https://research.adra.ac.id /index.php/jete/
P - ISSN: 3025-0668
E - ISSN: 3025-0676

Optimization of Bamboo Bridge Outbound Activities in Shaping the Religious Character of Grade II Students of Madrasah Ibtidaiyah Alam Ya Bunayya Bungo

Uci Rahma Yani[1], Muhammad Zaki[2], Siti Khamim[3]

[1] Yasni Bungo Islamic University Jambi, Indonesia
[2] Yasni Bungo Islamic University Jambi, Indonesia
[3] Yasni Bungo Islamic University Jambi, Indonesia

ABSTRACT

This research is motivated by the importance of forming the religious character of Madrasah Ibtidaiyah students from an early age, while in educational practice there are still symptoms of lack of discipline, low responsibility, lack of confidence, and not optimal practice of religious values in daily life. This study aims to describe the implementation of outbound Bamboo Bridge activities, analyze the optimization strategy and integration of religious values, and explain its impact on the formation of religious character of grade II students of Madrasah Ibtidaiyah Alam Ya Bunayya Bungo. This study uses a descriptive qualitative approach with a type of field research. Data was collected through observation, interviews, and documentation of madrasah heads, homeroom teachers of grade II, outbound assistant teachers, students, and parents. The results of the study show that Bamboo Bridge outbound activities can be an effective medium in shaping religious character if carried out through careful planning, intensive teacher mentoring, value reflection, and continuous evaluation. The impact that arises includes increased discipline, courage, responsibility, patience, and social concern of students. Thus, it can be concluded that the optimization of Bamboo Bridge's outbound acBamboo Bridge; Karakter Religius; Madras; Optimalisasi; Outbound. Ativities contributes significantly to the formation of students' religious character through concrete, fun, and meaningful learning experiences.

KEYWORDS

Bamboo Bridge; Karakter Religius; Madras; Optimalisasi; Outbound.

Citation: Yani, U. R., Zaki, M., & Khamim, S. (2026). Optimization of Bamboo Bridge Outbound Activities in Shaping the Religious Character of Grade II Students of Madrasah Ibtidaiyah Alam Ya Bunayya Bungo. *Journal Emerging Technologies in Education*, *4*(3), 217–230.
https://doi.org/10.70177/jete.v1i3.12663

Correspondence:

Uci Rahma Yani,
ucirahmayani120@gmail.com

Received: December 12, 2025

Accepted: March 15, 2026

Published: June 26, 2026

INTRODUCTION

Islamic basic education is in fact not only directed at the mastery of knowledge, but also at the formation of the character of students as a whole (Nurrohmah, Syaifurrahman, & Lestari, 2025). At the Madrasah Ibtidaiyah level, this orientation becomes increasingly important because the elementary school age phase is a strategic period in the habituation of values, moral instilling, and the formation of children's religious identity (Puteri, 2025). In this context, religious character occupies a central position because it is directly related to the attitude of obedience to religious teachings, discipline of worship, politeness of behavior, responsibility, and the ability to establish good social relationships. Religious character education in madrassas needs to be strengthened

through habituation, school culture, and learning strategies that do not stop at intracurricular activities in the classroom (Muttaqin, 2025). Thus, the development of contextual, active, and meaningful learning models is an urgent need so that the internalization of religious values is not verbalistic, but present in a real, directed, and relevant learning experience to the student's developmental stage.

In the context of Madrasah Ibtidaiyah, the Bamboo Bridge activity can not only be understood as an out-of-class game, but also as an experiential learning medium that allows students to experience religious values directly through concrete actions. Studies of experiential learning show that hands-on experience encourages students to become active, responsible, and independent subjects, while the formation of religious character in madrassas becomes more effective when supported by habituation, teacher example, a conducive environment, and authentic assessment (Duchatelet, Cornelissen, & Volman, 2023). In practice, when students climb bridges, obey safety instructions, wait their turns, maintain their balance, and help friends who feel afraid, they are practicing discipline, patience, trust, cooperation, and respect for others in real situations. The internalization of religious values occurs when the physical experience is directed by the teacher into religious meaning, for example, courage is understood as a form of tawakal, obedience to rules as manners and obedience, and assistance to friends as a form of ukhuwah and affection, so that outbound activities do not stop at the game aspect, but develop into moral-spiritual awareness that is easier to remember and habit in daily life

