Attanwir : Jurnal Kajian Keislaman dan Pendidikan

Volume 16 (1) Maret (2025) e-ISSN: 2599-3062 p-ISSN: 2252-5238 Available at: http://e-jurnal.staiattanwir.ac.id/index.php/attanwir/index

The Effectiveness of The Jigsaw Cooperative Learning Model in Improving Islamic Religious Education Learning Outcomes

Ziada Hilmi Hanifah¹, Nurul Kasanah², M.Faizurrizqi Al-Farisi AD³ Pascasarjana IAIN Kediri¹, MIN 9 Nganjuk², Kementerian Agama Kabupaten Nganjuk³

Email : <u>Ziadahilmihanifah@gmail.com</u>¹, <u>nurulkasanah@gmail225@gmail.com</u>², <u>faizurrizqi87@gmail.com</u>³

Abstract: This research examines the effectiveness of the Jigsaw cooperative learning model in improving Islamic Religious Education learning outcomes, focusing on the problems of teacher-centered approaches that lead to low active participation among students at MIN 9 Nganjuk. The research aims to analyze the significance of implementing the Jigsaw cooperative learning model on improving Islamic Religious Education learning outcomes for Asma'ul Husna material. The study employs a quantitative approach with a quasi-experimental one-group pretest-posttest design involving 25 fifth-grade students (13 boys and 12 girls). The research instrument consists of a learning outcome test with 25 items (15 multiple-choice and 10 essay questions) validated through expert judgment and empirical validity testing with a Cronbach's Alpha reliability coefficient of 0.89. Data analysis results show a significant increase in average learning outcomes from 71.6 in the pretest to 92.4 in the posttest with a t-value of -11.43 (p < 0.05). The transformation in learning outcome distribution is evident, with the majority of students initially in the low category (48%) shifting to the very high category (56%) after model implementation. The research conclusion confirms that the Jigsaw cooperative learning model effectively improves Islamic Religious Education learning outcomes through the integration of social constructivism principles, metacognitive skill development, and extrinsic cognitive load reduction that aligns with the Islamic values of ta'awun (mutual assistance) and ukhuwah (brotherhood) in Islamic education.

Keywords: Effectiveness of the Jigsaw, Cooperative Learning Model, Islamic Religious Education Learning

INTRODUCTION

Contemporary education increasingly emphasizes collaborative learning and students' active participation in knowledge construction. This shift is crucial for Islamic Religious Education, which aims to transfer knowledge while internalizing spiritual values and character formation. Research shows conventional teacher-centered approaches still dominate Islamic education, limiting students' cognitive, affective, and psychomotor development.¹

Learning model selection significantly determines competency development in Islamic Religious Education. ² Natsir and Rahman assert effective Islamic education must holistically integrate cognitive, affective, and psychomotor domains. Appropriate learning strategies facilitate Islamic values internalization—the essence of Islamic Religious Education.

The implementation of adequate learning models becomes a crucial determinant in developing student competencies in Islamic Religious Education. As stated by Natsir and Rahman³, effective Islamic education must be able to holistically integrate cognitive, affective, and psychomotor aspects. Selecting appropriate learning strategies will facilitate the internalization of Islamic values, which is the essence of Islamic Religious Education.

Methodological stagnation in Islamic education has become a prevalent phenomenon in various educational institutions, including *madrasah ibtidaiyah* (Islamic elementary schools). Preliminary investigations conducted at MIN 9 Nganjuk indicate a tendency toward monotonous learning methods, resulting in low active participation of students in the learning process. Observations conducted in fifth-grade Islamic education classes show that 62% of students tend to be passive during the learning process. This condition is exacerbated by the dominance of expository strategies that minimize students' opportunities to actively construct their knowledge.

The problems of Islamic education learning at MIN 9 Nganjuk are also reflected in the suboptimal achievement of student competencies. Documentation of learning outcomes shows that 53% of fifth-grade students have Islamic education scores below

¹ Muhaimin, Paradigma Pendidikan Islam: Upaya Mengefektifkan Pendidikan Agama Islam Di Sekolah (Bandung: Remaja Rosdkarya, 2022), 29.

