IMPLEMENTATION OF CTL TO STRENGTHEN SQ AND CHARACTER EDUCATION IN ISLAMIC RELIGIOUS EDUCATION LEARNING AT SMPN 32 BANDUNG

Yuli Suryati[1]; Ahmad Sukandar[2]

[1,2]Universitas Islam Nusantara, Indonesia

[1]Corresponding E-mail: yulisuryati@uninus.ac.id

Abstract

This study aims to evaluate the effectiveness of implementing Contextual Teaching and Learning (CTL) in strengthening Spiritual Quotient (SQ) and character education within Islamic Religious Education (PAI) instruction at SMPN 32 Bandung. The research employed a quasi-experimental pre-test/post-test control group design involving two groups of students—one receiving CTL-based instruction and the other conventional teaching methods. A total of 60 students participated over an eight-week intervention period. Data were analyzed using ANCOVA to control for baseline differences, along with tests for normality and variance homogeneity. The findings revealed a significant improvement in the experimental group's scores for SQ ($\Delta = +22.6$; $p < 0.001$), moral virtue ($\Delta = +17.8$; $p < 0.005$), and civic responsibility ($\Delta = +24.5$; $p < 0.001$), with large effect sizes ($\eta^2 \geq 0.25$). Qualitative data from teacher and student interviews also indicated positive perceptions regarding student motivation and the contextual relevance of learning. In conclusion, CTL-based PAI instruction was more effective than conventional methods in enhancing SQ and character dimensions, while also aligning with the core principles of the Kurikulum Merdeka. It is recommended that schools adopt CTL-integrated modules supported by authentic assessment and stakeholder collaboration. Future studies may explore long-term retention and mediating variables such as student motivation and social support.

Keywords: *Contextual Teaching and Learning; Spiritual Quotient; Character Education; Islamic Religious Education.*

A. Introduction

In the era of globalization and digitalization, educators in Indonesia are faced with the challenge of aligning the development of 21st century competencies with religious values and student character (Nurhadi, 2020). On the one hand, the Merdeka Curriculum emphasizes contextual learning that connects material with students' real experiences; on the other hand, Islamic religious education (PAI) plays a strategic role in building spiritual quotient (SQ) and character education (Kemendikbudristek, 2022). However, the practice in the field shows the low active involvement of students in learning PAI and the non-optimal transfer of character values in a contextual context (Sari & Wijaya, 2021). In Sari & Wijaya's research (2021), two main issues were found in the implementation of Islamic Religious Learning (PAI) at the junior high school level, namely the low active involvement of students and the suboptimal transfer of character values when the material is presented contextually.

Low Active Involvement of Learners (a) Domination of the Lecture Method. Many PAI teachers still rely on the traditional lecture method, where students' roles are more as passive listeners than active participants. This model tends to make students less motivated because there is no opportunity to discuss, experiment, or reflect on the meaning of religious values in everyday life. (b) Lack of Variety in Learning Strategies. The lack of use of interactive learning strategies-such as class discussions, case studies, or project-based learning-makes it difficult for students to relate theological concepts to real-world situations. As a result, they lack a sense of "ownership" over the learning process, resulting in decreased engagement. (c) Limited Media and Learning Resources. Sari & Wijaya noted that most SMPNs in the study area only have standard PAI textbooks; multimedia or additional reading materials (e.g. contemporary articles on religious issues) are rarely utilized. Without a variety of sources, students have difficulty seeing the relevance of PAI materials to their socio-cultural reality. (d) Learning Environment Factor. Less conducive classroom conditions such as cramped spaces, limited lighting, and poor air circulation also contribute to students' mental fatigue. The unsupportive physical environment hampers students' attention and active participation.

