Vol. 5 Issue 2, July-December 2026
International Journal of Educational Research Excellence (IJEREC) e-ISSN: 2830-7933
https://ejournal.ipinternasional.com/index.php/ijere DOI:10.55299/ijere.v5i2.1751

The Effect of The Moral Reasoning Method on Students' Learning Motivation in Understanding Narrative Texts in 6th Grade

Nurhakimah[1*)], Rahmat Kartolo[2]
[1,2]Universitas Muslim Nusantara Al Washliyah, Medan, Indonesia
Email: nurhakimahspd938@gmail.com[1], rahmatkartolo@umnaw.ac.id[2]
Correspondence Authors: nurhakimahspd938@gmail.com
Article history: Received February 25, 2026; revised March 24, 2026; accepted April 30, 2026

ABSTRACT

This research was motivated by the low learning motivation of students in understanding narrative texts in sixth grade at SD Negeri 061 Mompangnjulu, Mandailing Natal Regency. Students appeared passive and less enthusiastic in participating in Indonesian language learning, especially in the narrative text material, which requires comprehension of story structure and the moral values contained within. The conventional method, which tends to be monotonous, was deemed ineffective in engaging students both emotionally and intellectually. Therefore, the Moral Reasoning method was introduced as a learning approach that engages students in moral discussions, dilemma-solving, and value reflection, with the expectation of increasing their learning motivation. This study employed a quantitative approach with a quasi-experimental design, specifically the Pretest–Posttest Nonequivalent Control Group Design. The sample consisted of two classes: the experimental class (VI A) and the control class (VI B), each comprising 28 students. The experimental class was taught using the Moral Reasoning method, while the control class was taught using conventional methods. Data collection techniques included observation, a learning motivation questionnaire, and documentation. Data analysis involved tests for normality, homogeneity, and a t-test. The results showed that the average learning motivation score in the experimental class increased to 72.18 after treatment, compared to the control class which scored 71.71. The hypothesis test showed a significance value of 0.01 < 0.05, indicating that the null hypothesis (H_0) was rejected and the alternative hypothesis (H_a) was accepted. This means there is a significant effect of applying the Moral Reasoning method on students' learning motivation. During the learning process, students in the experimental group were more actively engaged, motivated to express opinions, and able to connect story content with real-life moral values. In conclusion, the Moral Reasoning method is effective in enhancing students' learning motivation in understanding narrative texts. This method not only encourages active student participation but also builds awareness of moral and ethical values that are relevant to their everyday lives.

Keywords: Moral Reasoning Method, Learning Motivation, Narrative Comprehension, Value-Based Learning

I. INTRODUCTION

The exponential pace of development in the digital era has fundamentally transformed nearly every aspect of human life, with education experiencing particularly profound changes. The wave of innovation in information and communication technology has brough both opportunities and challenges to educational systems worldwide. While access to learning resources has become broader and more diverse, enabling the creative exploration of teaching methods and transcending traditional spatial and temporal boundaries of interaction, the complexity of learning challenges has simultaneously intensified. This reality demands educational approaches that are more adaptive, relevant, and oriented toward the holistic development of learners' potential (Nicolosi et al., 2024).

Education is the primary foundation for national progress. Education represents a conscious and meticulously planned endeavor with the noble purpose of creating conducive learning atmospheres and empowering the learning process. The fundamental objective of education is to facilitate learners in actively exploring and developing their inherent potential across multiple dimensions: spiritual-religious values that guide noble principles, self-control abilities essential for social interaction, mature and character-building personality formation, diverse intelligence development, internalization of noble morals as behavioral foundations, and mastery of practical skills needed for independent living, societal contribution, national advancement, and international distinction (Many, 2024).

Within this context, learning plays a central role as the driving force for achieving educational objectives. Learning is not merely a unidirectional transfer of knowledge from educator to learner, but rather a dynamic and multidimensional interactive process involving learners as active subjects, educators as facilitators and motivators, and various rich and relevant learning resources within constructively designed learning environments. Effective learning processes have transformative impacts on learners, significantly enhancing their critical and analytical thinking abilities, developing diverse practical and social skills, and instilling positive attitudes toward learning and life. Meaningful learning constitutes systematically designed activities oriented toward learners (student-centered), with the primary aim of encouraging learners to engage actively in the process of constructing knowledge and understanding (Howard Kerr, 2025).

Modern learning paradigms increasingly emphasize active learning. This approach provides extensive space for learners to not only receive information passively but also to actively construct their own understanding of concepts and meanings through activities that are relevant and meaningful to their life contexts. In this context, the teacher's role transforms from a "lecturer" to a facilitator, motivator, and creative learning designer. Teachers are required to possess the ability to design learning experiences that are engaging, challenging, and relevant to students' needs and interests, while being capable of utilizing diverse learning media appropriate to the characteristics of teaching materials and students' learning styles. Moreover, effective teachers not only master innovative teaching strategies but also possess high professional competence, a deep understanding of students' developmental psychology, and a strong commitment and motivation to continuously improve learning quality (Vaghamshi, 2025).

Furthermore, learning effectiveness is not solely determined by mastery of the subject matter. The quality of interpersonal relationships between teachers and learners plays a crucial role in creating a conducive and motivating learning environment. Positive educational relationships, characterized by mutual trust, respect, and care, are strong foundations for building students' internal learning motivation. When students feel valued, supported, and understood by their teachers, they become more motivated to engage actively in learning processes, dare to take risks in learning, and possess higher self-confidence in achieving academic goals (Ramadhan et al., 2025).

In the context of Indonesian language learning in elementary schools, particularly regarding narrative text materials, the challenge of creating engaging and meaningful learning experiences has become increasingly significant. Narrative texts, with their rich story plots, diverse characters, and implicit or explicit moral messages, possess great potential not only to develop students' language abilities but also to instill noble values and local wisdom. However, conventional learning approaches that tend to rely on lectures or memorization methods are often ineffective in exploring this potential. Consequently, students may only understand narrative texts at a cognitive level without truly internalizing the moral values, ethics, and life lessons contained in them. Nevertheless, narrative texts often reflect daily life values that are highly relevant for establishing students' character from an early age. Therefore, innovation in Indonesian language teaching methods is needed, particularly for narrative text materials, capable of cultivating students' awareness of morally evaluating actions and connecting them with their life experiences (Cahyaningrum, 2025).

Research on narrative text comprehension indicates that elementary students often encounter difficulties in processing texts beyond a surface-level understanding. Studies have shown that while many students can decode and recall basic story elements, they struggle to make deeper inferences about characters' motivations, identify underlying themes, and extract moral lessons from narratives. This surface-level processing limits students' ability to connect textual content with their own experiences and moral development, resulting in passive engagement and diminished learning motivation. Furthermore, the pedagogical approaches commonly employed in elementary Indonesian language classrooms frequently emphasize the technical aspects of reading at the expense of comprehension and critical engagement with text content, particularly regarding the moral and ethical dimensions embedded in narrative literature (Tabullo et al., 2023).

