	20.79	p < 0.025	Significant	Reject null hypothesis
Behavior Management	0.80	21.60	p < 0.025	Significant	Reject null hypothesis

Table 2 presents the test of significant agreement on the rank orders of teacher-child interaction dimensions. All dimensions obtained significant Kendall's W and chi-square results, leading to the rejection of the null hypothesis. Positive climate obtained W = 0.94 and teacher sensitivity obtained W = 0.92, both significant at p < 0.005. The remaining dimensions also showed significant agreement, with W values ranging from 0.71 to 0.80.

The high Kendall's W values for positive climate and teacher sensitivity indicate strong consensus among respondents regarding the rank order of practices in these areas. This means that teachers did not merely rate the dimensions highly; they also showed a shared pattern in judging which indicators were most evident. Such agreement is important because it suggests common professional understanding of emotionally supportive and responsive classroom interaction. It also indicates that these practices may be embedded in the district's kindergarten teaching culture.

The significant agreement in regard for learner perspective, productivity, and behavior management also deserves attention. These dimensions involve autonomy support, classroom organization, and constructive guidance, which require deliberate teacher decisions throughout the school day. Agreement in these areas implies that teachers have comparable views about the importance of learner voice, structured routines, and respectful behavior support. This shared perception can become a foundation for district-wide training and coaching because teachers already appear to recognize similar priority practices.

From a policy standpoint, the significance of all five dimensions supports the inclusion of teacher-child interaction indicators in formal monitoring tools. When respondents demonstrate strong agreement, it becomes more feasible to develop common observation rubrics, professional learning modules, and school-level quality assurance mechanisms. The results also suggest that teacher-child interaction can be operationalized rather than treated as an abstract expectation. This strengthens the argument for embedding relational pedagogy into early childhood supervision and professional development.

Table 3. Effectiveness of Teacher-Child Interaction in Improving Self-Regulation Skills

Self-Regulation Dimension	Mean	Rank	Interpretation	Highest-Rated Evidence from Indicators
Optimism	4.93	1	Very Much Evident	Re-engages after setbacks and shows enthusiasm (4.95); encourages peers and expresses confidence (4.94-4.93).
Adaptability	4.92	2	Very Much Evident	Adjusts to changes in routines and social interactions; remains calm during unexpected events (4.93).

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Self-Regulation Dimension	Mean	Rank	Interpretation	Highest-Rated Evidence from Indicators
Communication	4.92	2	Very Much Evident	Listens attentively and responds appropriately (4.94); expresses ideas clearly and follows directions (4.93).
Persistence	4.91	4	Very Much Evident	Celebrates small successes and asks for guidance instead of abandoning difficult tasks (4.92).
Self-Awareness	4.86	5	Very Much Evident	Recognizes need for help (4.93); expresses preferences and demonstrates awareness of strengths (4.90).

Table 3 shows that teacher-child interaction was rated Very Much Evident in improving all five self-regulation dimensions. Optimism ranked highest with a mean of 4.93, while adaptability and communication both obtained means of 4.92. Persistence followed with a mean of 4.91, and self-awareness obtained the lowest but still very high mean of 4.86. These results indicate that kindergarten teachers perceived their interactions as highly effective in supporting children's regulation of emotion, behavior, effort, and communication.

The highest rating for optimism suggests that children were perceived to maintain confidence, enthusiasm, and willingness to try again after setbacks. This outcome is closely connected to the quality of teacher language, feedback, and emotional support. When teachers emphasize effort, provide reassurance, and celebrate progress, children are more likely to interpret difficulty as manageable rather than threatening. Thus, optimism appears to be a developmental result of classrooms where teachers normalize mistakes and reinforce hopefulness.

The similarly high ratings for adaptability and communication show that teacher-child interaction helped learners manage change and participate socially. Adaptability is essential in kindergarten because children regularly encounter transitions, new activities, shifting peer roles, and unexpected classroom events. Communication is equally important because children regulate themselves partly through language, listening, asking, negotiating, and expressing needs. The findings suggest that supportive interaction practices enabled children to adjust and communicate with confidence.