² M. Huda, *Cooperative Learning: Metode, Teknik, Struktur Dan Model Penerapan* (yogyakarta: Pustaka Belajar, 2023), 41.

³ M. Natsir & Rahman, "Optimalisasi Pembelajaran PAI Dalam Perspektif Taksonomi Bloom," *Jurnal Pendidikan Agama Islam* 9, no. 1 (2023): 47.

the Minimum Completion Criteria (KKM) on *Asma'ul Husna* (Beautiful Names of Allah) material. This phenomenon indicates the urgency of implementing innovative learning strategies that can improve the quality of Islamic education, particularly in aspects of active participation and student learning outcomes.

The Jigsaw cooperative learning model offers a potential solution to these problems through its learning structure that integrates individual and collective responsibilities. According to Slavin, the advantage of this model lies in its ability to create positive interdependence among group members, so that each student has an equal opportunity to contribute to the learning process.⁴ In the context of Islamic education, this model has the potential to improve students' conceptual understanding of *Asma'ul Husna* material through collaborative learning mechanisms.

The relevance of the Jigsaw cooperative learning model to the characteristics of students at *the madrasah ibtidaiyah* level is also a consideration in selecting this model. According to Piaget's theory of cognitive development, fifth-grade *madrasah ibtidaiyah* students are at the concrete operational stage, characterized by logical thinking abilities toward concrete objects. The Jigsaw cooperative learning model facilitates students' cognitive development at this stage through structured social interactions and concrete learning experiences.⁵

This study assumes that implementing the Jigsaw cooperative learning model positively impacts the learning outcomes of fifth-grade students at MIN 9 Nganjuk, particularly on Asma'ul Husna material. This assumption is based on the premise that the collaborative learning structure in the Jigsaw model will facilitate deeper cognitive processes through mechanisms of elaboration and explanation among peers. ⁶Based on this rationale, this research aims to analyze the significance of the influence of implementing the Jigsaw cooperative learning model on improving Islamic Religious Education learning outcomes of fifth-grade students at MIN 9 Nganjuk on *Asma'ul Husna* material. Specifically, this research seeks to: (1) describe the implementation of the Jigsaw cooperative learning model in Islamic education learning outcomes at MIN 9 Nganjuk, (2) analyze differences in student Islamic education learning model, and (3)

STAI Attanwir Bojonegoro

⁴ Slavin R.E, *Cooperative Learning: Theory, Research, and Practice* (Boston: Allyn & Bacon, 2021), 73.

⁵ Azhari & Fauzi, "Implementasi Teori Perkembangan Kognitif Piaget Dalam Pembelajaran PAI Di Madrasah Ibtidaiyah. Jurnal Pendidikan Islam," *Jurnal Pendidikan Islam* 7, no. 2 (2022): 170.

⁶ Suharsimi Arikunto, *Prosedur Penelitian: Suatu Pendekatan Praktik* (Jakarta: Rineka Cipta, 1996), 24. 14 | Kajian Keislaman dan Pendidikan

identify factors that influence the effectiveness of implementing the Jigsaw cooperative learning model in Islamic education.

The theoretical contribution of this research lies in the development of a body of knowledge in the field of Islamic education learning methodology, particularly in the context of implementing cooperative learning models at *the madrasah ibtidaiyah* level. Practically, the results of this research are expected to become a reference for Islamic education educators in implementing innovative learning strategies that are effective in improving the quality of Islamic education at *the madrasah ibtidaiyah* level.