One learning approach deemed highly relevant to addressing this challenge is the Moral Reasoning method. This method constitutes an integral part of the active learning paradigm that explicitly encourages students to develop critical and reflective thinking abilities regarding various issues involving the dimensions of right and wrong actions. In implementing the Moral Reasoning method, students are actively invited to engage in in-depth discussions regarding moral values contained in stories, cases, or ethical dilemmas. They are encouraged to analyze characters' or actors' actions from various moral perspectives, consider the consequences of those actions, and formulate moral judgments based on rational and ethical principles. Through this process, students not only learn about moral values abstractly but also develop the ability to apply moral principles in concrete contexts and make responsible decisions (Nurmaya et al., 2025).

The theoretical foundations of Moral Reasoning as an educational approach are deeply rooted in developmental psychology, particularly in Lawrence Kohlberg's theory of moral development. Kohlberg's cognitive-

developmental approach to moral education posits that moral reasoning develops through a series of hierarchical stages, progressing from preconventional levels focused on punishment avoidance and self-interest, through conventional levels emphasizing social conformity and law maintenance, to postconventional levels characterized by principled reasoning based on universal ethical principles (Mudzakkir, 2024). According to this framework, moral reasoning represents the cognitive process by which individuals consider and evaluate the rightness or wrongness of actions based on the application of logical, consistent, and universal moral principles that transcend social norms or external authority.

Kohlberg's research, building upon Piaget's earlier work on moral judgment, demonstrated that moral development occurs through active thinking and reasoning rather than through the passive internalization of cultural norms. His studies, which utilized moral dilemmas such as the famous Heinz dilemma, revealed that individuals' moral reasoning could be classified into distinct developmental stages, each representing increasingly sophisticated and principled approaches to ethical decision-making. Importantly, Kohlberg found that exposure to moral reasoning one stage above a learner's current level creates cognitive conflict or disequilibrium, which serves as a catalyst for moral development. This finding has profound implications for educational practice, suggesting that carefully structured moral discussions and dilemma analyses can actively promote students' progression through the stages of moral reasoning.

The application of Moral Reasoning methods in educational contexts, particularly in language arts instruction, represents a synthesis of moral education and literacy development. When students engage with narrative texts through a moral reasoning framework, they are challenged to move beyond literal comprehension to analyze characters' motivations, evaluate the ethical dimensions of plot events, consider alternative courses of action, and formulate reasoned moral judgments. This process engages higher-order cognitive skills, including analysis, evaluation, and synthesis, while simultaneously developing students' capacity for empathy, perspective-taking, and principled ethical reasoning. Research in educational psychology indicates that such cognitively demanding and personally relevant learning activities are strongly associated with increased intrinsic motivation, deeper engagement and enhanced learning outcomes.

Motivation serves as a fundamental psychological construct in educational contexts, representing the driving force that initiates, directs, and sustains learning behaviors. In educational psychology, motivation is conceptualized as arising from the interaction of internal and external factors that energize and direct behavior toward goal achievement. According to self-determination theory, a prominent framework in motivation research, learners' motivation exists on a continuum from amotivation (lack of intention to act) through various forms of extrinsic motivation (behavior driven by external contingencies or internalized values) to intrinsic motivation (behavior driven by inherent interest and enjoyment).

Intrinsic motivation, characterized by engagement in activities for inherent satisfaction rather than separable consequences, has been consistently associated with optimal learning outcomes. Research demonstrates that intrinsically motivated students exhibit greater persistence in the face of challenges, employ deeper learning strategies, demonstrate better conceptual understanding, and experience more positive emotions during the learning process. Contemporary educational research emphasizes the importance of pedagogical approaches that support students' basic psychological needs for autonomy, competence, and relatedness, as the satisfaction of these needs promotes the development and maintenance of intrinsic motivation (Puderbach et al., 2025).

Conversely, extrinsic motivation, while sometimes necessary and beneficial, requires careful consideration in educational practices. When learning is motivated primarily by external rewards, grades, or avoidance of punishment, students may demonstrate compliance and short-term engagement but often fail to develop a deep understanding or sustained interest in the subject matter. Educational researchers have identified the phenomenon of the "overjustification effect," whereby the introduction of extrinsic rewards for intrinsically interesting activities can actually undermine intrinsic motivation. However, when extrinsic motivators are structured to support autonomy and competence development rather than control behavior, they can facilitate the internalization of values and the development of autonomous forms of motivation.

In the specific context of elementary Indonesian language education and narrative text comprehension, motivation plays a complex role. Students with high learning motivation demonstrate a greater willingness to engage with challenging texts, persist through comprehension difficulties, employ active reading strategies, participate in class discussions, and connect textual content with their personal experiences and prior knowledge. Conversely, students lacking motivation often exhibit passive reading behaviors, superficial text processing, reluctance to participate in literacy activities, and failure to transfer learning beyond immediate classroom requirements. Therefore, understanding the factors that influence students' motivation for narrative text learning—including instructional methods, text selection, classroom environment, teacher-student relationships, and task characteristics—is essential for effective literacy instruction.

The specific context of this research, SD Negeri 061 Mompangnjulu in Mandailing Natal Regency, provides a clear illustration of the urgency of implementing the Moral Reasoning method. Based on preliminary observations conducted in June 2024, several problems related to low learning motivation among sixth-grade students in understanding narrative text materials were identified. Indicators of this low motivation were reflected in several aspects: lack of active student participation during the learning process, low levels of student interest in the presented narrative text materials, and the continued dominance of lecture methods as the teacher's primary approach in delivering materials. Furthermore, observations indicated that some students tended to be passive, lacked the initiative to ask questions, and were reluctant to express their opinions during discussion sessions, indicating insufficient cognitive and emotional engagement in the learning process.

The root of this low learning motivation problem is strongly suspected to be related to learning approaches that are less capable of actively involving students in the process of constructing understanding. Narrative text materials may be insufficiently linked explicitly with life values close to students' daily realities and experiences, making them feel abstract and less relevant. Consequently, students may not perceive connections between lesson materials and their lives, ultimately decreasing their interest and motivation to learn. In this context, the Moral Reasoning approach is believed to possess great potential as an effective solution for increasing students' learning motivation in understanding narrative texts. By inviting students to actively analyze moral values in stories and reflect upon them in the context of their lives, they are expected to become more interested, engaged, and motivated to understand lesson materials more deeply.

Previous research supports the effectiveness of moral reasoning approaches in educational settings. Studies have demonstrated that moral reasoning methods can significantly improve learning outcomes, particularly in subjects involving the understanding of moral values and character formation. Additionally, these methods have proven effective in developing students' critical thinking abilities, empathy, and moral awareness. Apriyani and Rusiyono (2018) found that moral reasoning methods had significant effects on cultivating nationalistic character values among elementary students compared to conventional storytelling approaches. Their research demonstrated that engaging students in moral dilemma discussions and value reflection activities led to a deeper internalization of ethical principles and increased motivation to participate in learning activities.