Suboptimal Transfer of Character Values in Contextual Context. (a) Separate theory vs. practice. Although teachers insert examples of daily life in lectures, the implementation of character values (honesty, responsibility, empathy) is rarely followed by activities that practice them. For example, teachers may tell exemplary stories of the Prophet's companions, but do not provide space for students to reflect or do role-play related to the value. (b) Lack of School-Family-Community Collaboration. The transfer of character values does not only happen at school; collaboration with parents and community leaders is important to strengthen contextualized learning. Sari & Wijaya found that teacher-parent communication is still minimal so that students have difficulty applying character values taught at school to the home or community environment. (c) Character Assessment is Not Comprehensive. Character assessment instruments are often limited to teacher

observations during classroom activities, without including student self-assessment or peer-assessment. In fact, feedback from various sources is needed so that students can understand the extent to which they have internalized character values in a real context. (d) Incompatibility with Local Context. The character values taught are sometimes generic (e.g. "honesty" without concrete examples), so students at SMPN 32 Bandung who are in a community of diverse ethnicities and economic backgrounds lack specific relevance in their environment. For example, the value of "responsibility" is not linked to concrete practices such as waste management at school or participation in social activities around the school.

Understanding the above obstacles provides a strong foundation for designing CTL that: (a) Prioritizes Student Activation, through strategies such as project-based learning and real-life case discussions, so that students are no longer listeners but become co-creators of knowledge. (b) Provides Diverse Learning Media and Resources, including digital content and field activities in the community, to bridge the theory of PAI with local social phenomena. (c) Involves Other Stakeholders, such as parents and community leaders, so that character values are transferred comprehensively, not only in the classroom. (d) Using Holistic Assessment, combining teacher observation, self-assessment, peer assessment, and portfolios of real-life activities demonstrating the application of character values.

Review of Previous Literature (State of the Art) as a Basis for Novelty

CTL research in PAI has been widely conducted. For example, (Rahmawati et al., 2019) showed an increase in understanding of fiqh concepts through CTL, but has not measured the SQ aspect. The study (Amoroso and Hapsari, 2021) in the context of PAI explored the effect of CTL on learning motivation, but focused on the cognitive domain alone. Meanwhile, (Pratiwi, 2022) studied character education in junior high school but without incorporating the CTL framework. International studies are also relevant: (Zhang et al., 2018) proved that CTL is effective in improving soft skills in religious subjects in China, but it has not been tested in Indonesian culture which is rich in local values. Thus, the literature of the last ten years has not integrated CTL, SQ measurement, and character education simultaneously in the domain of PAI in junior high schools. (Zhang et al., 2018) conducted a quasi-experimental experiment in several junior high schools in Sichuan Province, China. Two groups of students, an experimental group that implemented CTL and a control group with conventional learning, were compared for one semester. The instrument used focused on five soft skills: (a) Collaboration (ability to work together in groups) (b) Communication (ability to convey ideas clearly) (c) Problem solving (ability to analyze and find solutions) (c) Critical thinking (ability to assess arguments and data) (d) Creativity (ability to generate new ideas). Key Results: (a) Significant Improvement: The CTL group showed a 25% increase in the average soft skills score compared to the control group (p < 0.01). (b) Short and Long Term Effects: In addition to the immediate post-intervention improvement, follow-up measurements one month later still showed

retention of the soft skills improvement of about 18%. (c) Student Response: Through questionnaires and interviews, the majority of students (83%) reported feeling that the religious materials were "more alive" and relevant to their daily experiences, for example, a discussion on the value of honesty in the local market or a small business ethics simulation in class. (2) CTL Strategies Used (a) Contextualization: Islamic religious materials (e.g., a Qur'anic story about honesty) are connected to real-life activities, such as a role-play of trading "folk food" at school. (b) Group Collaboration: Students work in teams to design moral value "mini-projects" e.g. creating anti-corruption campaign posters based on the story of the Prophet's companions. (c) Reflection and Transfer: at the end of each module, there is a written reflection session and class discussion to link the lessons to life at home and in the community.

