
Improving Students' Interpersonal Intelligence in Elementary Social Studies Using the Group Investigation Type of Cooperative Learning (A Classroom Action Research on Third-Grade Students of SDI Cililitan 2, Jakarta)

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Abstract

This study aims to improve students' interpersonal intelligence in Social Studies learning through the implementation of the Cooperative Learning model of Group Investigation. The research was conducted as Classroom Action Research involving third-grade students of SDI Cililitan 2, Jakarta. The study was carried out in two cycles, each consisting of planning, action, observation, and reflection. Data were collected using observation sheets, interpersonal intelligence questionnaires, and field notes. The instruments focused on indicators of interpersonal intelligence such as social sensitivity, social insight, and social communication. Data analysis was conducted using an interactive qualitative model developed by Miles and Huberman, consisting of three stages: data reduction, data display, and conclusion drawing/verification. The success of the intervention was evaluated based on the percentage of students achieving higher levels of interpersonal intelligence after the implementation of the Group Investigation model. The findings showed a significant improvement in students' interpersonal intelligence across both cycles. Students demonstrated better collaboration, empathy, communication, and participation during group activities. In addition, the teacher's role in facilitating student interaction and guiding the learning process became more effective. The study concludes that the Cooperative Learning model of Group Investigation is effective in enhancing interpersonal intelligence among third-grade students in Social Studies learning. The model promotes active participation, social interaction, and shared responsibility, making it suitable for developing 21st-century interpersonal skills in elementary school contexts.

Keyword: *Interpersonal intelligence; social studies; cooperative learning; group investigation; classroom action research*

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INTRODUCTION

Education is a planned effort to guide young generations in preparing for their future as responsible adults. It plays a crucial role in helping students develop their intellectual, social, and emotional capacities so that they can contribute actively to society. The educational process involves various environments, such as the family, school, and community. Through education, students are expected to become intelligent and competent individuals in navigating their lives. This process can take place formally at school or informally in their social surroundings.

According to (Berliana & Atikah, 2023), the theory of Multiple Intelligences proposed by Howard Gardner explains that every child has the potential to excel in at least one of the nine intelligences: linguistic, logical-mathematical, visual-spatial, musical, bodily-kinesthetic, interpersonal, intrapersonal, naturalistic, and existential. Interpersonal intelligence, one of the nine, is vital for students as it enables them to interact and socialize effectively. It allows individuals to understand and respond to the emotions and social needs of others, which is essential in social life. For students, it facilitates effective communication, teamwork, and leadership. Moreover, this type of intelligence helps prevent social isolation and promotes healthy peer relationships.

Students with high interpersonal intelligence tend to be empathetic, sociable, and capable of resolving social conflicts. They often emerge as group leaders and are able to organize their peers during activities. In contrast, those with low interpersonal intelligence struggle with socialization, tend to be passive, and are less confident in social interaction.

In this era of globalization, communication and interpersonal skills have become crucial for individual success. Academic achievement alone is no longer sufficient; social ability and collaboration are key to realizing ideas. Therefore, education must place greater emphasis on the development of interpersonal intelligence to prepare students to contribute effectively to society.

The “Merdeka Curriculum” currently implemented at SDI Cililitan 2 emphasizes student-centered learning and flexibility. It promotes the development of the Pancasila Student Profile, one element of which is collaboration, encompassing cooperation, communication, and empathy. In this context, social skills such as interpersonal intelligence become essential to help students understand and engage with their environment.

Social Studies is a core subject in the elementary curriculum that examines human interactions within society and the relationship between individuals and their surroundings (Maksum, 2020). At the primary level, Social Studies is tailored to suit students’ developmental stages, providing relevant knowledge and basic social skills. It also serves as a vehicle for fostering students’ interpersonal intelligence to help them interact effectively in daily life.

Observations conducted in Grade 3 of SDI Cililitan 2 showed that students’ interpersonal intelligence remained low. Some students were observed forming exclusive groups and refusing to collaborate with new peers. These behaviors caused others to feel excluded, withdrawn, and reluctant to engage. According to interviews with the classroom teacher, students involved in peer groups generally performed better

academically and socially than those who were not. If left unaddressed, this situation could potentially impact both academic and social development in the future.