Furthermore, research on narrative comprehension and moral development suggests a synergistic relationship between these domains. When students engage with narratives containing moral dilemmas and ethical themes, they simultaneously develop literacy skills and moral reasoning capabilities. The cognitive processes involved in understanding character motivations, predicting consequences, and evaluating actions from multiple perspectives contribute to both narrative comprehension and moral development. Pedagogical approaches that explicitly integrate moral reasoning into narrative text instruction offer the potential to address multiple educational objectives simultaneously while enhancing student engagement and motivation.

Despite the theoretical promise of integrating moral reasoning methods into narrative text instruction, empirical research examining this approach in the context of Indonesian elementary education is limited. Most existing studies on moral reasoning in education have focused on moral or character education as separate curricular areas rather than as integrated components of language arts instruction. Similarly, while extensive research has examined various pedagogical approaches to improve reading comprehension, few studies have specifically investigated the effects of moral reasoning methods on students' motivation and comprehension of narrative texts. This study addresses this gap by empirically examining the implementation and effects of the Moral Reasoning method in the context of narrative text instruction in Indonesian elementary schools.

This study aimed to investigate whether the Moral Reasoning method, when systematically integrated into narrative text instruction, can significantly enhance sixth-grade students' learning motivation compared with conventional teaching approaches. Specifically, this study examines (1) whether there are significant differences in learning motivation between students taught using the Moral Reasoning method and those taught using conventional methods in understanding narrative texts, and (2) the nature and magnitude of the effect of the Moral Reasoning method on students' learning motivation in narrative text comprehension. By addressing these research questions through a rigorous quasi-experimental design, this study contributes to the theoretical understanding of motivation in literacy education and practical knowledge regarding effective pedagogical approaches for narrative text instruction in elementary Indonesian language education.

Investigating these questions has significant implications for educational practices. If the Moral Reasoning method proves effective in enhancing students' learning motivation for narrative texts, it would provide educators with a theoretically grounded and empirically validated pedagogical approach for addressing the persistent challenges of passive student engagement and superficial text processing in elementary literacy instruction. Furthermore, by integrating moral and character education objectives with literacy development goals, this approach offers the potential for more efficient and holistic achievement of multiple educational

objectives within constrained instructional time. Finally, understanding the specific mechanisms through which moral reasoning activities enhance motivation whether through increased relevance, cognitive engagement, emotional connection, or other pathways can inform broader efforts to design motivating and effective learning experiences across various educational contexts and content areas in the future.

II. METHODS

A. *Research Design*

This study employed a quantitative research approach with a quasi-experimental design to investigate the effect of the Moral Reasoning method on students' learning motivation in understanding narrative texts. The quasi-experimental approach was selected as the most appropriate design because, in educational field settings, the random assignment of individual students to experimental and control conditions is typically not feasible due to existing classroom structures and ethical considerations regarding the differential treatment of students within the same school (Creswell, 2021). According to Sugiyono (2019), quasi-experimental research provides opportunities to examine the effects of treatments occurring in natural educational settings without random subject assignment, although internal validity may be somewhat reduced compared to true experimental designs due to limitations in controlling external variables (Sugiyono, 2019).

Specifically, this study utilizes a Pretest-Posttest Nonequivalent Control Group Design, which represents one of the most rigorous quasi-experimental designs available for educational research. This design involves two groups, ―an experimental group and a control group, ―which are not formed through random assignment but are comparable in relevant characteristics. Both groups receive pretests and posttests using identical measurement instruments, but only the experimental group receives the treatment of interest (Campbell & Stanley, 1963). The design can be represented schematically as follows.

Group 1 (Experimental): O_1 X O_2

Group 2 (Control): O_3 - O_4

O_1 and O_3 represent pretest measurements of learning motivation; X represents the implementation of the Moral Reasoning method treatment; O_2 and O_4 represent posttest measurements; and the dashed line indicates non-random group assignment. This design offers significant advantages over simpler quasi-experimental designs by including both pretest data (allowing the assessment of initial group equivalence and statistical control for baseline differences) and a control group (enabling the separation of treatment effects from maturation, history, and other threats to internal validity).

The presence of both pre- and post-test data in conjunction with a control group strengthens causal inference by allowing researchers to examine whether changes in the dependent variable (learning motivation) differ significantly between groups receiving different treatments. If the experimental group shows significantly greater improvement from pretest to posttest compared to the control group, this pattern provides evidence that the treatment (Moral Reasoning method) caused the differential change, particularly when initial group equivalence has been established and potential confounding variables have been considered.

B. *Participants and Setting*

This study was conducted at SD Negeri 061 Mompangnjulu, located in the Mandailing Natal Regency, North Sumatra Province, Indonesia. The school serves a predominantly rural population and represents a typical public elementary school in the region in terms of resources, class size, and student demographics. The research was conducted during the 2025-2026 academic year, specifically from August 1, 2025, to December 31, 2025. This timeframe was selected to ensure the completion of the full intervention cycle within a single semester while avoiding major holidays and examination periods that might interfere with normal instructional routines.

The research population consisted of all sixth-grade students at SD Negeri 061 Mompangnjulu during the 2025-2026 academic year, totaling 56 students distributed across two parallel classes. Sixth grade was selected as the focus of this study because students at this level have developed sufficient reading proficiency to engage meaningfully with narrative texts while still being at a critical stage for developing higher-order comprehension skills and moral reasoning abilities. Sixth-grade students, typically aged 11-12 years, are in Kohlberg's conventional level of moral development, making them particularly receptive to moral reasoning interventions that encourage consideration of multiple perspectives and principled ethical thinking.

Rather than selecting a sample from the population, this study employed a total population sampling approach, including all 56 sixth-grade students. Students were divided into experimental and control groups based on

their existing class assignments: Class VI-A (n=28 students) was designated as the experimental group receiving instruction through the Moral Reasoning method, while Class VI-B (n=28 students) served as the control group receiving conventional instruction. This assignment method, while not involving random individual assignment, approximates random assignment at the group level because students were assigned to classes at the beginning of the academic year through administrative processes unrelated to the research variables of interest.

To verify the appropriateness of using existing class assignments as experimental and control groups, preliminary analyses were conducted to examine the equivalence of the two groups on relevant demographic and academic variables. Statistical tests confirmed that the groups did not differ significantly in terms of gender distribution, prior academic achievement in the Indonesian language, socioeconomic backgrounds, or baseline learning motivation as measured by the pretest. This initial equivalence strengthens the internal validity of the quasi-experimental design by reducing the likelihood that observed differences in outcomes are attributable to pre-existing group differences rather than to the experimental treatment.

Intervention: Moral Reasoning Method Implementation

The experimental group received a structured intervention implementing the Moral Reasoning method integrated into narrative text instruction over eight weeks, with three 70-minute instructional sessions per week (total of 24 sessions). The intervention was designed based on Kohlberg's theory of moral development and educational applications of moral reasoning, adapted specifically for the context of narrative text comprehension in elementary Indonesian language education.