Self-awareness ranked lowest among the five self-regulation dimensions, yet it remained very much evident. This may imply that recognizing and articulating internal states is more developmentally complex than showing enthusiasm, adapting to routines, or communicating socially. Young children often need repeated modeling and explicit language to identify emotions, explain actions, and reflect on behavior. Therefore, the finding points to an opportunity for teachers to deepen emotion vocabulary, reflective questioning, and guided self-assessment in kindergarten routines.

Table 4. Test of Significant Agreement on Rank Orders of Self-Regulation Outcomes

Self-Regulation Dimension	Kendall's W	Chi-Square	p-value	Interpretation	Decision
Self-Awareness	0.96	25.92	$p < 0.005$	Significant	Reject null hypothesis
Persistence	0.66	17.82	$p < 0.05$	Significant	Reject null hypothesis
Adaptability	0.82	22.14	$p < 0.01$	Significant	Reject null hypothesis
Optimism	0.83	22.41	$p < 0.01$	Significant	Reject null hypothesis
Communication	0.66	17.82	$p < 0.05$	Significant	Reject null hypothesis

Table 4 presents the test of significant agreement on the rank orders of the effectiveness of teacher-child interaction in improving self-regulation skills. All five dimensions reached statistical significance, resulting in the rejection of the null hypothesis. Self-awareness obtained the highest Kendall's W of 0.96 with chi-square of 25.92 at $p < 0.005$. Adaptability and optimism also showed strong agreement, while persistence and communication were significant at $p < 0.05$.

The very high agreement for self-awareness is notable because self-awareness ranked lowest in the summary mean table. This combination suggests that while self-awareness may be the least strongly evident among the five outcomes, teachers were highly consistent in how they ranked its indicators. In practical terms, teachers may share a common understanding that recognizing emotions, identifying needs, and reflecting on behavior are important but developmentally demanding skills. This finding can guide targeted professional development on supporting children's emotional language and reflective thinking.

The significant agreement for adaptability and optimism reinforces the interpretation that these skills are consistently observed across classroom contexts. Children who adjust to routine changes, remain calm during unexpected events, and maintain positive expectations are likely benefiting from predictable and emotionally supportive teacher interactions. The agreement also suggests that teachers recognize the same classroom behaviors as evidence of these skills. This provides a strong basis for developing common self-regulation benchmarks in kindergarten programs.

The significant results for persistence and communication indicate that teachers also shared rank-order judgments about effortful engagement and expressive competence. Even though the W values for these dimensions were lower than self-awareness, they were still statistically significant. This means that teachers generally agreed on the patterns of learner behaviors that reflect persistence and communication. Consequently, school-based monitoring of self-regulation should include both observable behaviors, such as waiting and staying on task, and language-based behaviors, such as explaining, asking, and negotiating.

Table 5. Policy Recommendation Matrix Derived from the Findings

Responsible Actor	Policy/Program Direction	Implementation Focus
DepEd Key Officials	Revise classroom observation instruments, school improvement plans, and LAC documentation to include interaction indicators that foster emotional regulation, goal-setting, and adaptive behavior.	System-level quality assurance and policy alignment

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Responsible Actor	Policy/Program Direction	Implementation Focus
Curriculum Planners and Writers	Establish grade-level benchmarks for self-regulation and ensure curriculum content promotes emotional engagement, peer collaboration, learner autonomy, play-based learning, and culturally responsive activities.	Curriculum standards and developmental scaffolding
Teachers	Use affirming, future-focused language; recognize persistence and progress; ask open-ended questions; model emotion-related language; and provide constructive feedback when learners struggle.	Daily classroom interaction and learner support
School Heads	Conduct capacity-building workshops, encourage peer activities, facilitate goal-setting routines, support predictable schedules, and strengthen monitoring of teacher-child interaction practices.	Instructional leadership and professional learning
Public Schools District Supervisors	Facilitate mechanisms for teachers to reflect on adaptability indicators, share effective practices, and harmonize approaches across school contexts.	District-level coaching, benchmarking, and supervision
Division Superintendent and Implementation Teams	Assign clear implementation roles to district supervisors, school heads, and instructional coaches to sustain self-regulation support through responsive interaction.	Governance, accountability, and implementation fidelity