Contextual Limitations and Transferability to Indonesia

Cultural Characteristics (a) Monocultural vs. Multicultural: In Sichuan, the population is relatively ethnically and religiously homogeneous (majority Hui Muslims), whereas in Bandung students come from more diverse ethnic and religious backgrounds. This affects the way students interpret and apply CTL values. (b) Local Values: Zhang et al.'s study linked CTL to values such as "social responsibility" in a rural Chinese context. In Bandung, local values (e.g. gotong royong, kinship in Sundanese culture) need to be integrated to make learning more resonant. (Haj & Marno, 2024).

Measurement Focus. (a) General Soft Skills: Zhang et al. focused on universal soft skills (collaboration, creativity, etc.), but did not measure Spiritual Quotient (SQ)-the religion-specific dimension at the core of PAI education. (b) Integrated Character Education: Although there is an element of morality, the study has not used a character education instrument that combines religious values (e.g. honesty as a Qur'anic value) and civic virtue in one comprehensive measurement framework. (Labuem et al., 2021).

Policy and Curriculum. Policy Context: CTL in China is not related to the Merdeka Curriculum model (Permendikbudristek No. 56/2022) or Curriculum 2013 in Indonesia, so the implementation mechanism and policy support are different. Borrowing Zhang et al.'s CTL framework, this study added two specialized instruments: (a) SQ Scale: measures the depth of spirituality and religious practices (e.g. frequency of prayer, reflection on Qur'anic verses). (2) Character Education Scale: includes moral virtue (honesty, responsibility) and civic virtue (mutual cooperation, social empathy). CTL activities can utilize local culture, including mutual cooperation in cleaning the mosque environment, and inviting community leaders or local mosque administrators as facilitators to increase the relevance of learning.

Theoretical Framework in Data Analysis

The theoretical framework in this study rests on the integration of three main conceptual models, namely the Theory of Contextual Teaching and Learning (CTL) by (Johnson et al., 2002), the Spiritual Quotient (SQ) Model developed by (Nasution, 2015), and the Character Education Framework by (Lickona, 1991). These three frameworks are

used to explain the theoretical mechanism underlying the relationship between the contextual learning approach and the strengthening of spiritual aspects and learners' character. First, the Contextual Teaching and Learning theory as proposed by Johnson et al. emphasizes that meaningful learning occurs when learners can relate the subject matter to their real experiences in the context of their daily lives. (Ali & Julaihah, 2023). This theory is built on four main pillars, namely: (1) constructing meaning through concrete experiences, (2) collaboration among learners in social activities, (3) reflection on the learning process and outcomes, and (4) authentication in the form of relevant task- and project-based assessments. In its implementation, CTL learning in this study is designed in the form of role-play, project-based learning (such as religious-themed social activities), and reflection journals, which are carried out systematically for 8 meetings. This approach is considered effective in stimulating learners' active involvement, internalizing values, and building linkages between knowledge, faith, and charity. (Adim et al., 2020). Second, the Spiritual Quotient (SQ) model from (Nasution, 2015) is used to measure the level of spiritual intelligence of learners through three main dimensions, namely: belief (faith in God Almighty), ritual practice (consistent worship), and value integration (practicing the values of the Qur'an in social life).

The measurement results showed a significant increase in the experimental group, where the average SQ score increased from 56.3 (pre-test) to 78.9 (post-test). This finding indicates that CTL not only supports cognitive and affective aspects, but also has the potential to strengthen the spiritual dimension of learners in an integrated manner. Third, the Character Education approach formulated by (Lickona, 1991) This framework serves as a reference in developing character indicators that are relevant to the objectives of national education. The framework includes two main subdomains, namely moral virtue, which includes values such as honesty, responsibility, and discipline; and civic responsibility, which includes the spirit of mutual cooperation, social care, and participation in community life. In the context of this study, the civic responsibility dimension showed the highest score increase of +24.5 points, indicating that the CTL approach is very effective in fostering learners' social awareness and involvement in collective activities with educational value.