Preliminary research further revealed that only 7 out of 21 students (33.3%) scored high on the interpersonal intelligence questionnaire. This indicates a gap in students' social abilities, where those with higher scores worked better in groups, while those with lower scores faced difficulties in collaboration. This highlights the urgent need to improve students' interpersonal intelligence for better social and academic interaction.

The dominant teaching method in the classroom was still teacher-centered lectures, making students less engaged. Collaborative learning was rarely implemented, and when it was, students were often allowed to choose their group members. This hindered the development of social interaction among students. Without intervention, students may grow up prioritizing themselves and lacking concern for others.

Teachers play a vital role in the learning process, not only as knowledge transmitters but also as facilitators who create learning environments that encourage social interaction and skill development. Teachers must design engaging lesson plans, apply relevant methods, and manage the classroom to support active student involvement. They are also responsible for fostering interpersonal skills such as empathy, communication, and cooperation. Therefore, adopting models that promote student participation and interaction is highly recommended—one of which is the Cooperative Learning model, particularly the Group Investigation type.

Cooperative Learning is a teaching approach that simultaneously develops academic and social skills, including interpersonal intelligence. In this model, students work in small groups to achieve shared goals. It teaches students the value of teamwork and mutual support, which indirectly enhances their logical thinking, problem-solving, and decision-making skills. According to Slavin in (Sulistio & Hayanti, 2022), cooperative learning involves heterogeneous student groups where each member assists one another in achieving success.

Group Investigation (GI) is one of the cooperative learning models designed to encourage collaborative inquiry in small groups. According to (Sharan & Sharan, 1992), GI allows students to collaborate in heterogeneous groups to investigate a self-selected topic, collect data, and present their findings. Each group member contributes according to agreed roles, promoting interpersonal skills, responsibility, and effective collaboration.

METHODS

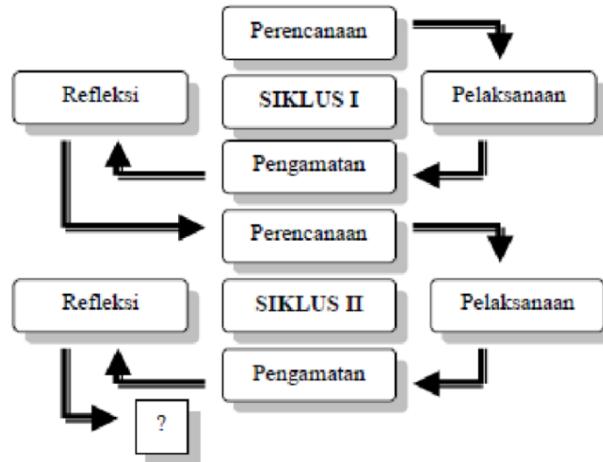


Figure 1. Kemmis & Taggart PTK Cycle

This study employed a Classroom Action Research (CAR) design, which aims to improve both the quality of learning processes and student outcomes. The research model used was adapted from Kemmis and McTaggart, consisting of four main stages: (1) Planning, (2) Action, (3) Observation, and (4) Reflection. Each cycle of the research followed these stages to implement and evaluate instructional improvements.

1. Planning involved identifying the problem and formulating alternative actions to address it. This stage included the preparation of learning scenarios outlined in the Lesson Plan (RPP), instructional materials, evaluation instruments, and teacher-student observation sheets. The planning was structured to accommodate several cycles, aligned with the available learning time.
2. Action referred to the implementation of the learning strategies and scenarios that were planned. It involved the application of the Group Investigation model in the Social Studies classroom, emphasizing group work, investigation, and presentation.
3. Observation took place simultaneously with the implementation phase. Data collection was conducted through structured observation sheets to monitor both teacher and student activities, ensuring accurate documentation of the teaching-learning process.
4. Reflection was conducted at the end of each cycle to evaluate the effectiveness of the actions taken. This step involved analyzing the results of the observations and assessments to identify necessary improvements for the next cycle.