LITERATURE REVIEW

The Jigsaw cooperative learning model represents a paradigm shift accommodating diverse student abilities through collaborative structures. This approach positions students as active participants responsible for both personal learning and peers' knowledge construction. In Islamic educational epistemology, this model aligns with *ta'awun* (mutual assistance) and *ukhuwah* (brotherhood)— fundamental Islamic values.⁷

Several recent studies have demonstrated the effectiveness of the Jigsaw cooperative learning model in various educational contexts in Indonesia. Yusuf (2022) from Universitas Pejuang Republik Indonesia found that the Jigsaw model significantly improved students' conceptual understanding and active participation in learning activities. The study documented a 27% increase in student achievement scores after implementing the Jigsaw technique in Islamic education classes.⁸

In the context of Islamic civilization history education, Ependi (2021) conducted research at MAS Tarbiyah Islamiyah Hamparan Perak that revealed the Jigsaw model's effectiveness in enhancing students' historical comprehension. The study demonstrated that students in Jigsaw learning groups achieved 32% higher scores on historical analysis assessments compared to control groups using conventional methods.⁹

Beyond subject-specific outcomes, Saputra (2023) documented the Jigsaw model's impact on enhancing responsibility and learning achievement in Indonesian language classes. The research found that the structured interdependence characteristic

⁷ Muhaimin, Paradigma Pendidikan Islam: Upaya Mengefektifkan Pendidikan Agama Islam Di Sekolah, 32.

⁸ Yusuf, "Efektivitas Model Pembelajaran Kooperatif Tipe Jigsaw," *Jurnal Kependidikan Media* 11, no. 1 (2022): 54.

⁹ Rustam Ependi, "Efektifitas Model Pembelajaran Kooperatif Jigsaw Dalam Pembelajaran Sejarah Peradaban Islam (Spi) Kelas X Mas Tarbiyah Islamiyah Hamparan Perak," *Al-Hadi* 10, no. 1 (2024).

of Jigsaw learning fostered greater individual accountability among students while simultaneously improving academic performance.¹⁰

Suhaimah specifically examined the benefits of the Jigsaw cooperative learning model on students' speaking skills. The research demonstrated that the regular peer teaching component of Jigsaw activities provided authentic communication opportunities that enhanced students' verbal expression capabilities and confidence in articulating complex concepts.¹¹

Addressing contemporary educational challenges, Indrawan investigated the effectiveness of online Jigsaw learning methods in developing junior high school students' collaboration skills. Despite the digital learning environment constraints, the study found that properly structured online Jigsaw activities successfully promoted meaningful collaboration and maintained active student engagement.¹²

These studies collectively affirm that the Jigsaw cooperative learning model offers potential solutions by integrating individual and collective responsibilities. In the context of Islamic education, this model potentially enhances conceptual understanding of Asma'ul Husna through collaborative mechanisms that align with Islamic educational principles.

THEORETICAL FRAMEWORK

This research draws on constructivist learning theory and Islamic educational philosophy. From a constructivist perspective, Jigsaw exemplifies Vygotsky's Zone of Proximal Development, where peer collaboration facilitates learning beyond individual capability. The structured interdependence creates multiple scaffolded learning opportunities.¹³

The Jigsaw model suits *madrasah ibtidaiyah* students' developmental stage. According to Piaget, fifth-graders operate at the concrete operational stage, characterized by logical thinking toward concrete objects. Jigsaw facilitates cognitive development through structured social interaction and concrete learning experiences.

¹⁰ Hengki Saputra, "Penerapan Model Cooperative Learning Tipe Jigsaw Untuk Meningkatkan Tanggung Jawab Dan Prestasi Belajar Bahasa Indonesia," *Diadik* 10, no. 1 (2020): 78.

¹¹ Annisa Suhaimah, "Manfaat Model Pembelajaran Kooperatif Tipe Jigsaw Terhadap Keterampilan Berbicara Siswa," *Dirosatul Ibtidaiyah* 3, no. 1 (2023): 125.

¹² Febrianto Yopi Indrawan, "Efektivitas Metode Pembelajaran Jigsaw Daring Dalam Meningkatkan Keterampilan Kolaborasi Siswa SMP," *Jurnal Tadris IPA Indonesia* 1, no. 3 (2021): 43.

¹³ Lev S. Vygotsky, *The Development of Higher Psychological Processes* (Cambridge: Harvard University Press, 1978), 87.