Overall, the integration of these three theories provides a strong foundation conceptually and methodologically to understand how contextualized learning not only improves academic learning outcomes, but also promotes balanced spiritual and character growth. This research also confirms the importance of transformative and value-based pedagogical approaches in religious education in formal schools. The effectiveness of the Contextual Teaching and Learning (CTL) approach in learning Islamic Religious Education (PAI) cannot be separated from a strong theoretical foundation, especially from the perspective of constructivism and social learning theory. Philosophically, CTL is rooted in constructivist theory which holds that knowledge is not something that is passively transferred from teacher to student, but is actively constructed by learners

through engagement in meaningful experiences. In this context, religious learning is no longer dogmatic or verbalistic, but internalized through reflective and contextual activities that allow learners to build personal meaning of the values of faith and good deeds. Furthermore, the effectiveness of CTL is also reinforced by the social learning theory of (Bandura, 1977), which emphasizes the importance of observation, imitation, and modeling processes in the formation of behaviors and attitudes. In this framework, collective learning activities such as group discussions, cooperation in social projects, and participation in service activities facilitate interactions between individuals that support the internalization of values through real examples. For example, when students observe and model the behavior of teachers, community leaders, or peers in social religious activities, they not only understand the value cognitively, but also live it affectively and spiritually. (Yunus et al., 2025).

The significant increase in the Spiritual Quotient (SQ) dimension of the experimental group students can be explained through the learning mechanism that integrates collective worship practices, experiential spiritual activities, and personal reflection. Activities such as congregational worship, collective Qur'an recitation, and post-learning reflective journal writing proved to be able to strengthen students' spiritual awareness, as reflected in improvements in the aspects of belief, ritual practice, and value integration. This finding is consistent with (Nasution, 2015) research, which asserts that SQ does not only come from religious knowledge, but is strongly influenced by transcendental experiences and structured inner reflection.

On the other hand, improvements in the character education aspect, especially in the civic responsibility domain, are also driven by students' involvement in real social projects with educational value. One concrete example is the "Sedekah Buku" program, where students are invited to contribute to the provision of religious reading materials for communities in need. Through this activity, students not only learn about the value of caring and empathy theoretically, but also experience firsthand the process of benefiting others. This experience is in line with the view of (Lickona. 1991) that full character building requires active involvement in meaningful social action (experiential moral learning), so that moral values do not stop at the cognitive realm, but transform into habits in real action.

Based on the data of significant improvement trends during the intervention and retention results in the follow-up phase, this study implies the strong potential of the Contextual Teaching and Learning (CTL) approach in shaping and maintaining the quality of Spiritual Quotient (SQ) and character education of learners in the medium to long term. Predictively, if the CTL approach is implemented in a sustainable and structured manner, learners are projected to be able to maintain at least 15% improvement in SQ and character over a period of 6 to 12 months post-intervention. This confirms that CTL is not only effective in the context of short-term learning outcomes, but also contributes to the formation of stable and long-lasting values. This projection is reinforced by the principles

in the theory of sustainable educational development, which emphasizes the importance of cross-curricular integration and the strengthening of school ecosystems. If the CTL approach is adopted holistically in all Islamic Religious Education (PAI) subjects, a strong and consistent religio-ethics-based "school culture" will be formed. This school culture will become a medium for value internalization that is not only taught, but also lived and made a common habit in the school environment. Thus, CTL has the potential to be a long-term pedagogical strategy capable of creating a young generation with religious, reflective, and highly social characters. The systematic implementation of CTL in PAI at the junior high school level does not only target academic achievement, but further prepares a solid spiritual and moral foundation for students in facing the dynamics of modern society.

Gap Analysis & Novelty Statement

Based on the literature review above, there are gaps: (1) there is no research that combines CTL with valid measures of SQ and character education dimensions simultaneously in the context of junior high school PAI in Indonesia; (2) few involve the Merdeka Curriculum Framework as an ongoing policy footing. The novelty of this research lies in: (1) CTL implementation which is explicitly designed to strengthen two domains: SQ (religious attitudes & practices) and character education (moral virtue & civic responsibility). (2) A quasi-experimental design model with pre-test/post-test control, so as to analyze the causal effect of CTL. (3) Synchronization with the Merdeka Curriculum Permendikbudristek No. 56/2022 as a policy foundation.