The research was conducted at SDI Cililitan 2, East Jakarta, involving 21 third-grade students during the 2024/2025 academic year. The researcher played a dual role as both the planner and the main implementer of the teaching activities. Meanwhile, the classroom teacher participated as a collaborator and observer.

Data were collected using questionnaires on interpersonal intelligence, observation checklists, field notes, and documentation. The indicators measured included empathy, cooperation, communication, and participation. Data were analyzed through both quantitative and qualitative approaches. Quantitative analysis focused on

the increase in student questionnaire scores, while qualitative analysis described changes in student behavior and classroom interactions based on observational data.

The interpersonal intelligence questionnaire used in this study was developed based on indicators adapted from Gardner's theory of Multiple Intelligences, specifically focusing on three main dimensions: social sensitivity, social insight, and social communication. To ensure the quality of the instrument, validity and reliability tests were conducted prior to implementation. Content validity was established through expert judgment involving two educational psychology experts and one elementary education specialist who reviewed the alignment between questionnaire items and the theoretical framework. Based on their feedback, several items were revised to improve clarity and relevance to third-grade students' developmental level.

Construct validity was examined using Pearson Product-Moment correlation analysis on a pilot sample of 30 students from a comparable school setting. Items with correlation coefficients below 0.30 were eliminated or revised, resulting in a final instrument consisting of 25 valid items distributed across the three dimensions. The reliability of the questionnaire was tested using Cronbach's Alpha coefficient, yielding a value of 0.87, which indicates high internal consistency according to Nunnally and Bernstein's criteria that reliability coefficients above 0.70 are considered acceptable for research purposes. This reliability coefficient demonstrates that the instrument consistently measures students' interpersonal intelligence across different administration times and contexts, making it suitable for monitoring changes throughout the intervention cycles.

RESULTS & DISCUSSION

Result

Quantitative Evidence of Interpersonal Intelligence Development

The implementation of the Cooperative Learning model of Group Investigation was conducted in two action cycles. Each cycle aimed to improve the interpersonal intelligence of third-grade students in the context of Social Studies learning at SDI Cililitan 2, Jakarta.

The figure below illustrates the percentage improvement of teacher and student activities in Cycle I and Cycle II across all meetings, as well as the development of students' interpersonal intelligence at the end of each cycle.

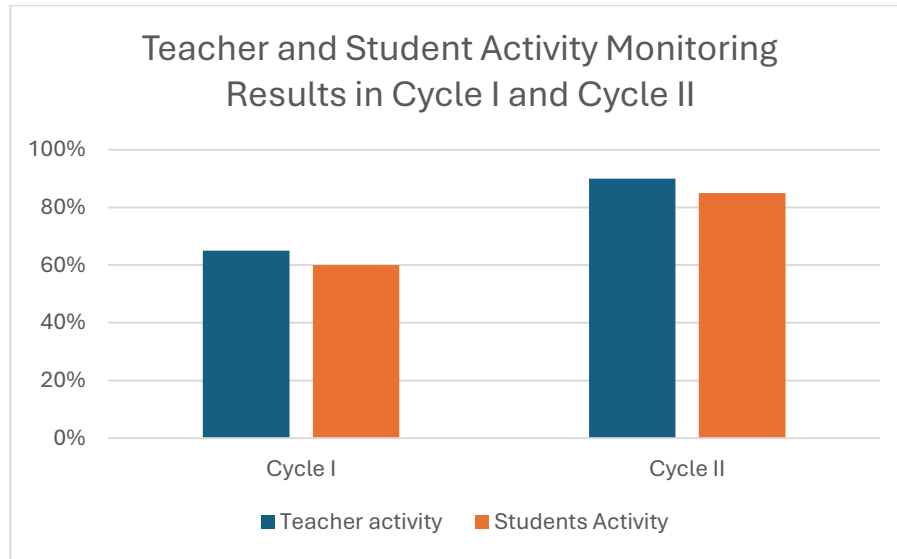


Figure 2. Teacher and Student Activity Monitoring Results in Cycle I and Cycle II