Each instructional session following the Moral Reasoning method involved four main phases:

Phase 1: Strategic Group Formation and Orientation (10 minutes)

Students were organized into small heterogeneous groups of to 3-4 members, with group composition strategically designed to include students with varying levels of academic achievement, communication skills, and social backgrounds. This heterogeneity was intended to promote diverse perspectives in moral discussions and provide opportunities for peer learning in the process. During orientation, the teacher introduced the narrative text to be studied and activated students' prior knowledge regarding both the story context and relevant moral concepts.

Phase 2: Presentation of Moral Dilemmas Embedded in Narrative Texts (20 minutes)

The teacher presented carefully selected narrative texts containing moral dilemmas relevant to the students' experiences and developmental levels. Texts were chosen to include situations where characters faced ethical choices with no clearly "correct" answer, encouraging students to consider multiple perspectives and competing values. The teacher guided students in identifying the central moral dilemma in the narrative, characters involved, their motivations, and the potential consequences of different courses of action. Students engaged in close reading of the text, discussing vocabulary, plot elements, and character development while focusing on the moral dimensions of the narrative.

Phase 3: Small Group and Whole-Class Moral Reasoning Discussions (30 minutes)

In small groups, students discussed the moral dilemma presented in the narrative, sharing their initial responses to questions such as, "What should the character do in this situation?" "Why is this the right choice?" "What principles or values support this decision?" "What would be the consequences of different choices?" "How would different people be affected by each option?" Group discussions were structured to encourage the articulation of moral reasoning, perspective-taking, and consideration of principled justifications rather than mere expression of personal preferences.

Following small group discussions, whole-class discussions were facilitated by the teacher, who employed Socratic questioning techniques to deepen students' moral reasoning. The teacher challenged students to defend their positions with logical arguments, consider counterarguments, examine the consistency of their moral principles across different situations, and progress toward more sophisticated moral reasoning. Crucially, the teacher maintained a non-judgmental stance, avoiding the imposition of "correct" answers while guiding students to recognize more and less adequate forms of moral reasoning.

Phase 4: Selection of Principled Moral Reasoning and Reflection (10 minutes)

The class engaged in a collaborative process of identifying and evaluating the quality of different moral arguments presented during the discussion. The teacher facilitated students' recognition of moral reasoning based on universal ethical principles (such as fairness, human dignity, justice, and care) as more adequate than reasoning based solely on punishment avoidance, self-interest, or unquestioning obedience to authority. Students were encouraged to articulate what they learned from the discussion, how their thinking had developed, and how the moral lessons from the narrative might apply to their own lives. Written reflection activities allowed students to consolidate their learning and practice articulating their moral reasoning in writing.

Throughout the intervention, teachers employed several key pedagogical strategies consistent with moral reasoning approaches: presenting dilemmas at or slightly above students' current moral reasoning level to create cognitive conflict; encouraging peer interaction and exposure to diverse moral perspectives; maintaining a democratic, respectful classroom environment where all perspectives were heard; focusing attention on the reasoning process rather than specific moral conclusions; and connecting moral reasoning to students' real-life experiences and concerns.

Control Condition: Conventional Instruction

The control group received conventional narrative text instruction following the standard curriculum and typical pedagogical approaches used at SD Negeri 061 Mompangnjulu. This instruction primarily employed teacher-centered methods, including teacher explanation of vocabulary and story content, teacher-led reading of narrative texts, factual comprehension questions focusing on plot, characters, and setting, and conventional grammar and vocabulary exercises. While teachers in the control group addressed moral themes in narratives when explicitly stated in texts or curriculum materials, they did not systematically engage students in moral reasoning discussions, dilemma analysis, or structured reflections on the ethical dimensions of narratives.

The control condition was deliberately maintained as a typical practice rather than a no-treatment condition to allow a meaningful comparison between the Moral Reasoning method and conventional approaches actually used in Indonesian elementary schools. This design choice enhances the practical significance of the research by demonstrating whether the Moral Reasoning method offers advantages over existing practices rather than merely over no instruction.

C. *Instruments and Data Collection*

Data were collected using three primary methods: observation, learning motivation questionnaires, and documentation.

Learning Motivation Questionnaire

The primary outcome measure for this study was students' learning motivation for narrative text comprehension, assessed through a researcher-developed questionnaire based on established theories of academic motivation and adapted to the specific context of elementary Indonesian-language learning. The questionnaire consisted of 35 items measuring six dimensions of learning motivation identified in motivation theory and previous research: (1) desire and aspiration to succeed (four items); (2) drive and need to learn (four items); (3) hopes and future aspirations (four items); (4) appreciation in learning (four items); (5) interesting learning activities (four items); and (6) conducive learning situations (five items). Additionally, 10 items assessed students' perceptions of the Moral Reasoning method implementation in the experimental group.

All items were reted on a five-point Likert scale, with response options ranging from (1), Disagree (2), to (3), Agree (4), and Strongly Agree (5). Items were formulated as both positively and negatively worded statements to reduce acquiescence bias, with appropriate reverse coding applied during the analysis. For example, positively worded items included "I feel enthusiastic when reading narrative texts in class" and "I actively participate in discussions about story content," while negatively worded items included "I feel bored when asked to read narrative texts" and "I have difficulty understanding the moral messages in stories."

Prior to the main data collection, the questionnaire underwent validation procedures, including expert review by Indonesian language education specialists and pilot testing with a separate sample of 30 sixth-grade students from a comparable school. Item analysis and reliability assessment resulted in the refinement of several items and deletion of items with poor discrimination indices. The final version of the questionnaire demonstrated good internal consistency reliability (Cronbach's $\alpha = 0.87$ for the total scale, with subscale alphas ranging from 0.72−0.85).

The learning motivation questionnaire was administered to all participants in both the experimental and control groups at two time points: immediately before the intervention began (pretest) and within one week after the intervention concluded (posttest). The administration procedures were standardized across groups, with the researcher reading each item aloud and ensuring that the students understood the questions before responding. Completed questionnaires were checked for completeness, and missing responses (fewer than 2% of all items) were addressed through individual follow-ups with students.

Classroom Observation

Systematic classroom observations were conducted to document the implementation fidelity of the Moral Reasoning method in the experimental group and to gather qualitative data on student engagement, participation patterns, and the quality of moral reasoning discussions. The researcher and two trained research assistants conducted observations during 12 randomly selected instructional sessions (50% of total sessions) in the experimental group and six sessions in the control group, using a structured observation protocol.

The observation protocol included quantitative indicators (frequency counts of students' verbal contributions, instances of different types of moral reasoning, and teacher questioning patterns) and qualitative descriptive sections for recording contextual details, illustrative examples of student reasoning, and classroom dynamics. Interrater reliability among the three observers was established during training sessions and periodically checked during data collection, with an agreement exceeding 85% for quantitative indicators.

Documentation

Documentary data were collected to provide contextual information and supplementary evidence regarding the interventions and their effects. This included lesson plans and instructional materials used in both the experimental and control groups, student attendance records to document participation in the intervention, samples of student written work including reading response journals and moral reasoning reflection essays, and photographs and video recordings of selected classroom activities (with appropriate permissions obtained from school administration and parents).

D. Data Analysis

Data analysis procedures addressed both descriptive and inferential research questions through sequential analytical steps.