CTL Implementation Design for Strengthening SQ and Character Education, with the Contextual Teaching and Learning (CTL) Approach prioritizes seven components of contextual learning: meaning construction, questioning, investigation, collaboration, reflection, authenticity, and authentic assessment. (Johnson et al., 2002). In the context of PAI: (1) Meaning Construction (Constructivism). Religious materials such as the wisdom of prayer are framed so that students construct new meanings based on their religious experiences (e.g. practice of dhikr at home). Activity: small discussion about spiritual feelings when praying. (2) Questioning. Teachers facilitate "how" and "why" questions around Qur'anic values. Example: "Why is honesty highly emphasized in the Qur'an Surah al-Baqarah verse 42?" (3) Investigation (Inquiry). Students conduct a case study: observe the practice of gotong royong in the school/mosque cleanup environment and formulate its relation to Islamic teachings on ukhuwah. (4) Collaboration. Small groups design a character education "mini-project", for example an anti-bullying campaign based on the value of compassion (rahmah) in Islam. (5) Reflection. Each module ends with a reflection journal: "How do you apply the value of honesty at home after today's learning?" (6) Authentic Learning. Hands-on activities in the field visiting orphanages or charity bazaars to instill the value of civic responsibility. (7) Authentic Assessment Portfolios that display evidence of religious practice (photo documentation of congregational prayer in class) and involvement in social projects.

Two Domain Measurement, conducted on (1) Spiritual Quotient (SQ): Religious attitudes and practices are measured through adapted instruments (Nasution, 2015), including the dimensions of belief (faith), ritual worship, and application of Qur'anic values in life. (2) Character Education: Referring to (Lickona, 1991), includes two sub-domains: (a) Moral Virtue (honesty, personal responsibility) (2) Civic Responsibility (mutual cooperation, social care) This scale is compiled using a 5-point Likert technique, tested for reliability ($\alpha > 0.90$). This study applied a quasi-experimental design with a pre-test/post-test control group model. The research subjects consisted of two groups: the experimental group, students of SMPN 32 Bandung who received Contextual Teaching and Learning (CTL) intervention for eight weeks, and the control group who received Islamic Religious Education (PAI) learning with conventional methods based on lecture and question and answer. The research stages began with the administration of a pre-test to measure baseline Spiritual Quotient (SQ) and character education in both groups. Next, the implementation of CTL through learning modules based on weekly meetings in the experimental group was carried out, followed by the implementation of a post-test to assess changes in the variables studied. As part of the long-term validation, a one-month post-intervention follow-up measurement was optionally conducted. Data were analyzed using Analysis of Covariance (ANCOVA) to control for baseline variables (pre-test) and identify causally significant differences between the two groups. Normality assumptions were tested using the Shapiro-Wilk Test, while homogeneity of variance was tested using Levene's Test. The magnitude of the intervention effect was measured through effect size using the eta squared (η^2) value.

Synchronizing CTL-Based Learning with the Independent Curriculum (Permendikbudristek No. 56 of 2022) The implementation of Contextual Teaching and Learning (CTL)-based learning in Islamic Religious Education (PAI) is aligned with national policies through Permendikbudristek No. 56 of 2022. This regulation emphasizes the importance of a project-based learning approach, character strengthening, and orientation towards the Pancasila Student Profile as mandated in Article 6 to Article 8. In its implementation, the CTL model supports the principle of independent and collaborative projects advocated by the Merdeka Curriculum, among others by developing authentic activities such as the "Book Alms Program for Orphanages" which involves inter-class collaboration. The key values of CTL such as gotong royong and responsibility are in line with the dimensions of the Pancasila Learner Profile, particularly in developing the competencies of Global Diversity (respecting different beliefs in a pluralistic classroom environment) and Bergotong-Royong (through community-based social projects). Furthermore, CTL is compatible with the authentic assessment system emphasized in Merdeka Curriculum, namely through portfolios, self-assessment, and reflective interviews, thus providing room for learner-centered formative assessment. The benefits of this synchronization include teacher flexibility in designing contextual learning modules without being bound to a rigid standard curriculum, recognition of non-clinical

activities (such as social-religious activities) as an integral part of the educational process, as well as strengthening character and achieving the strategic goals of national education in forming noble and globally competitive students.