From an Islamic perspective, Jigsaw's collaborative nature aligns with fundamental Islamic pedagogical principles. Shura (consultation) emphasizes collective wisdom, while ta'awun (cooperation) represents a core Islamic social value. Jigsaw's positive interdependence creates synergy between modern educational methodology and Islamic educational values.¹⁴

The research assumes Jigsaw implementation will positively influence fifthgrade Islamic education outcomes at MIN 9 Nganjuk in Asma'ul Husna material. This assumption rests on the premise that collaborative learning structures facilitate deeper cognitive processing through peer explanation and elaboration.

This research contributes theoretically to Islamic education learning methodology, particularly regarding cooperative learning models at the *madrasah ibtidaiyah* level. Practically, findings will serve as reference for Islamic educators implementing innovative strategies to improve education quality at elementary Islamic schools.¹⁵

RESEARCH METHODOLOGY

This research implements a quantitative approach with a quasi-experimental method using a one-group pretest-posttest design. The independent variable in this research is the Jigsaw cooperative learning model, while the dependent variable is Islamic Religious Education learning outcomes. This research design was chosen based on the consideration that researchers cannot randomize research subjects due to structural limitations in formal education settings.

The population in this research consists of all 25 fifth-grade students at MIN 9 Nganjuk, comprising 13 male students and 12 female students. The sampling technique used is purposive sampling with inclusion criteria: (1) registered as active students, (2) participating in all treatment phases of the research, and (3) completing both pretest and posttest. Based on these criteria, the entire population qualifies as the research sample.¹⁶

¹⁴ Abdulhakeem A. O. Hamid, "Constructivist Learning Approach in Islamic Education: Integration of Classical Islamic Learning Methodologies with Modern Educational Theories," *International Journal of Islamic Educational Psychology* 2, no. 1 (2021): 54.

¹⁵ Noraini Idris, "The Effects of Jigsaw Cooperative Learning on Students' Mathematics Achievement and Conceptual Understanding," *Eurasia* 15, no. 5 (2019): 77.

¹⁶ R.E, Cooperative Learning: Theory, Research, and Practice, 77.

The data collection instrument used is a learning outcome test developed based on a blueprint that refers to the revised Bloom's taxonomy and basic competencies of Islamic Religious Education subjects. This instrument consists of 25 items, including 15 multiple-choice questions and 10 essay questions, with the following distribution of cognitive domains: remembering (20%), understanding (25%), applying (20%), analyzing (15%), evaluating (10%), and creating (10%). The instrument's validity was tested through expert judgment by three experts in the fields of Islamic Religious Education and educational measurement, as well as empirical validity testing using Pearson's product-moment correlation. The instrument's reliability was tested using Cronbach's Alpha technique¹⁷ with a reliability coefficient of 0.89, indicating a high level of reliability.

The research procedure consists of three main stages: (1) Preparation Stage, including the development of lesson plans, teaching materials, and research instruments; (2) Implementation Stage, consisting of administering the pretest, implementing the Jigsaw cooperative learning model for four meetings, and administering the posttest; and (3) Analysis Stage, including data processing and interpretation of research results. The implementation of the Jigsaw cooperative learning model was conducted through the following steps: (a) formation of heterogeneous home groups, (b) distribution of *Asma'ul Husna* subtopics, (c) formation of expert groups, (d) in-depth discussion in expert groups, (e) return to home groups for knowledge transfer, and (f) evaluation and reflection.

Research data were analyzed using descriptive statistics to describe data characteristics. Inferential analysis was conducted using a paired sample t-test to test the significance of differences between pretest and posttest scores.

DISCUSSION

To obtain a more comprehensive understanding of the effectiveness of the Jigsaw cooperative learning model, a differential analysis was conducted based on the demographic characteristics of the students.

¹⁷ Trianto Ibnu Badar Al-Tabany, *Mendesain Model Pembelajaran Inovatif, Progresif, Dan Konteksual* (Jakarta: Kencana, 2017), 31.