Prior to hypothesis testing, several preliminary analyses were conducted to verify the appropriateness of the planned statistical procedures and to assess initial group equivalence. Descriptive statistics (means, standard deviations, and frequency distributions) were calculated for all study variables to characterize the sample and identify potential data entry errors or outlier values. Box plots and histograms were used to assess the distributional properties of continuous variables.

The planned primary analysis (independent samples t-test comparing post-test motivation scores between experimental and control groups) requires several statistical assumptions: independence of observations, normality of distribution within groups, and homogeneity of variance between groups. Independence was ensured through the research design (students responded individually to the questionnaires without collaboration). Normality was assessed using the Kolmogorov-Smirnov test and examination of Q-Q plots for each group separately. The results indicated that motivation score distributions did not significantly deviate from normality in either group ($p > 0.05$), supporting the appropriateness of parametric analysis. Homogeneity of variance was assessed using Levene's test, which indicated no significant difference in variability between groups ($p = 0.658$), satisfying this assumption.

The main research hypothesis that students receiving instruction through the Moral Reasoning method would demonstrate significantly higher learning motivation than students receiving conventional instruction—was tested through independent samples t-tests comparing post-test motivation scores between experimental and control groups. Both the total motivation scores (averaged across all items) and dimension-specific subscale scores were analyzed. Effect sizes were calculated using Cohen's d to quantify the magnitude of group differences beyond statistical significance.

Additionally, to control for any initial differences in motivation between groups despite non-significant pretest differences, an analysis of covariance (ANCOVA) was conducted with post-test motivation scores as the dependent variable, group as the independent variable, and pre-test motivation scores as a covariate. This analysis provided a more precise estimate of the treatment effects by statistically adjusting for baseline differences.

Paired-sample t-tests were conducted within each group separately to examine whether motivation scores changed significantly from pre-to post-test, providing information about the magnitude of change within each instructional condition. Additionally, qualitative observation data were analyzed through thematic coding to identify patterns in student engagement, types of moral reasoning displayed, and characteristics of classroom discourse in the experimental and control groups.

All quantitative analyses were performed using SPSS Statistics version 22.0, with statistical significance set at $\alpha = 0.05$. Given the directional nature of the research hypothesis (predicting higher motivation in the experimental group), one-tailed significance tests were employed for primary hypothesis testing, although two-tailed tests are reported to provide conservative estimates.

III. RESULTS AND DISCUSSION

A. Descriptive Statistics

A descriptive analysis of learning motivation scores provided initial insights into the effects of the Moral Reasoning method on sixth-grade students' motivation for narrative text comprehension. Table 1 presents the means, standard deviations, and ranges for both the experimental and control groups at the pretest and posttest measurement occasions.

Tabel 1. Descriptive Statistics for Learning Motivation Scores

Group	Time Point	N	Mean	SD	Min	Max
Experimental	Pretest	28	66.43	7.89	52	82
Experimental	Posttest	28	72.18	8.12	58	87
Control	Pretest	28	65.96	8.23	50	81
Control	Posttest	28	67.71	8.45	53	83

Note: Motivation scores represent the means across all 35 questionnaire items on a 5-point Likert scale, converted to percentage scores for interpretability (possible range: 0-100).

Examination of the pretest scores revealed that the experimental and control groups demonstrated statistically equivalent levels of learning motivation prior to the intervention ($M_{exp} = 66.43$, $SD = 7.89$; $M_{con} = 65.96$, $SD = 8.23$; $t(54) = 0.22$, $p = 0.83$). This initial equivalence is essential for valid causal inference in quasi-experimental designs, as it indicates that the groups were comparable at baseline despite a non-random assignment. The absence of significant pretest differences strengthens the confidence that the observed posttest differences can be attributed to the intervention rather than to preexisting group characteristics.

Following the eight-week intervention period, marked differences emerged between the groups. The experimental group showed substantial improvement in learning motivation, with mean scores increasing by 5.75 points (from 66.43 to 72.18), representing an 8.7% increase in the post-test scores. In contrast, the control group demonstrated only modest change, with mean scores increasing by 1.75 points (from 65.96 to 67.71), a 2.7% increase in the mean score. The magnitude of improvement in the experimental group was more than three times that observed in the control group, providing preliminary evidence for the effectiveness of the Moral Reasoning method.

An analysis of the motivation dimension subscales revealed differential effects across the six measured components of learning motivation. Table 2 presents the posttest means for each dimension by group.

Tabel 2. Posttest Motivation Scores by Dimension

Motivation Dimension	Experimental Group M (SD)	Control Group M (SD)	Difference
Desire to succeed	3.89 (0.67)	3.45 (0.71)	0.44**
Drive and need to learn	3.76 (0.72)	3.38 (0.68)	0.38**
Future aspirations	4.02 (0.58)	3.82 (0.63)	0.20*
Appreciation in learning	3.95 (0.64)	3.52 (0.69)	0.43**
Interesting activities	4.15 (0.61)	3.61 (0.74)	0.54***
Conducive situations	3.87 (0.69)	3.59 (0.72)	0.28*

Note: Scores represent dimension means on a 5-point scale. Significance levels: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The dimension-level analysis revealed that the Moral Reasoning method demonstrated particularly strong effects on students' perceptions that learning activities were interesting and engaging ($d = 0.79$, large effect) and on students' sense of appreciation and recognition in the learning process ($d = 0.65$, medium-large effect). These findings align with theoretical expectations, as the Moral Reasoning method explicitly structures learning around discussions of personally relevant moral dilemmas that naturally engage students' interest and provide opportunities for students to contribute their perspectives and reasoning, thereby experiencing recognition and validation.

Moderate to strong effects were also observed for desire to succeed ($d = 0.64$) and drive and need to learn ($d = 0.56$), suggesting that engagement with moral reasoning activities enhanced students' achievement motivation and sense of learning as meaningful and necessary. Smaller but statistically significant effects were

found for future aspirations (d = 0.33) and conducive learning situations (d = 0.41). The relatively smaller effect on future aspirations may reflect the fact that sixth-grade students' long-term educational and career goals are influenced by many factors beyond specific instructional methods, while the moderate effect on perceptions of conducive learning situations indicates that the discussion-based, interactive nature of Moral Reasoning created a more positive classroom climate compared to conventional instruction.

Statistical Assumption Testing

Prior to conducting inferential statistical tests, the required assumptions for parametric analyses were systematically evaluated. The results of normality testing using the Kolmogorov-Smirnov test indicated that post-test motivation score distributions did not significantly deviate from normality in either the experimental group ($D(28) = 0.142$, $p = 0.253$) or the control group ($D(28) = 0.098$, $p = 0.885$). These non-significant results ($p > 0.05$) support the conclusion that the normality assumption is satisfied, allowing the appropriate use of t-tests for hypothesis testing.

Additionally, Levene's test for equality of variances yielded a non-significant result ($F(1,54) = 0.198$, $p = 0.658$), indicating that the assumption of homogeneity of variance between groups was satisfied. The similar variability in motivation scores across the experimental and control groups (SD = 8.12 vs. 8.45) further supports this conclusion and indicates that the Moral Reasoning intervention did not differentially affect the consistency of motivation across students.