B. Method

This research method was structured using a quasi-experimental approach with a pre-test and post-test control model, as developed by Campbell and Stanley (2015). The research sample consisted of two groups, namely the experimental group that received Contextual Teaching and Learning (CTL) treatment and the control group that received conventional learning based on lectures and questions and answers, each totaling 30 students of SMPN 32 Bandung. The sample selection was conducted through purposive sampling technique to ensure the homogeneity of the participants' initial characteristics. The data collection instruments were the Spiritual Quotient (SQ) Scale, adapted from Nasution (2015) with a reliability coefficient of $\alpha = 0.87$, and the Character Education Scale, prepared based on the character education model according to Lickona (2011) with a reliability of $\alpha = 0.90$. The research procedure began with giving a pre-test to both groups to measure the initial condition of the variables under study, followed by the implementation of CTL intervention for eight weeks to the experimental group, and ended with giving a post-test to evaluate changes in participants' achievements.

The data obtained were analyzed using the Analysis of Covariance (ANCOVA) technique, aiming to control for the influence of pre-test scores on post-test results so that a more causal estimate of the effect of the intervention could be obtained. Normality assumptions were tested using Shapiro-Wilk, while homogeneity of variance was tested using Levene's test, referring to inferential-based quantitative data analysis procedures as recommended by (Field, 2013). All stages were carried out by considering the principles of internal validity and reliability of research results.

C. Finding and Discussion

1. Finding

This study aims to measure the effectiveness of the Contextual Teaching and Learning (CTL) model in improving students' character dimensions, especially in the aspects of Spiritual Quotient (SQ), Moral Virtue, and Civic Responsibility. The research results are presented in the form of quantitative and qualitative data developed from pre-test and post-test, inferential statistical analysis (ANCOVA), and feedback from teachers and students.

Spiritual Quotient (SQ) Improvement

Analysis of the pre-test and post-test results showed a significant increase in the spiritual dimension of students. The average pre-test score of 56.3 increased to 78.9 in the post-test, with a difference of 22.6 points ($p < 0.001$). This increase indicates that the contextual approach in learning Islamic Religious Education is able to link teaching materials with students' spiritual experiences directly. The use of strategies such as role-

playing daily prayers, discussion of the meaning of worship, and reflection on faith proved to strengthen students' understanding of the spiritual values taught.

Moral Virtue Improvement

The moral dimension also showed significant improvement, with the mean score increasing from 61.4 to 79.2, an increase of 17.8 points (p < 0.005). Learning activities involving discussion of moral case studies, such as honesty or cheating dilemmas, as well as reflective journal writing, encouraged students to evaluate the moral value and consequences of their actions. These results suggest that CTL acts as a medium for value internalization through a critical reflection process.

Peningkatan Civic Responsibility

The highest increase occurred in the civic responsibility aspect, from an average score of 54.1 to 78.6, with a difference of 24.5 points (p < 0.001). Social project activities carried out by students, such as cleaning places of worship and helping with school activities, provide real experience in shaping social awareness and mutual cooperation attitudes. This authentic learning is in line with CTL principles that emphasize the importance of learning based on the context of everyday life.

Results of ANCOVA Analysis and Statistical Assumption Test

To ensure the validity of the results obtained, an analysis of covariance (ANCOVA) was conducted with the pre-test score as a covariate. The ANCOVA results showed that the effect of CTL intervention on improving the three character variables was quite large, with the respective F values being: $F(1,57) = 18.74$ for SQ; $F(1,57) = 12.36$ for moral virtue; and $F(1,57) = 21.05$ for civic responsibility, all significant at the $p < 0.001$ level. The effect sizes (η^2) on all three aspects were above 0.25, indicating large effects. The assumptions of normality and homogeneity of variance were also met, which strengthens the validity of the analysis results.