Outbound activities at Madrasah Ibtidaiyah are no longer positioned simply as educational recreation, but as an effective pedagogical medium to instill value through students' direct experiences. Within this framework, outbound becomes relevant for Islamic education because a direct and participatory learning experience has been proven to encourage students to become active, responsible, and easier subjects to live the values practiced in real situations. When children follow the game, obey the rules, wait for their turn, help friends, control their fears, and solve challenges together, they are not only developing social, emotional, leadership, courage, cooperation, discipline, and responsibility, but are also building religious character in the form of concrete behavior (Miskiyah, Nurhidaya, & Ashar, 2025). In this study, religious character is understood as the disposition of students' attitudes and behaviors that reflect a good relationship with God, with fellow humans, and with the school's social environment; Therefore, its manifestation is not only seen in the implementation of formal worship, but also in manners, obedience to rules, honesty, responsibility, empathy, help, patience, and respect for teachers and friends (Banafsa, Nurjannah, & Laksana, 2025). Thus, the power of outbound lies in its ability to present an experience that allows religious values not to stop as normative advice, but to be internalized through practice, habituation, reflection, and association of meaning by the teacher into a living and applicable moral-spiritual message

In the framework of experiential Islamic education, the Bamboo Bridge activity deserves to be positioned not just as a motor game, but as a pedagogical vehicle that connects physical challenges with the formation of moral-spiritual meaning. Direct experience in learning encourages students to be active, responsible subjects, and it is easier to internalize values through real actions rather than abstract advice. As students maintain balance, follow procedures, wait for turns, and help each other through obstacles, they practice discipline, patience, cooperation, empathy, and responsibility as manifestations of religious character that are in line with madrasah habits and culture (Bhoki, Are, & Ola, 2025). Theoretically, this study expands the application of experiential learning in religious character education at Madrasah Ibtidaiyah; empirically, it provides a basis for assessing indicators of religious behavior in extracurricular activities; And practically, it offers a

nature-based learning model that teachers can replicate to relate reflection, example, and habituation to students' concrete experiences

Madrasah Ibtidaiyah Alam Ya Bunayya Bungo has institutional distinctiveness in the form of nature-based learning and direct experience that integrates the academic dimension with character building. In the context of contemporary Islamic education, this peculiarity makes the madrasah relevant as a location for studying strategies to strengthen religious character through extracurricular activities (Sujarwo, 2024). However, the implementation of the outbound Bamboo Bridge shows that the problems identified are not incidental, but appear in several important aspects, namely unstable student discipline, not optimal confidence, and the practice of religious values that are not consistent in daily life. Therefore, the need to strengthen the program is not enough to be understood as a technical improvement of the game, but demands a more systematic pedagogical design through the integration of values, teacher mentoring, habituation, and continuous evaluation so that the Bamboo Bridge truly functions as an effective and measurable means of religious character learning in schools and has an impact on student behavior inside and outside the classroom.

The research gap of this study lies in the fact that the previous studies referenced in the proposal tend to place the formation of religious character in the framework of school culture, worship habits, teacher examples, and routine religious activities, while studies that specifically examine the optimization of Bamboo Bridge outbound activities as an instrument for the formation of religious character of Madrasah Ibtidaiyah students are still very limited (Maulina, 2020). Research on outbound has generally focused more on aspects of leadership, cooperation, or social development, while the religious dimension as a result of consciously designed education has not been the main focus (Yufarika, Supriyatno, & Zuhriyah, 2025). On the other hand, there has not been much research linking the characteristics of nature schools, the design of challenge-based educational games, and the process of internalizing religious values in low-grade students in an integrated manner (Syahidi, 2025). This study gap is what creates an academic need to present research that not only describes outbound activities, but also examines its optimization strategies in shaping religious characters contextually, systematically, and based on field reality.

The novelty of this research lies in the placement of the Bamboo Bridge not just as an outbound game, but as an experience-based pedagogical tool that can be optimized through planning, teacher mentoring, integration of Islamic values, and targeted evaluation of student behavior. This research also offers a new theoretical perspective that the formation of religious character in children takes place through the flow of experience, reflection, spiritual meaning, and habituation, so that values such as discipline, patience, responsibility, empathy, and tawakal are not only taught, but experienced and brought to life in real actions. Another novelty lies in the context of the subject, namely grade II students at Madrasah Ibtidaiyah Alam Ya Bunayya Bungo, who are in the phase of concrete development and effective learning through direct activities in the natural environment. Thus, this research contributes to enriching the conceptualization of religious character education that is more applicative, contextual, and close to the world of children's learning.

Based on this background, this study aims to analyze the implementation and optimization of Bamboo Bridge outbound activities in shaping the religious character of grade II students of Madrasah Ibtidaiyah Alam Ya Bunayya Bungo, as well as identify supporting and inhibiting factors in nature-based education practices. This focus is in accordance with the direction that places outbound activities as a character education strategy that needs to be carefully designed so that the results do not stop at the recreative aspect. In line with this goal, the formulation of this research

problem can be directed to several main questions: how to implement Bamboo Bridge outbound activities for grade II students at Madrasah Ibtidaiyah Alam Ya Bunayya Bungo; how the process of integrating religious values in these activities; how to optimize the form of optimization carried out by teachers and schools so that the activity is effective in forming religious character; as well as what factors affect the success or limitations of its implementation. This formulation provides a firm analytical direction while maintaining synchronization between the title, focus of the study, the context of the field, and the scientific contribution of the research.