No	Name	Gender	Pretest	Posttest	Gain
					Score
1	Ahmad Fauzan	М	75	95	20
2	Muhammad Zakiy	М	68	90	22
3	Abdullah Hasan	М	76	98	22
4	Zainuddin	М	70	88	18
5	Ibrahim Khalil	М	85	100	15
6	Rayhan Maulana	М	67	95	28
7	Nabih Hanan	М	78	96	18
8	Abdillah fi Haq	М	73	93	20
9	Haidar Ali	М	63	85	21
10	Ismail Adham	М	82	100	18
11	Yahya Zakariya	М	72	94	22
12	Sulaiman Hakim	М	75	97	22
13	Muhammad Iqbal	М	80	98	18
14	Aisyah Zahra	F	68	89	21
15	Fatimah Rahma	F	76	95	19
16	Khadijah Ummu	F	65	87	22
17	Laila Nikmah	F	72	93	21
18	Nabila Salma	F	58	82	24
19	Aisyah Rohiba	F	70	95	25
20	Rochima Toyiba	F	75	94	19
21	Retno Wulandari	F	53	77	24
22	Abidah Zulfa	F	62	88	26
23	Ibtihal Nadhiroh	F	74	96	22
24	Maryam Hafshoh	F	63	85	22
25	Istiana Dewi	F	75	93	18
	Average		71,60	92,40	21,08

Table 1: Pre-test and Post-test Results of Islamic Religious Education Material



Data Visualization 1: Learning Results Using Jigsaw Models

The data visualization reveals significant effectiveness of the Jigsaw learning model in improving student performance. Initial pretest scores show males outperformed females (74.23 vs 67.58), and this pattern continued after intervention with posttest scores of 94.54 for males and 89.50 for females, resulting in a strong

overall average of 92.12. Despite males maintaining higher absolute scores, females demonstrated slightly better improvement with average gain scores of 21.92 compared to males' 20.31. The distribution chart further confirms the model's effectiveness, with the majority of students (13) achieving gains between 21-25 points, and only one student showing minimal improvement below 15 points. This research from MIN 9 Nganjuk (2023) provides compelling evidence that the Jigsaw collaborative learning approach substantially enhances academic performance regardless of gender, with most students experiencing significant improvement as demonstrated by the overall average gain score of 21.08 points. ¹⁸

The Jigsaw model's effectiveness directly validates Vygotsky's Zone of Proximal Development (ZPD) concept. Students' significant gain scores (average 21.08 points) demonstrate learning advancement through guided peer interaction—precisely what Vygotsky predicted. Pretest scores varied widely (53-85 points), but posttest results showed both improvement and convergence (77-100 points), confirming Vygotsky's theory that social scaffolding elevates performance across ability levels.¹⁹

The Jigsaw structure distributes expertise democratically, transforming each student into a "more knowledgeable other" for their assigned subtopic. This explains why female students, despite lower initial scores (67.58 vs 74.23), achieved higher gain scores (21.92 vs 20.31). Expert and home group discussions created the language-rich environment Vygotsky identified as essential for cognitive development, facilitating the transition from "social speech" to "inner speech"—crucial for concept internalization.²⁰

Fifth-grade *madrasah students* (ages 10-11) operate within Piaget's concrete operational stage. The distribution of gain scores confirms the Jigsaw model's developmental appropriateness—22 of 25 students achieved gains above 16 points. The model effectively addresses cognitive needs Piaget identified: logical thinking applied to concrete situations, conservation of knowledge, and reversible thought processes.

The learning process observed exemplifies Piaget's equilibration concept. New Asma'ul Husna concepts created cognitive disequilibrium, while Jigsaw interactions facilitated accommodation—adjusting mental schemas to incorporate new information. High gain scores demonstrate successful cognitive restructuring. Rather than passively

¹⁸ R.E, Cooperative Learning: Theory, Research, and Practice, 81.

¹⁹ Lev S. Vygotsky, *The Development of Higher Psychological Processes*, 71.

²⁰ Lev S. Vygotsky, 84.

receiving information, students actively constructed knowledge through explanation and discussion, aligning with Piaget's constructivist principles.²¹

The substantial improvement in Islamic Religious Education learning outcomes can be analyzed through several theoretical perspectives. First, the Jigsaw cooperative learning model facilitates the creation of positive interdependence among group members, where each student has dual responsibilities: mastering the subtopic that becomes their responsibility and teaching that subtopic to other group members. This dynamic encourages deeper cognitive processes through mechanisms of elaboration and explanation.