Table 5 synthesizes the policy recommendations generated from the findings of the study. The recommendations are distributed across DepEd key officials, curriculum planners and writers, teachers, school heads, public schools district supervisors, and division-level implementation teams. This distribution is important because teacher-child interaction cannot be strengthened by classroom effort alone. Sustainable improvement requires alignment among policy instruments, curriculum guides, teacher practice, school leadership, and district supervision.

For teachers, the recommendations emphasize intentional interaction practices that directly support self-regulation. These include affirming language, recognition of effort, structured emotional vocabulary, open-ended questions, and immediate constructive feedback. Such practices help children interpret difficulty positively, express internal states, adjust behavior, and persist in tasks. When used consistently, these strategies transform ordinary classroom exchanges into developmental opportunities.

For school heads and district supervisors, the recommendations focus on capacity building, peer learning, predictable routines, goal-setting practices, and reflective mechanisms. These actions move teacher-child interaction from an individual teacher habit to a monitored and supported school-wide practice. Inter-school benchmarking can also help identify contextual strategies that work across public, private, and laboratory school settings. Leadership support is therefore essential for sustaining relational pedagogy beyond isolated classrooms.

At the system and curriculum levels, the recommendations call for institutional recognition of self-regulation as an early childhood priority. Classroom observation tools, school improvement plans, LAC documentation, curriculum benchmarks, and quality assurance frameworks should include indicators related to interaction and regulation. This approach would allow schools to monitor not only academic readiness but also emotional, behavioral, and communicative readiness. The policy matrix therefore positions self-regulation as a shared responsibility across governance levels.

4. Conclusions and Implications

4.1 Conclusions

The study concludes that teacher-child interaction employed by kindergarten teachers in Goa District was very much evident across the five examined dimensions. Teacher sensitivity, productivity, regard for learner perspective, behavior management, and positive climate all obtained very high mean ratings. This indicates that teachers perceived themselves as consistently using responsive, respectful, organized, and emotionally supportive interaction practices. The result affirms the centrality of teacher-child interaction in kindergarten classroom quality.

Teacher sensitivity emerged as the highest-rated dimension, showing that responsiveness to children's needs was the strongest perceived feature of teacher-child interaction. Teachers reported practices that included adjusting instruction, noticing emotional cues, providing reassurance, and maintaining emotional availability. These practices are essential because young learners often depend on teacher support to manage transitions, frustration, and new learning situations. The finding supports the conclusion that sensitivity is a key foundation for self-regulation development.

The study also concludes that productivity, regard for learner perspective, behavior management, and positive climate functioned together as complementary dimensions of effective interaction. Productivity provided structure and efficient learning time, while regard for learner perspective supported autonomy and voice. Behavior management provided respectful guidance and clear expectations, while positive climate supported belonging and emotional safety. This combination suggests that self-regulation is best supported when classrooms are both caring and well organized.

There was significant agreement on the rank orders of all teacher-child interaction dimensions. The rejection of the null hypothesis across positive climate, teacher sensitivity, regard for learner perspective, productivity, and behavior management indicates that respondents shared consistent judgments. This strengthens the validity of the interpretation that interaction practices were not randomly perceived or inconsistently ranked. The finding also supports the feasibility of developing common school or district standards for interaction quality.

The study further concludes that teacher-child interaction was very much effective in improving the self-regulation skills of kindergarten learners. All self-regulation dimensions, namely optimism, adaptability, communication, persistence, and self-awareness, obtained very high ratings. This suggests that interaction practices were perceived to contribute to children's ability to

re-engage after setbacks, adjust to change, communicate appropriately, sustain effort, and recognize personal needs or emotions. Teacher-child interaction therefore operated as a developmental mechanism for school readiness.