The figure above shows an increase in both teacher and student activity across the two cycles. In Cycle I, teacher activity reached 65%, while student activity was at 60%. In Cycle II, there was a significant improvement, with teacher activity reaching 90% and student activity increasing to 85%. These scores met the success criteria, which required a minimum of 80% activity rate. Meanwhile, data on students' interpersonal intelligence scores are shown in the figure below:

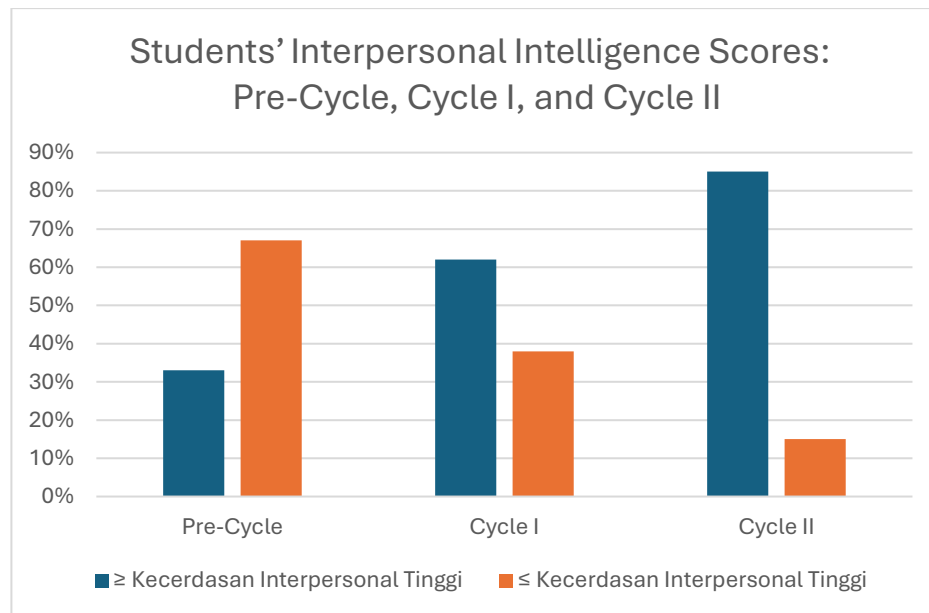


Figure 3. Students' Interpersonal Intelligence Scores: Pre-Cycle, Cycle I, and Cycle II

The figure above indicates an increase in the number of students categorized as having high interpersonal intelligence from the pre-cycle phase to Cycle II. In the pre-

cycle stage, only 7 students (33.3%) were in the high category, while 14 students (66.7%) were still in the low category. After the intervention in Cycle I, the number of students in the high category increased to 13 (61.90%), and those in the low category decreased to 8 (38.10%). In Cycle II, the results improved further, with 18 students (85.71%) achieving high interpersonal intelligence, and only 3 students (14.29%) remaining in the low category. Based on these results, the success criterion which required at least 80% of students to reach high interpersonal intelligence was successfully achieved by the end of Cycle II. Therefore, the implementation of this classroom action research is considered

Qualitative Evidence of Interpersonal Intelligence Development

The quantitative improvement reflected in the 85.71% achievement rate in Cycle II was substantiated by rich qualitative data collected through systematic field observations and reflective notes. These qualitative findings provide deeper insights into the behavioral transformations that accompanied the numerical gains, illustrating how students' interpersonal competencies evolved throughout the intervention.

Social Sensitivity and Empathy Development

During the initial sessions of Cycle I, field notes documented instances of students showing limited awareness of their peers' emotional states. For example, on March 12, 2024, when a student named Rizki struggled to understand the task about traditional markets, his group members initially ignored his confusion and continued their discussion without him. However, by the third meeting of Cycle II (April 23, 2024), a marked transformation was observed. The researcher noted: "Ani noticed that Rizki looked confused while reading the investigation material. She immediately approached him, asked what he didn't understand, and patiently explained the concept using simpler language. Other group members also paused their work to ensure everyone was on the same page before proceeding."

This behavioral shift aligns with Goleman's assertion that emotional intelligence, particularly empathy, can be cultivated through structured social interactions where students learn to recognize and respond to others' emotional cues. The Group Investigation model created natural opportunities for students to practice perspective-taking, a fundamental component of interpersonal intelligence. According to Selman's stages of social perspective-taking, third-grade students are transitioning from self-reflective to mutual perspective-taking, making this developmental period critical for empathy cultivation.