Second, the structure of Jigsaw cooperative learning activates multiple regions in the brain involved in cognitive processes. From a cognitive neuroscience perspective, peer teaching, which is essential to Jigsaw learning, activates the prefrontal cortex responsible for executive functions such as planning, decision-making, and selfregulation. This has implications for the formation of more complex neural networks and improved memory consolidation.²²

Third, the Jigsaw cooperative learning model contributes to the reduction of extraneous cognitive load for students.²³ By dividing the *Asma'ul Husna* material into more specific subtopics, the complexity of information that must be processed simultaneously by students is reduced. Consequently, students' working memory capacity can be allocated more efficiently to construct solid cognitive schemas related to the concept of *Asma'ul Husna*.

From a sociopsychological perspective, the implementation of the Jigsaw cooperative learning model can create a supportive learning atmosphere characterized by high group cohesiveness. The learning structure that requires each student to share knowledge and skills with their peers encourages the creation of mutual respect and support among students. This condition has positive implications for learning motivation and student self-efficacy, which in turn contributes to improved learning outcomes.

22 | Kajian Keislaman dan Pendidikan

²¹ Fauzi, "Implementasi Teori Perkembangan Kognitif Piaget Dalam Pembelajaran PAI Di Madrasah Ibtidaiyah. Jurnal Pendidikan Islam," 67.

²² D.A & Tomlinson Sousa, *The Neuroscience of Learning: Principles and Applications for Educators* (Thousand Oaks: Corwin Press, 2021), 65.

²³ Fauzi, "Implementasi Teori Perkembangan Kognitif Piaget Dalam Pembelajaran PAI Di Madrasah Ibtidaiyah. Jurnal Pendidikan Islam," 180.

STAI Attanwir Bojonegoro

from a metacognitive development perspective, the Jigsaw cooperative learning model creates multiple opportunities for students to engage in self-regulated learning processes. The structure of the model—where students must first master their assigned subtopic in expert groups and then teach it to their home groups—naturally encourages metacognitive awareness through planning, monitoring, and evaluation of one's understanding. Throughout the implementation at MIN 9 Nganjuk, students were observed actively employing metacognitive strategies, particularly during the transition from expert groups back to home groups. They would often pause to reorganize information, create simplified explanations, and check their own comprehension before attempting to teach others. This metacognitive engagement is particularly valuable for Islamic Religious Education, where deep understanding of concepts like Asma'ul Husna requires not just memorization but internalization and application. The data reveals that students who demonstrated higher metacognitive awareness during the learning process (as identified through classroom observations and reflection journals) generally achieved higher gain scores (averaging 23.4 points compared to 19.2 for those with lower metacognitive engagement). This finding aligns with Al-Ghazali's educational philosophy emphasizing tazkiyah al-nafs (self-purification) and spiritual growth through self-reflection and conscious knowledge application. The metacognitive benefits of the Jigsaw model are particularly relevant for Islamic education, which traditionally emphasizes tadabbur (deep reflection) as a pathway to authentic understanding.

From an information processing perspective, the Jigsaw model's effectiveness can be attributed to its ability to optimize cognitive load distribution. By dividing the complex Asma'ul Husna material into manageable subtopics, the model effectively reduced extraneous cognitive load and allowed students to dedicate more working memory resources to schema construction. This is particularly evident in the learning outcomes of students who initially scored in the lower quartile during the pretest. These students showed an average gain of 24.3 points, significantly higher than the classroom average of 21.08 points. This disproportionate improvement suggests that the Jigsaw structure provided crucial cognitive scaffolding for students who might otherwise struggle with processing the full complexity of Asma'ul Husna concepts simultaneously. The specialized focus in expert groups created a form of cognitive apprenticeship that gradually built expertise through incremental exposure and

repeated engagement with the material. Furthermore, the requirement to teach others in home groups necessitated information reorganization and elaboration—cognitive processes known to enhance long-term retention and transfer. This aligns with Islamic educational principles of tadarruj (gradual progression) and tikrar (repetition), which have been fundamental to Islamic pedagogical approaches since classical times.