RESEARCH METHODOLOGY

This research method uses field research with a qualitative descriptive approach to deeply understand the process of optimizing Bamboo Bridge outbound activities in shaping the religious character of grade II students at Madrasah Ibtidaiyah Alam Ya Bunayya Bungo. Qualitative descriptive design is considered most appropriate to answer research questions because the focus of the study does not lie in measuring the relationship between variables, but in tracing processes, the meaning of experiences, teacher-student interactions, and learning dynamics that occur naturally in the real context of schools (Judijanto et al., 2024). This setting provides a space for researchers to directly observe the integration between the design of extracurricular activities, the integration of religious values, habituation, and student behavioral responses in an experiential learning environment. Thus, this approach is expected to produce a systematic, factual, and in-depth picture of the implementation, optimization strategies, and pedagogical implications of Bamboo Bridge on the formation of students' religious character.

The subjects of the study were determined through purposive sampling techniques, namely the deliberate selection of informants based on direct involvement, substantive understanding, and their ability to provide relevant data on the implementation of the outbound Bamboo Bridge. The selection criteria include: actively involved in the planning or implementation of activities, knowing the process of integrating religious values in activities, being able to explain changes in student behavior, and willing to be interviewed and observed in depth (Setiyani et al., 2026). On that basis, the main informants include the head of the madrasah, the homeroom teacher of class II, the outbound accompanying teacher, and some grade II students who actively participate in the activity, while the parents of the students are selected as supporting informants to confirm the sustainability of religious behavior at home. Primary data was obtained through interviews, observations, and direct interactions, while secondary data came from school documents, photographs, activity archives, and scientific literature. This arrangement of subjects and data sources allows researchers to comprehensively understand the relationship between direct learning experiences, teacher mentoring, habituation, and the manifestation of students' religious character in the context of natural learning

Data collection techniques in this study included participant observation of the implementation of the outbound Bamboo Bridge, in-depth interviews with informants, and documentation studies on archives, photographs, activity records, and school documents. Observation was used to record directly the patterns of student interaction, forms of teacher assistance, responses to challenges, and the manifestation of religious values that emerged during activities in a natural and experiential learning context. In-depth interviews were conducted to explore the perceptions, strategies, experiences, and obstacles faced by schools in optimizing outbound as a means of religious character education. The data were analyzed with the Miles and Huberman model through the stages of accumulation, reduction, presentation, and drawing conclusions iteratively. To ensure the validity of the data, the research applied triangulation of

sources, techniques, and time. However, methodological transparency will be stronger if the research also explicitly explains the number of participants involved and the duration of the field observations carried out.

RESULT AND DISCUSSION

The theoretical framework of this research rests on the integration of the concept of optimizing extra-classroom learning activities, religious character education, and experiential learning approaches in the context of nature-based madrassas (Hidayah, Tobroni, & Faridi, 2025). Optimization is understood as a systematic effort to maximize the function of a program through targeted planning, implementation, mentoring, and evaluation so that educational goals are achieved effectively and efficiently. Outbound activities, including Bamboo Bridge, in this perspective are not just physical games, but learning mediums designed to stimulate balance, courage, concentration, cooperation, and adherence to the rules through hands-on experience (Maulidin, Hidayatullah, & Darisman, 2025). Religious character education is interpreted as the process of forming attitudes and behaviors that reflect adherence to Islamic teachings in relation to Allah, fellow humans, and the environment, through the habit of worship, school culture, and the example of teachers (Huda, Widodo, Karwanto, Aseri, & Wahyudin, 2024). Thus, the Bamboo Bridge is positioned as a concrete vehicle to internalize religious values such as patience, tawakal, honesty, discipline, and responsibility.

Conceptually, the relationship between Bamboo Bridge's outbound activities and the formation of religious character can be explained through a gradual analytical model that connects four key constructions, namely experiential stimulus, value reflection, behavioral habituation, and madrasah cultural strengthening. The physical and social experiences in Bamboo Bridge act as a stimulus that puts students in real situations to dare to face challenges, obey procedures, cooperate and be responsible, so that values do not stop at the cognitive level, but are present in concrete actions. The next stage is value reflection, when the teacher interprets the experience with Islamic teachings such as ukhuwah, patience, tawakal, and amanah so that students understand the religious meaning behind the activities carried out. After that, the habituation of behavior and culture of religious madrassas serves to strengthen internalization, so that this model makes it clear that religious character is formed through the process of continuous experience, meaning, repetition, and strengthening of the environment.