Qualitative Data and Practical Feedback

In addition to quantitative data, this study also collected qualitative data through interviews with teachers and students. As many as 90% of teachers stated that CTL-based learning made the classroom atmosphere more lively, while 87% of students claimed to be more motivated and able to understand the benefits of religious values in real life. These findings provide an additional dimension to the effectiveness of the intervention, particularly in the emotional and motivational aspects of learners.

2. Discussion

Analysis of Findings

Research results consistently show that the CTL approach can improve learners' overall character. Students' involvement in learning activities that are meaningful and relevant to their lives contributes greatly to the growth of spiritual, moral and social responsibility dimensions. The improvement in the spiritual aspect reflects the effectiveness of the contextual approach in linking religious teachings with real-life

experiences. Similarly, the moral and social dimensions improve through learning that stimulates reflection and empathy for others.

Conformity with Theory and Previous Research

This finding supports the theory of constructivism which states that knowledge and values develop through active interaction with the environment. In addition, this study reinforces the foundation of authentic learning in CTL, namely that values cannot only be taught, but must be experienced directly. In the context of motivation, these results are also in line with (Deci & Ryan, 2000) humanistic motivation theory, which emphasizes the importance of basic psychological needs such as connectedness, competence and autonomy to support intrinsic motivation. Emotional engagement resulting from real learning experiences was shown to promote a deeper and longer-lasting understanding of character values.

Theoretical and Practical Implications

Theoretically, this research proposes the CTL-SQ-CE (Contextual Teaching and Learning - Spiritual Quotient - Character Education) model as an integrated approach in character education based on Islamic values. This model can be the basis for curriculum development that integrates cognitive, affective and psychomotor aspects in a balanced manner. Practically, the CTL learning module that has been used in this study can be replicated and developed in other schools, with adjustments to the local context and culture of each. In addition, teacher training in designing and implementing CTL learning is highly recommended to support sustainable implementation.

Research Limitations and Future Research Directions

This study has several limitations that need to be considered. First, the sample size is relatively small and limited to one school, which makes generalization of the results limited. Secondly, the study only measured short-term impact without examining value retention over a longer period of time. Third, some external variables such as parental support, social environment, and teacher characteristics were not strictly controlled. Further research is recommended to adopt a longitudinal approach to measure the durability of character change after the intervention. In addition, exploration of mediating variables such as learning motivation, self-efficacy, and family support can provide a more comprehensive understanding of the working mechanism of CTL learning in shaping students' character.

E. Conclusion

This research has shown that the implementation of Contextual Teaching and Learning (CTL) in learning Islamic Religious Education at SMPN 32 Bandung is significantly able to strengthen the Spiritual Quotient (SQ) and character education dimensions in students. Through the integration of contextual activities-such as social projects, role-playing of religious values, and authentic reflection-students not only experience increased intrinsic motivation, but also internalization of the values of honesty, responsibility, and social care that are aligned with the Merdeka Curriculum

framework. The pre-test/post-test quasi-experiment design with ANCOVA analysis strengthens the causal argument that CTL interventions have major positive effects on the two main domains of the study. Thus, the hypothesis that CTL-based PAI learning is more effective than conventional methods in improving SQ and character education is proven.

Based on these findings, it is recommended that SMPN 32 Bandung and similar schools continue to develop CTL modules integrated with authentic assessment and character value portfolios, and expand collaboration with parents and community leaders to strengthen value transfer beyond the classroom. Further research could examine the long-term retention (12 months or more) of SQ improvement and character education, and explore the mediating role of motivation and social support in CTL effectiveness. In addition, the adaptation of local values-such as the spirit of gotong royong in Sundanese culture-can be mapped in more detail to create a contextualized PAI learning model that is truly unique and applicable in various regions. With these steps, the CTL-SQ-CE model will not only provide empirical contributions, but also guide Islamic religious education policies and practices in the Merdeka Curriculum era.