Collaborative Communication Patterns

Observation transcripts revealed significant evolution in students' communication patterns. In Cycle I, Meeting 1 (March 5, 2024), the observer recorded: "Group 3 experienced conflict when deciding on their investigation topic. Budi dominated the conversation, insisting on his choice without listening to others. Maya

and two other students remained silent, appearing reluctant to voice their opinions. The discussion ended with Budi making the decision unilaterally."

Contrastingly, by Cycle II, Meeting 2 (April 16, 2024), a different dynamic emerged in the same group: "During topic selection for the economic activities investigation, Budi proposed studying the traditional market. Instead of imposing his idea, he asked, 'What do you all think about investigating the traditional market? Does anyone have other suggestions?' Maya confidently responded, 'I think that's interesting, but we could also compare it with the modern supermarket.' The group discussed both options, with each member contributing ideas, before reaching a consensus through voting."

This transformation exemplifies what Mercer and Littleton describe as 'exploratory talk', a type of dialogue where partners engage critically but constructively with each other's ideas, offering reasonable challenges and alternatives. The progression from monologic to dialogic interaction patterns demonstrates genuine interpersonal intelligence development. Research by Webb and colleagues indicates that students who provide and receive elaborate explanations in collaborative settings not only enhance their own learning but also develop sophisticated social communication skills.

Inclusive Participation and Social Integration

One of the most compelling qualitative findings concerned students who were initially socially isolated. The case of Sinta, a student who scored in the low interpersonal intelligence category during the pre-cycle phase, illustrates this development. Field notes from March 8, 2024 (Cycle I, Meeting 1) recorded: "Sinta sat at the edge of her group, barely participating. When her group members discussed the investigation plan, she looked down at her desk. When directly asked for her opinion, she simply shrugged and said, 'I don't know, whatever you all decide.'"

The researcher's reflective notes from this session stated: "Sinta appears withdrawn and lacking confidence in group settings. Her group members seem uncertain about how to include her meaningfully. Intervention needed: teacher will assign specific, manageable roles to ensure participation."

Following this observation, the teacher implemented targeted facilitation strategies in Cycle II. By April 25, 2024 (Cycle II, Meeting 3), the transformation was documented: "Sinta actively participated in her group's presentation preparation. She volunteered to design the visual aids and explained to her group members: 'I think if we use pictures of real markets, it will be clearer for our classmates.' Her suggestions were enthusiastically received, and she smiled while working collaboratively with Deni to create the presentation materials."

This progression reflects what Vygotsky conceptualized as the zone of proximal development in social learning—students can achieve higher levels of social

competence through guided participation and scaffolded peer interaction. Contemporary research by Gillies demonstrates that teacher facilitation and structured role assignments in cooperative groups significantly enhance participation rates among students who are initially reluctant or socially anxious.

Leadership Emergence and Shared Responsibility

Observational data also captured the emergence of distributed leadership within groups, a sophisticated manifestation of interpersonal intelligence. In Cycle I, leadership tended to be monopolized by academically dominant students. However, Cycle II observations revealed more egalitarian patterns. Field notes from April 18, 2024, documented: "In Group 5, leadership roles rotated naturally based on task requirements. When the group conducted field interviews at the school canteen, Farhan—who initially seemed shy—took the lead because he was comfortable talking to the canteen vendors. During data analysis, Dewi guided the group because of her organizational skills. During presentation preparation, Andi coordinated the group because of his creative ideas for visual displays."

This fluid leadership pattern exemplifies what Zaccaro and colleagues' term 'shared leadership'—a dynamic process where leadership roles shift among group members based on expertise and situational demands rather than fixed hierarchies. The Group Investigation model's emphasis on collaborative inquiry naturally facilitated this development. Research by Hmelo-Silver indicates that problem-based and inquiry-based learning environments promote the distribution of cognitive and social responsibilities among group members, fostering collective competence.