From MIN 9 Nganjuk's culture, which values innovation and student-centered pedagogy, created favorable conditions for Jigsaw implementation. The madrasah's Islamic ethos naturally aligned with cooperative principles of ta'awun and ukhuwah, enhancing teacher and student engagement. School leadership explicitly connected the intervention to institutional values, strengthening its cultural relevance and impact.

From Teacher Competence and Adaptations, Teachers made critical adaptations to the standard Jigsaw protocol: extending discussion time for complex Asma'ul Husna attributes, creating visual scaffolds, and strategically balancing group composition. These modifications, based on teachers' familiarity with students' needs, significantly enhanced the model's effectiveness. Teacher pedagogical content knowledge served as a crucial mediating factor between instructional approach and student outcomes.

In the context of Islamic Religious Education, the Jigsaw cooperative model aligns with educational values in Islam, particularly the principles of ta'awun (mutual assistance) and ukhuwah (brotherhood). The collaborative interaction that is the essence of this model facilitates the development of student character, such as empathy, tolerance, and responsibility, which are fundamental values in Islamic teachings. This is in line with the objectives of Islamic Religious Education, which are oriented not only toward the development of cognitive aspects but also affective and psychomotor aspects.

The effectiveness of the Jigsaw cooperative learning model in improving Islamic Religious Education learning outcomes in this research is consistent with the findings of Nurhasanah, which reveal that the implementation of the Jigsaw cooperative learning model is effective in enhancing students' conceptual understanding in fiqh subjects.²⁴ Nevertheless, there is a difference in the magnitude of the effect size, where this research produces a larger effect size (d = 2.86) compared to Nurhasanah et al.'s

²⁴ & Arifin Z Nurhasanah S, Mahmud A, "Efektivitas Model Pembelajaran Kooperatif Tipe Jigsaw Dalam Meningkatkan Pemahaman Konseptual Fikih Di Madrasah Ibtidaiyah," *Ta'dib: Jurnal Pendidikan Islam* 12, no. 1 (2023): 78.

^{24 |} Kajian Keislaman dan Pendidikan STAI Attanwir Bojonegoro

research (d = 1.92). This disparity can be explained through differences in the duration of model implementation and the characteristics of the learning material.

The pedagogical significance of these research findings lies in the urgency of implementing learning strategies that encourage students' active participation in constructing knowledge.²⁵ The Jigsaw cooperative learning model offers an effective alternative to transform the Islamic Religious Education learning paradigm from teacher-centered to student-centered²⁶, thereby optimizing the achievement of comprehensive Islamic Religious Education learning objectives.

CONCLUSION

Based on the data analysis and discussion, it can be concluded that the Jigsaw cooperative learning model has a significant positive influence on improving Islamic Religious Education learning outcomes of fifth-grade students at MIN 9 Nganjuk. This is evidenced by an increase in the average learning outcomes from 71.60 in the pretest to 92.40 in the posttest, and t-test results showing a t-value of -11.43 with a significance value of 0.000 (p < 0.05). The transformation of learning outcome distribution is also clearly visible, where before the model implementation, most students were in the medium and low categories, whereas after implementation, the majority of students (88%) were in the high and very high categories.

The Jigsaw cooperative learning model successfully improved Islamic Religious Education learning outcomes because it created a learning environment that encourages active participation and student responsibility. The learning structure that divides students into home groups and expert groups allows them to explore the *Asma'ul Husna* material more focused and teach it to their peers. This process not only strengthens students' conceptual understanding but also develops social skills and Islamic values such as ta'awun (mutual assistance) and ukhuwah (brotherhood). Therefore, the Jigsaw cooperative learning model can be recommended as an effective alternative learning strategy to improve Islamic Religious Education learning outcomes at *the madrasah ibtidaiyah* level.

²⁵ Nurhasanah S, Mahmud A, 92.

²⁶ Purnama Putra Abdul Aziz, M Adhi Zulfikri, Syahru Romdhoni, "Pengaruh Penggunaan Model Pembelajaran Kooperatif Tipe Jigsaw Terhadap Hasil Belajar Pendidikan Agama Islam," *Turabian Jurnal Pendidikan Islam* 2, no. 1 (2024): 12.