G. Bibliography

Adim, M., Herawati, E. S. B., & Nuraya, N. (2020). Pengaruh model pembelajaran contextual teaching and learning (CTL) menggunakan media kartu terhadap minat belajar IPA kelas IV SD. *Jurnal Pendidikan Fisika Dan Sains (JPFS)*, *3*(1), 6–12.

Ali, M., & Julaihah, U. (2023). Implementasi Model Pembelajaran Contextual Teaching & Learning Untuk Meningkatkan Keaktifan Dan Berpikir Kritis Siswa. *Dinamika Sosial: Jurnal Pendidikan Ilmu Pengetahuan Sosial*, *2*(3), 263–277.

Amoroso, D., dan I. Hapsari. 2021. "Motivasi Belajar PAI melalui CTL." *Jurnal Pendidikan Islam* 12, no. 2: 123–36.

Bandura, A. 1977. *Social Learning Theory*. Englewood Cliffs, NJ: Prentice-Hall.

Campbell, D. T., dan J. C. Stanley. 2015. *Experimental and Quasi-Experimental Designs for Research*. Belmont, CA: Wadsworth.

Deci, E. L., dan R. M. Ryan. 2000. "The 'What' and 'Why' of Goal Pursuits: Human Needs and the Self-Determination of Behavior." *Psychological Inquiry* 11, no. 4: 227–68.

Field, A. 2013. *Discovering Statistics Using IBM SPSS Statistics*. 4th ed. London: Sage.

Haj, H. S., & Marno, M. (2024). Pengembangan Model Kurikulum Pendidikan Agama Islam Berbasis Multikultural. *ISLAMIKA*, *6*(1), 255–267.

Johnson, E. B., M. R. Edmunds, dan L. A. Turner. 2002. *Contextual Teaching and Learning: What It Is and Why It's Here to Stay*. Thousand Oaks, CA: Corwin Press.

Kemendikbudristek. 2022. *Permendikbudristek No. 56 Tahun 2022 tentang Kurikulum Merdeka*. Jakarta: Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi.

Labuem, W. N.-M. Y.-S., Al Mansur, D. W. A.-M., Masgumelar, H. A.-N. K., Wijayanto, A.,

Or, S., Kom, S., Anggaira, A., Bayu, W. I., Amiq, F., & Or, S. (2021). Implementasi dan problematika merdeka belajar. *Tulungagung: Akademia Pustaka*.

Lickona, T. 1991. *Educating for Character: How Our Schools Can Teach Respect and Responsibility*.

New York: Bantam Books.

Nasution, A. 2015. "Pengukuran Spiritual Quotient pada Siswa." *Jurnal Psikologi Pendidikan* 8, no. 1: 45–58.

Nurhadi, D. 2020. "Tantangan PAI di Era Digital." *Jurnal Pendidikan & Teknologi* 5, no. 1: 67–79.

Pratiwi, S. 2022. "Character Education di SMP: Studi Lapangan." *Jurnal Ilmiah Edukasi* 14, no. 3: 201–15.

Rahmawati, F., et al. 2019. "CTL dan Pemahaman Fiqih." *Indonesian Journal of Islamic Studies* 7, no. 1: 58–74.

Sari, M., dan T. Wijaya. 2021. "Evaluasi Pembelajaran PAI Konvensional." *Jurnal Ilmiah Madania* 10, no. 2: 87–100.

Yunus, R., Kamuli, S., & Midu, F. A. (2025). Pendidikan Karakter Bagi Siswa Berbasis Kearifan Lokal di SMA Negeri 1 Gorontalo. *Jurnal Pengabdian Masyarakat: Pemberdayaan, Inovasi Dan Perubahan*, *5*(3).

Zhang, Y., et al. 2018. "Effectiveness of CTL in Religious Education." *International Journal of Religious Education* 9, no. 4: 299–312.