Conflict Resolution and Social Problem-Solving

The development of conflict resolution skills provided another window into interpersonal intelligence growth. Early observations documented instances of unresolved conflicts that disrupted group functioning. For example, field notes from March 15, 2024, recorded: "Group 2 reached an impasse when members disagreed about how to organize their presentation. Voices were raised, two students stopped participating, and the teacher had to intervene to mediate the situation."

By contrast, Cycle II observations showed students employing constructive conflict resolution strategies independently. Notes from April 22, 2024, documented: "When Group 2 disagreed about presenting their findings, instead of arguing, Lina suggested: 'Let's each explain our idea, then we can combine the best parts of each.' The group members took turns presenting their proposals, clarifying questions respectfully, and ultimately synthesized elements from multiple suggestions into a cohesive presentation plan."

This evolution reflects what Johnson and Johnson characterize as constructive controversy—a process where disagreements are managed through integrative negotiation rather than competitive bargaining or avoidance. According to Deutsch's

cooperation theory, students who learn to frame conflicts as shared problems requiring collaborative solutions develop higher-order interpersonal competencies essential for lifelong social success.

Teacher Facilitation and Scaffolding Evolution

Qualitative data also revealed the teacher's evolving role throughout the cycles. In Cycle I, the teacher frequently intervened to resolve group issues, provide directions, and manage conflicts. Reflective notes from March 19, 2024, stated: "I find myself constantly moving between groups to keep them on task and mediate disagreements. Students still depend heavily on my guidance for social interaction management."

However, by Cycle II, the teacher's role shifted toward strategic facilitation. Reflective notes from April 28, 2024, recorded: "Today I observed more than intervened. Groups are increasingly self-regulating. When I did step in, it was to pose guiding questions rather than provide direct solutions. For example, when Group 4 struggled with task distribution, instead of assigning roles, I asked: 'How might you divide the work, so everyone contributes according to their strengths?' This prompted them to engage in metacognitive discussion about their collaborative process."

This pedagogical evolution aligns with the gradual release of responsibility framework articulated by Fisher and Frey, where effective instruction moves from teacher modeling to guided practice to independent application. Research by Blatchford and colleagues emphasizes that the quality of teacher facilitation—particularly the balance between structure and autonomy—critically determines whether cooperative learning develops genuine interpersonal competencies or merely procedural compliance.

Cross-Validation with Peer and Teacher Assessments

To triangulate findings, informal peer assessments were conducted at the end of Cycle II. Students were asked to anonymously nominate classmates who "help others feel included," "listen carefully to different ideas," and "make the group work well together." The three students who remained in the low interpersonal intelligence category received significantly fewer nominations (0-2 nominations each) compared to those in the high category (5-12 nominations each).

Moreover, the collaborating teacher's assessment corroborated the quantitative and observational data. In her final reflection, she noted: "The transformation in classroom social dynamics has been remarkable. Students who previously worked only with their close friends are now comfortable collaborating with anyone. The quality of group discussions has deepened students' build on each other's ideas rather than simply taking turns talking. Most importantly, I see genuine care emerging—students notice when someone needs help and offers support without being prompted."

This multi-source validation strengthens the study's credibility, as Lincoln and Guba emphasize that triangulation of data sources, methods, and perspectives enhances the trustworthiness of qualitative findings.

Synthesis: From Behavioral Change to Internalized Competence

The qualitative evidence presented above demonstrates that the 85.71% achievement rate in interpersonal intelligence represents not merely superficial behavioral compliance but genuine internalization of social competencies. Students progressed from requiring external prompts for appropriate social behavior to initiating empathetic responses, constructive communication, and collaborative problem-solving independently. This internalization process reflects what Deci and Ryan's self-determination theory describes as the shift from external regulation to integrated regulation—where socially valued behaviors become aligned with one's sense of self.

The rich behavioral descriptions documented throughout the intervention cycles provide concrete evidence of how the Group Investigation model operationalizes interpersonal intelligence development in authentic learning contexts. As Putnam and Borko argue, learning is fundamentally situated in social practice; therefore, assessing competence requires examining not just abstract skills but their manifestation in real interactions and relationships. The qualitative data presented here fulfills this requirement, offering a nuanced portrait of interpersonal intelligence as it unfolds in the complex social ecology of the elementary classroom.