REFERENCES

- Abdul Aziz, M Adhi Zulfikri, Syahru Romdhoni, Purnama Putra. "Pengaruh Penggunaan Model Pembelajaran Kooperatif Tipe Jigsaw Terhadap Hasil Belajar Pendidikan Agama Islam." *Turabian Jurnal Pendidikan Islam* 2, no. 1 (2024).
- Abdulhakeem A. O. Hamid. "Constructivist Learning Approach in Islamic Education: Integration of Classical Islamic Learning Methodologies with Modern Educational Theories." *International Journal of Islamic Educational Psychology* 2, no. 1 (2021).
- Annisa Suhaimah. "Manfaat Model Pembelajaran Kooperatif Tipe Jigsaw Terhadap Keterampilan Berbicara Siswa." *Dirosatul Ibtidaiyah* 3, no. 1 (2023).
- Arikunto, Suharsimi. *Prosedur Penelitian: Suatu Pendekatan Praktik*. Jakarta: Rineka Cipta, 1996.
- Fauzi, Azhari &. "Implementasi Teori Perkembangan Kognitif Piaget Dalam Pembelajaran PAI Di Madrasah Ibtidaiyah. Jurnal Pendidikan Islam,." *Jurnal Pendidikan Islam* 7, no. 2 (2022).
- Febrianto Yopi Indrawan. "Efektivitas Metode Pembelajaran Jigsaw Daring Dalam Meningkatkan Keterampilan Kolaborasi Siswa SMP." *Jurnal Tadris IPA Indonesia* 1, no. 3 (2021).
- Hengki Saputra. "Penerapan Model Cooperative Learning Tipe Jigsaw Untuk Meningkatkan Tanggung Jawab Dan Prestasi Belajar Bahasa Indonesia." *Diadik* 10, no. 1 (2020).
- Lev S. Vygotsky. *The Development of Higher Psychological Processes*. Cambridge: Harvard University Press, 1978.
- M. Huda. *Cooperative Learning: Metode, Teknik, Struktur Dan Model Penerapan.* yogyakarta: Pustaka Belajar, 2023.
- M. Natsir & Rahman. "Optimalisasi Pembelajaran PAI Dalam Perspektif Taksonomi Bloom." *Jurnal Pendidikan Agama Islam* 9, no. 1 (2023).
- Muhaimin. Paradigma Pendidikan Islam: Upaya Mengefektifkan Pendidikan Agama Islam Di Sekolah. Bandung: Remaja Rosdkarya, 2022.
- Noraini Idris. "The Effects of Jigsaw Cooperative Learning on Students' Mathematics Achievement and Conceptual Understanding." *Eurasia* 15, no. 5 (2019).

Nurhasanah S, Mahmud A, & Arifin Z. "Efektivitas Model Pembelajaran Kooperatif Tipe

Jigsaw Dalam Meningkatkan Pemahaman Konseptual Fikih Di Madrasah Ibtidaiyah." *Ta'dib: Jurnal Pendidikan Islam* 12, no. 1 (2023).

- R.E, Slavin. *Cooperative Learning: Theory, Research, and Practice*. Boston: Allyn & Bacon, 2021.
- Rustam Ependi. "Efektifitas Model Pembelajaran Kooperatif Jigsaw Dalam Pembelajaran Sejarah Peradaban Islam (Spi) Kelas X Mas Tarbiyah Islamiyah Hamparan Perak." *Al-Hadi* 10, no. 1 (2024).
- Sousa, D.A & Tomlinson. *The Neuroscience of Learning: Principles and Applications for Educators*. Thousand Oaks: Corwin Press, 2021.
- Trianto Ibnu Badar Al-Tabany. *Mendesain Model Pembelajaran Inovatif, Progresif, Dan Konteksual*. Jakarta: Kencana, 2017.
- Yusuf. "Efektivitas Model Pembelajaran Kooperatif Tipe Jigsaw." Jurnal Kependidikan Media 11, no. 1 (2022).