Primary Hypothesis Testing: Group Differences in Learning Motivation

The central research question—whether the Moral Reasoning method produces significantly higher learning motivation than conventional instruction—was addressed through independent samples t-test comparing posttest motivation scores between experimental and control groups. The results provide strong support for the effectiveness of the intervention.

The independent samples t-test revealed a statistically significant difference in post-test learning motivation scores between groups ($t(54) = 2.76$, $p = 0.008$, two-tailed; $p = 0.004$, one-tailed). Students in the experimental group who received instruction through the Moral Reasoning method ($M = 72.18$, $SD = 8.12$) demonstrated significantly higher learning motivation than students in the control group who received conventional instruction ($M = 67.71$, $SD = 8.45$). The magnitude of this difference was 4.47 points on the motivation scale, representing a medium-to-large effect size (Cohen's $d = 0.54$).

According to the conventional interpretations of effect size, Cohen's d values of 0.20, 0.50, and 0.80 represent small, medium, and large effects, respectively. The obtained effect size of $d = 0.54$ therefore represents an educationally meaningful difference that falls between medium and large effect categories. To contextualize this effect size, approximately 71% of students in the experimental group scored above the mean of the control group, and the average student receiving Moral Reasoning instruction demonstrated motivation levels exceeding approximately 71% of students receiving conventional instruction.

The 95% confidence interval for the mean difference (0.94−8.00) provides additional information regarding the precision of the treatment effect estimate. The fact that this confidence interval does not include zero further supports the statistical significance of the difference, while the width of the interval (ranging from quite small to moderately large effects) reflects sampling variability and suggests that replication studies would be valuable for estimating the true population effect more precisely.

To provide the most rigorous test of the intervention effect while controlling for any residual pretest differences between groups, an analysis of covariance (ANCOVA) was conducted with post-test motivation as the dependent variable, group as the independent variable, and pre-test motivation as a covariate. The results confirmed and strengthened the findings of the independent t-test. After statistically adjusting for pretest scores, the difference between groups remained highly significant ($F(1,53) = 12.84$, $p = 0.001$), with adjusted means of 72.29 for the experimental group and 67.60 for the control group, representing a difference of 4.69 points (slightly larger than the unadjusted difference due to small pretest differences favoring the control group).

Within-Group Changes: Pretest to Posttest Comparisons

Paired-sample t-tests examining changes within each group from pre-to post-test provided additional insights into the nature of the intervention effects. In the experimental group, students demonstrated highly significant increases in learning motivation from pretest ($M = 66.43$, $SD = 7.89$) to posttest ($M = 72.18$, $SD = 8.12$), $t(27) = 4.38$, $p < 0.001$, $d = 0.71$. This represents a large within-group effect, indicating that the students' motivation improved substantially over the course of the intervention period.

In contrast, the control group showed a small increase in motivation from pretest ($M = 65.96$, $SD = 8.23$) to posttest ($M = 67.71$, $SD = 8.45$), which was not statistically significant, $t(27) = 1.34$, $p = 0.192$, $d = 0.21$. The small, non-significant change in the control group suggests that conventional instruction maintained students' motivation at roughly baseline levels but did not substantially enhance it.

The contrast between the large, significant improvements in the experimental group and the small, non-significant changes in the control group strengthens the causal inference regarding the intervention effects. If the observed differences were primarily attributable to factors such as maturation, repeated testing, or historical events affecting all participants, both groups would be expected to show similar patterns of change. The differential pattern—with substantial improvement specific to the experimental group—provides strong evidence that the Moral Reasoning method caused increased learning motivation.

Systematic classroom observations provided rich qualitative data illuminating the mechanisms through which the Moral Reasoning method enhanced students' learning motivation. Analysis of observation protocols revealed several consistent patterns distinguishing experimental from control group classroom environments.

Quantitative tracking of students' verbal contributions during instructional sessions revealed dramatically higher participation rates in experimental group classrooms compared to control group classrooms. In experimental sessions, an average of 82% of students made at least one substantive verbal contribution during each class period, compared to only 34% in control group sessions. Furthermore, the distribution of participation was more equitable in experimental classrooms, with contributions coming from students across the achievement spectrum rather than being dominated by a few, high-achieving students.

Observers noted that the moral reasoning discussion format reduced common barriers to participation. Students who rarely volunteered in traditional question-answer formats were observed actively contributing their perspectives on moral dilemmas, apparently motivated by the personal relevance of moral questions and the absence of a single "correct" answer that might make them fear being wrong. One observer noted: "Even students identified by the teacher as typically reticent were seen leaning forward, raising hands, and eagerly sharing their views about what characters should do. The discussion format seemed to provide 'safe' entry points for all students to contribute."

Beyond quantitative participation, the qualitative assessment of the cognitive depth of student contributions revealed marked differences between groups. In experimental group discussions, students frequently demonstrated higher-order thinking skills, including analyzing characters' motivations from multiple perspectives, considering the consequences of different courses of action for various stakeholders, identifying and articulating ethical principles relevant to dilemmas, recognizing inconsistencies in their own reasoning and revising their positions, and generating novel applications of moral principles to situations beyond the immediate text.

In contrast, control group discussions (when they occurred) typically remained at the level of factual recall and literal comprehension only. Students answered questions about what happened in the story, who the characters were, and where events took place, but rarely engaged in the analysis, evaluation, or synthesis of ideas. The cognitive demand and intellectual stimulation appeared markedly different between conditions, with experimental students visibly "thinking hard" about complex questions while control students often appeared to be passively receiving information.

Observers documented numerous instances of students in experimental classrooms making explicit connections between narrative content and their life experiences, often with visible emotional engagement. Students shared personal anecdotes related to moral dilemmas in texts, discussed how story situations related to challenges they faced with friends or family members, and reflected on their moral development and decision-making. This personal relevance appeared to function as a powerful motivational force, transforming narrative texts from academic exercises into tools for understanding and navigating students' lives.

One illustrative example occurred during the discussion of a narrative involving a character who must decide whether to report a friend's cheating to the teacher. Multiple students shared their experiences with similar loyalty dilemmas, debated whether friendship or honesty should take priority, and thoughtfully considered how they might handle such situations. The discussion became animated, with students clearly invested in working through moral reasoning rather than simply completing an assignment. Such personally meaningful engagement was rarely observed in control group classrooms, where texts were treated as objects of academic study disconnected from students' lives.

The Moral Reasoning method appeared to foster the development of more positive classroom climates characterized by respectful dialogue, appreciation for diverse perspectives, and collaborative knowledge construction. Teachers in experimental classrooms established and maintained norms for moral discussions, including listening respectfully to all viewpoints, providing reasons for one's position, asking questions to understand others' reasoning, and focusing on evaluating arguments rather than judging people.