DISCUSSION

The analysis of data from Cycle I and Cycle II indicates improvements in both teacher and student activity, as well as in students' interpersonal intelligence. The implementation of the Cooperative Learning model of Group Investigation proved effective in enhancing the interpersonal intelligence of third-grade students in Social Studies learning. This model encouraged students to be more active in communication, collaboration, and group problem-solving. This finding aligns with (Slavin, 2009) view that Cooperative Learning can help students develop social and interpersonal skills through structured teamwork. Moreover, the Group Investigation model allows students to be directly involved in the learning process through investigative activities conducted in small groups. According to (Sharan & Sharan, 1992), this model provides opportunities for students to strengthen their collaborative skills, critical thinking, and interpersonal competencies in depth.

In the context of Social Studies where social interaction is key this approach is highly relevant as it facilitates meaningful peer engagement. (Sanjaya, 2020) emphasizes that Social Studies learning becomes more meaningful when students actively participate in the information-seeking process. The increased student participation observed in Cycle II serves as evidence that the learning process became

more contextual and collaborative. These findings are reinforced by (Basirun & Tarto, 2022), who found that Group Investigation improves Social Studies learning outcomes through enhanced cooperation and constructivist-based classroom interaction.

Similarly, (Fitriyani, 2020) study confirms that the Group Investigation model improves interpersonal intelligence by requiring students to collaborate and interact intensively. (Gardner, 2006) in his theory of Multiple Intelligences, explains that interpersonal intelligence reflects an individual's ability to understand and build relationships with others. Thus, group-based learning such as Group Investigation is highly relevant for developing this type of intelligence.

Observations in Cycle II also showed that the teacher was increasingly able to act as a facilitator, guiding investigations and group discussions effectively. This supports (Lie, 2004) assertion that the teacher's role is crucial in creating positive social interaction within learning groups. The interactions that emerged during these activities supported not only cognitive learning but also the development of empathy, active listening, and communication skills core components of interpersonal intelligence as identified by (Gardner, 2006). Furthermore, (Setiawan, 2024) research confirms the effectiveness of Group Investigation in improving interpersonal intelligence through group counseling services, showing significant gains from pre-test to post-test.

(Anggraeni et al., 2021) also noted that interpersonal intelligence is positively correlated with learning motivation; students with high interpersonal intelligence tend to be more enthusiastic and active in class. Likewise, (Maria & Nurwati, 2022) reported that the Group Investigation model contributed 65.61% to the improvement of students' interpersonal intelligence in Islamic Education classes, indicating a substantial statistical impact on students' affective development. (Komar & Taufik, 2021) further concluded that Group Investigation is superior to STAD and TGT models in developing interpersonal intelligence, even in exact subjects such as mathematics.

However, it is important to note that the effectiveness of Group Investigation largely depends on the teacher's ability to manage group dynamics. In Cycle I, for instance, the teacher's lack of involvement in distributing roles fairly led to imbalanced participation among group members. This suggests that even an effective model requires proper classroom management to function optimally. According to (Johnson & Johnson, 2017), the success of cooperative learning depends on well-planned positive interdependence and individual accountability, which must be deliberately structured by the teacher.

The improvement in students' interpersonal intelligence scores from Cycle I to Cycle II further demonstrates that this model benefits not only cognitive aspects but also supports social-emotional development. Students' abilities to interact, collaborate, and respect others' opinions improved significantly. (Jalil, 2022) research supports this finding, showing that the Group Investigation model enhances not only cognitive

learning outcomes but also students' affective and psychomotor skills, including social behavior during group activities.

CONCLUSION

The implementation of the Group Investigation model in Social Studies learning successfully improved the interpersonal intelligence of third-grade students. This model encouraged active collaboration, communication, and empathy among students, which contributed to their social-emotional growth. Teachers are recommended to adopt the Group Investigation model to promote interpersonal intelligence, especially in subjects that involve group inquiry and discussion. For optimal results, proper planning of group dynamics and fair task distribution is essential.

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