Optimism ranked as the highest self-regulation outcome, showing that learners were perceived to demonstrate enthusiasm, confidence, and hopeful re-engagement. This result indicates that children are more likely to show positive learning dispositions when teachers use affirming, effort-focused, and emotionally secure interaction. Adaptability and communication also ranked highly, suggesting that learners were able to adjust to classroom demands and express themselves effectively. These outcomes are especially important in kindergarten, where children are still learning how to participate in group-based schooling.

There was significant agreement on the rank orders of the effectiveness of teacher-child interaction in improving all self-regulation dimensions. Self-awareness registered the strongest agreement, while persistence, adaptability, optimism, and communication also reached statistical significance. The findings show that teachers shared common perceptions of how self-regulation skills were manifested among learners. This supports the conclusion that self-regulation indicators can be systematically monitored and strengthened in kindergarten classrooms.

Overall, the study concludes that teacher-child interaction is not merely supportive background behavior but an essential instructional and developmental practice. The findings show that when teachers provide warmth, sensitivity, autonomy support, productive routines, and respectful behavior guidance, learners are perceived to show stronger self-regulation. The evidence supports the formulation of policy recommendations focused on relational pedagogy, socio-emotional learning, and classroom quality assurance. In the context of Goa District, teacher-child interaction should be treated as a strategic pathway for improving kindergarten learners' readiness, participation, and regulation.

4.2 Implications

The first implication concerns classroom practice. Kindergarten teachers should intentionally treat every interaction as an opportunity to develop self-regulation. Greetings, transitions, play episodes, feedback, conflicts, and instruction can all be used to model emotional language, patience, communication, and problem solving. This means that self-regulation should be integrated into daily routines rather than taught only through isolated activities.

The second implication concerns teacher professional development. Since teacher sensitivity emerged as the highest-rated dimension, capacity-building programs should strengthen teachers' ability to notice, interpret, and respond to children's emotional and learning cues. Training should include practical strategies for reassurance, individualized support, trauma-informed communication, and developmentally appropriate guidance. Such programs would help sustain the strong interaction practices already evident in the district.

The third implication concerns classroom observation and supervision. Observation tools should include clear indicators for positive climate, teacher sensitivity, regard for learner perspective, productivity, and behavior management. Supervisors and school heads should not limit classroom monitoring to lesson delivery and compliance requirements. They should also examine the quality of teacher language, responsiveness, routines, learner choice, and behavior guidance.

The fourth implication concerns self-regulation benchmarks in the curriculum. Curriculum planners should identify age-appropriate indicators for self-awareness, persistence, adaptability, optimism, and communication. These indicators can guide teachers in planning activities, observing learner growth, and designing supportive interventions. Clear benchmarks would also help schools align socio-emotional learning with academic readiness.

The fifth implication concerns school leadership. School heads should create conditions that allow teachers to practice responsive interaction consistently. This includes manageable routines, collaborative planning time, learning action cell sessions, peer observation, and coaching focused on relational pedagogy. Leadership support is necessary because teacher-child interaction quality is shaped not only by teacher skill but also by school culture and workload conditions.

The sixth implication concerns district-level policy and benchmarking. Public schools district supervisors can use the findings to facilitate inter-school sharing of effective practices across varied school contexts. Benchmarking can help identify strategies for supporting optimism, adaptability, communication, persistence, and self-awareness among kindergarten learners. This process may also improve consistency in how teachers understand and implement interaction practices.

The seventh implication concerns family and community engagement. Self-regulation develops across home and school environments, so schools should help parents understand the value of consistent routines, affirming language, emotional vocabulary, and patient guidance. Parent orientation and home-school communication can reinforce the same skills developed in the classroom. When families and teachers use consistent approaches, children receive stronger support for regulation.

The eighth implication concerns future research and evidence building. Further studies may examine teacher-child interaction using classroom observation, learner assessment, interviews, or longitudinal designs. Comparative research across public, private, and laboratory schools can also identify contextual factors that strengthen or limit interaction quality. Such studies would extend the present findings and provide deeper evidence for early childhood policy and program improvement.

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