Students internalized and enacted these norms, with instances of students spontaneously asking classmates to explain their reasoning, building on each other's ideas, and respectfully challenging weak arguments while validating the person offering them. This contrasts with control group classrooms, where interaction patterns

tended toward teacher-student dyads with limited peer-to-peer dialogue and occasional competitive or dismissive peer interactions.
The respectful and inclusive climate in experimental classrooms appeared to particularly benefit students who might otherwise be marginalized. Observers noted instances of students with disabilities, students from lower socioeconomic backgrounds, and students with weaker academic skills having their contributions recognized and valued when they offered thoughtful moral reasoning, experiencing affirmation that may be less frequent in traditional, achievement-oriented classroom structures.

B. Discussion

The findings of this study provide strong empirical support for the effectiveness of the Moral Reasoning method in enhancing elementary students' learning motivation for narrative text comprehension. Multiple lines of evidence—quantitative comparison of motivation scores, examination of motivation dimension subscales, analysis of within-group change, and qualitative observation of classroom processes—converge in demonstrating that instruction organized around moral reasoning discussions produces significantly higher student motivation than conventional teaching approaches do.
The observed motivational benefits of the Moral Reasoning method can be understood through multiple theoretical frameworks from educational psychology and motivation research. From a self-determination theory perspective, Moral Reasoning may enhance motivation by better satisfying students' basic psychological needs for autonomy, competence, and relatedness (Avakyan & Taylor, 2024).
The method supports autonomy by providing students with genuine choices in how they interpret and respond to moral dilemmas, respect their perspectives, and avoid the imposition of "correct" answers. Unlike conventional instruction, where students may perceive their role as discovering what the teacher wants to hear, Moral Reasoning discussions position students as agents who construct their own moral understanding. This autonomy support has been consistently linked to enhanced intrinsic motivation in educational setting.
Competence needs are addressed through the scaffolded progression of moral reasoning activities that provide an optimal challenge: ―difficult enough to be engaging but accessible enough for students to experience success. Students develop competence not only in narrative comprehension but also in the valued skill of ethical reasoning, experiencing growth that is recognized and affirmed through the discussion process. The observation that students across achievement levels contributed to moral discussions suggests that the method provides multiple pathways to experience competence beyond traditional academic performance metrics.
Relatedness needs are fulfilled through the collaborative nature of moral reasoning discussions, which foster meaningful connections with peers regarding substantive questions. Students come to know each other not just as classmates but as moral agents with unique perspectives and experiences. The sharing of personal stories and moral struggles creates bonds of empathy and mutual understanding that strengthen students' sense of belonging to the classroom community (Win & Jeffrey Dawala Wilang, 2025).
From an interest development perspective, the Moral Reasoning method capitalizes on the inherently engaging nature of moral questions and narrative literature. Research on interest distinguishes between situational interest (temporary engagement triggered by environmental features) and individual interest (an enduring predisposition to engage with particular content). Moral dilemmas embedded in narratives appear to reliably trigger situational interest through their personal relevance, uncertainty (lacking obvious answers), and social nature (involving relationships and community). Repeated positive experiences with moral reasoning about narratives may foster the development of more stable individual interest in both literature and ethical questions.
Cognitive engagement theories suggest that activities that promote deeper processing, active construction of knowledge, and metacognitive reflection enhance both learning and motivation. The Moral Reasoning method engages students in cognitively demanding activities that require analysis, synthesis, evaluation, and perspective-taking—higher-order thinking skills that are intrinsically engaging for many learners. Furthermore, the method promotes metacognitive awareness as students reflect on their own and others' reasoning processes, examine their assumptions, and consider how their thinking changes through discussion.
The demonstrated effectiveness of the Moral Reasoning method has significant implications for Indonesian language education policy and practice. First, the findings suggest that narrative text instruction should not be limited to technical comprehension skills (identifying main ideas, recalling details, understanding vocabulary) but should explicitly engage students in analyzing and discussing the moral and ethical dimensions of the narratives. The Indonesian language curriculum already includes character education objectives, and the Moral Reasoning method provides a concrete pedagogical approach for authentically integrating character development with literacy instruction rather than treating them as separate curricular domains.
Second, teacher professional development programs should include preparation for facilitating moral reasoning discussions, including skills such as selecting narratives containing appropriate moral dilemmas,

crafting questions that promote moral reasoning, managing discussions to ensure broad participation and respectful dialogue, recognizing and promoting progression through levels of moral reasoning, and maintaining non-judgmental facilitation that encourages student thinking rather than imposing adult conclusions. These facilitation skills differ from those emphasized in conventional teacher training, which focuses on content transmission, and may require explicit instruction and practice opportunities.

Third, this study highlights the value of discussion-based, student-centered pedagogies in elementary classrooms. While Indonesian education has increasingly emphasized active learning in policy documents, classroom practice often remains teacher-centered, particularly in rural schools such as the research site. Demonstrating the motivational and educational benefits of methods such as Moral Reasoning may encourage the broader adoption of active learning approaches. Fourth, the integration of moral education and literacy development exemplified by the Moral Reasoning method offers an efficient approach to addressing multiple educational goals within limited instructional time. Rather than adding separate character education lessons to an already crowded curriculum, teachers can address moral development within existing Indonesian language instruction, achieving a synergy between literacy and character objectives.

While this study provides valuable evidence for the effectiveness of the Moral Reasoning method, several limitations should be acknowledged. Although the quasi-experimental design is appropriate for the school setting, it does not provide the same level of causal certainty as a randomized controlled trial. Although groups were equivalent at pretest and assignment was administratively determined rather than related to research variables, unobserved differences between classes could have potentially-influenced results.

The study was conducted in a single school in a rural area of North Sumatra; replication across diverse geographic, socioeconomic, and cultural contexts would strengthen generalizability of findings. Urban schools, private schools, and schools serving different populations may respond differently to the intervention. Additionally, the eight-week intervention period, while sufficient to demonstrate initial effects, does not address questions about long-term sustainability of motivational benefits or potential changes in effectiveness as the novelty of the method diminishes.

Future research should examine several important questions: Do the motivational benefits of Moral Reasoning instruction persist beyond the intervention period, or do they require ongoing implementation to be maintained? Does enhanced motivation translate into improved reading comprehension, writing quality, or other achievement outcomes How do students at different stages of moral development respond to the method, and can the instruction be further differentiated to optimize the effects? What are the essential components of effective moral reasoning discussions—which aspects must be implemented with high fidelity and which can be flexibly adapted to different contexts?

Investigating the moderators of intervention effects would also be valuable. Student characteristics, such as gender, prior achievement, socioeconomic status, and personality traits, may influence responsiveness to Moral Reasoning instruction. Teacher characteristics, including teaching experience, philosophical orientation, discussion facilitation skills, and comfort with moral ambiguity, likely affect implementation quality and student outcomes. Understanding these moderating factors would enable more targeted and effective applications of this method.

Finally, research examining the mechanisms linking Moral Reasoning instruction to enhanced motivation would deepen theoretical understanding. Mediation analyses were conducted to test whether specific psychological processes (autonomy support, competence development, interest, and cognitive engagement) accounted for the observed motivational benefits. Process-oriented qualitative research could provide detailed accounts of how motivation evolves over the course of an intervention and which specific instructional moments or experiences students identify as motivating.

IV. CONCLUSIONS

This quasi-experimental study examined the effect of the Moral Reasoning method on sixth-grade students' learning motivation in understanding narrative texts at SD Negeri 061 Mompangnjulu, Mandailing Natal Regency. The research employed a Pretest-Posttest Nonequivalent Control Group design with 56 students divided into experimental and control groups, utilizing observation, questionnaire, and documentation methods for data collection. The findings conclusively demonstrate that the Moral Reasoning method produces significantly higher learning motivation than conventional instructional approaches. Students in the experimental group showed mean posttest motivation scores of 72.18 compared to 67.71 in the control group, a statistically significant difference ($p = 0.01$, $p < 0.05$) representing a medium to large effect size (Cohen's $d = 0.54$). The experimental group demonstrated significant improvement from pretest to posttest (5.75 points), while the control group showed minimal change (1.75 points). Effects were particularly pronounced for students' perceptions that learning activities were interesting and engaging and that they experienced

appreciation and recognition in learning. Qualitative classroom observations revealed that the Moral Reasoning method enhanced motivation through several mechanisms: increased active participation across all achievement levels, deeper cognitive engagement with narrative content, stronger emotional connections through personally relevant moral discussions, and more positive classroom climates characterized by respectful dialogue and collaborative knowledge construction. Students demonstrated higher-order thinking skills including analyzing multiple perspectives, evaluating ethical principles, and connecting textual content to their lived experiences.

Funding Statement

"No external funding was received for this study."

Ethical Compliance

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments, or comparable ethical standards.

Data Access Statement

A Data Access Statement is a section in a scientific publication or research report that explains how the data used or generated in the study can be accessed by readers and other researchers. This statement aims to promote transparency, support research reproducibility, and comply with open-access policies, where applicable.

Common Elements in a Data Access Statement:

1. Data Location: Specifies where the data are stored, such as in online repositories (e.g., Zenodo, Dryad, or institutional repositories).
2. Access Instructions: Provides information on how to access the data, such as direct links, DOI (Digital Object Identifier), or contact details.
3. Data Availability: Indicates whether the data are publicly accessible, available upon request, or restricted due to ethical, legal, or privacy considerations.
4. Data Licensing: If the data are open, specify the applicable license (e.g., Creative Commons).

Examples of Data Access Statements:

1. Open Data:
   - "The data supporting this study are openly available in Zenodo at [DOI:10.xxxx/zenodo.xxxx]."
2. Restricted Data:
   - "The data that support the findings of this study are available upon request from the corresponding author. Due to privacy concerns, the data are not publicly available."
3. No Data Available:
   - "No datasets were generated or analyzed during the current study."
4. Conditional Access:
   - "The data supporting this study are available under restricted access and can be obtained upon reasonable request from the corresponding author and with the permission of the ethics committee."

Purpose of a Data Access Statement:

- Reproducibility: Enables other researchers to replicate or verify the findings.
- Collaboration: Encourages further collaboration by sharing data.
- Compliance: Adheres to the policies of funding agencies or journals that require open access to data.

Conflict of Interest Declaration

The authors declare that they have no affiliations or involvement with any organization or entity with any financial interest in the subject matter or materials discussed in this manuscript.

ACKNOWLEDGEMENTS

The author thanks all people and institutions in most cases, sponsors, and financial support acknowledgments.

REFERENCES

[1] Avakyan, E. I., & Taylor, D. C. M. (2024). *The effect of flipped classroom on students' basic psychological needs: autonomy, relatedness and competence and its association with self-esteem*. https://doi.org/10.21203/rs.3.rs-4817369/v1

[2] Cahyaningrum, D.-. (2025). ANALISIS CERPEN "THE ENCHANTED FISH" PADA BUKU BAHASA INGGRIS- STUDI DAN PENGAJARAN UNTUK SMA/MA/SMK/MAK DENGAN KODE SEMIK (KAJIAN SEMIOTIK ROLAND BARTHES). *Prosodi*, *19*(1), 32–46. https://doi.org/10.21107/prosodi.v19i1.26092

[3] Creswell, J. W. (2021). *Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). SAGE Publications.*

[4] Howard Kerr, A. (2025). Empowering higher education through heutagogical assessment strategies. *ASCILITE Publications*, 73–75. https://doi.org/10.65106/apubs.2025.2755

[5] Many, H. (2024). Creating An Empowering Learning Environment in Higher Education: A Modelization of Enhancing Student Learning Experience. *Canadian Journal of Educational and Social Studies*, *4*(4). https://doi.org/10.53103/cjess.v4i4.263

[6] Mudzakkir. (2024). Understanding Moral Psychology in Context: Emotions, Reasoning, and Social Norms. *Psychosocia : Journal of Applied Psychology and Social Psychology*, *2*(4), 211–233. https://doi.org/10.61978/psychosocia.v2i4.785

[7] Nicolosi, F., de Laurentis, C., Giussani, C., Marcus, H. J., Spena, G., & Ammar, A. (2024). Mixed Reality and Metaverse. In *Ethical Challenges for the Future of Neurosurgery* (pp. 141–159). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-71477-1_13

[8] Nurmaya, A., Ramli, M., Atmoko, A., & Akbar, S. (2025). Integrating Local Wisdom into Moral and Character Education to Foster Students' Moral Reasoning: An Embedded Mixed-Methods Study. *Journal of Cultural Analysis and Social Change*, 74–88. https://doi.org/10.64753/jcasc.v11i1.3139

[9] Puderbach, L., Laun, M., & Wolff, F. (2025). Impact of Telepresence Robots on Students' Basic Psychological Need Satisfaction and Intrinsic Motivation in Higher Education. *Psychology Learning & Teaching*. https://doi.org/10.1177/14757257251407697

[10] Ramadhan, A. F., Baharudin, Azizah, N., Hijriyah, U., & Susanti, A. (2025). Academic Resilience of Students: What Is Its Relationship with Learning Motivation of Islamic Education Students? *Indonesian Journal of Innovation Studies*, *26*(3). https://doi.org/10.21070/ijins.v26i3.1442

[11] Sugiyono. (2019). *Metode penelitian pendidikan: Pendekatan kuantitatif, kualitatif, dan R&D. Alfabeta.*

[12] Tabullo, Á. J., Benegas, J. M., & Vernucci, S. (2023). The role of executive functions in the comprehension of expository and narrative texts by high school students. *Suma Psicológica*, *30*(2), 30–39. https://doi.org/10.14349/sumapsi.2023.v30.n2.4

[13] Vaghamshi, B. (2025). *Modern Learning Paradigms Beyond Traditional Supervision: A Comprehensive Survey*. https://doi.org/10.14293/PR2199.002416.v1

[14] Win, A. T., & Jeffrey Dawala Wilang. (2025). Integrating Values Education into Teaching: Perspective from Subject Teachers in Thailand. *HUMAN BEHAVIOR, DEVELOPMENT and SOCIETY*, *26*(3), 459–472. https://doi.org/10.62370/hbds.v26i3.281917