The results of the study show that the implementation of Bamboo Bridge outbound activities at Madrasah Ibtidaiyah Alam Ya Bunayya Bungo has been integrated in nature-based learning programs and is positioned as a vehicle for the formation of religious character of grade II students, although it still requires strengthening in aspects of planning and value assistance. Participants' observations showed that students showed high enthusiasm, increased courage, and the ability to cooperate and obey the rules of the game when participating in activities (Cahyaningrum, Asri, Ibrahim, Putri, & Mujahidi, 2025). The accompanying teacher uses the moments before, during, and after the activity to instill the values of patience, tawakal, discipline, and responsibility through direction, joint prayer, and short reflection sessions. Interviews with homeroom teachers and madrasah principals confirmed that this activity was seen as effective in stimulating students' religious attitudes, especially in terms of discipline and helpfulness, although not all teachers consistently associated the physical and social experience of the Bamboo Bridge with the teachings of Islam in an explicit and structured manner.

In addition, data from interviews with parents and school documentation indicate positive behavioral changes in some students after participating in the program regularly, such as an increase

in willingness to carry out worship on time, a more patient attitude in waiting for their turn, and concern for helping friends. However, an in-depth analysis shows that the optimization of Bamboo Bridge outbound activities as a means of religious character formation still faces several obstacles, including limited learning time, variations in teachers' ability to reflect on values, and the absence of a standard character evaluation instrument. Theoretically, these findings reinforce the framework that experiential learning through Bamboo Bridge contributes to the formation of religious character when followed by systematic value assistance, behavioral habituation, and strengthening madrasah culture (Syafri & Budin, 2025). These results also emphasize the importance of a more structured program design so that the educational and spiritual potential of activities can be utilized to the maximum.

The discussion of the implementation of the Bamboo Bridge outbound activity for grade II students of Madrasah Ibtidaiyah Alam Ya Bunayya Bungo shows that this program is designed as an integral part of nature-based learning that emphasizes strengthening religious character through direct experience. The activity was carried out in the even semester of the 2025/2026 school year with a schedule adjusted to the madrasah academic calendar, so that it does not stand apart from the regular learning process, but becomes one of the innovative strategies for learning outside the classroom. Teachers and the school first prepare an activity plan that includes determining goals, game scenarios, group divisions, safety procedures, and instilling religious values to be highlighted. Thus, in terms of design, the outbound Bamboo Bridge is not interpreted as a purely recreational activity, but as part of a character education program that is structured and oriented towards the formation of students' religious attitudes and behaviors.

The implementation of the activity began with an initial briefing that served to clarify the goals, rules, and meaning of the values to be achieved through the Bamboo Bridge. At this stage, the teacher explains the relationship between courage, discipline, cooperation, and responsibility in play with Islamic teachings, such as the importance of trust, patience, and mutual help. Students are then divided into small groups to ensure that each child has the opportunity to participate and be accompanied intensively (Pangastuti, Suyudi, Bahtiar, & Abdullah, 2025). The accompanying teacher is in charge of ensuring that instructions are given clearly, that the Bamboo Bridge path is safe to travel, and that each student understands the sequence of activities. This approach is in line with the experiential learning theory framework which places concrete experiences as an entrance to build an understanding of values, so that from the beginning the activity has been directed at the integration of physical, social, and spiritual dimensions.

During the activity, students were asked to pass the bamboo bridge by following the rules that had been set, such as maintaining the queue, not preceding each other arbitrarily, helping friends who were in difficulty, and obeying the teacher's instructions. This condition creates an authentic situation that requires children to practice discipline, patience, courage, and cooperation in real terms. Observations in the field show that many students who were initially hesitant and afraid, then gradually dared to try after being supported by peers and motivated by teachers (Mann et al., 2022). At the same time, there are also students who learn to restrain themselves, wait for their turn, and make room for other friends, so that religious values such as tawadu', empathy, and ukhuwah are actualized in action. This interaction pattern shows the compatibility between the design of the activity and the purpose of religious character formation as presented in the introduction and theoretical framework.

The role of teachers in mentoring during Bamboo Bridge activities is crucial, both as technical facilitators and as religious role models (Rizqi, 2024). The teacher not only directs the procedural aspects of the game, but also actively associates each incident with moral and spiritual messages,

for example when a student falls or is about to fall, the teacher emphasizes the meaning of tawakal, effort, and the importance of helping each other. At the moment when students violate the rules, the teacher gives corrections that are associated with discipline as part of obedience to Allah and manners towards others. After all students completed the activity, a short reflection session was held where the teacher invited students to share their experiences, feelings, and what grades they learned. This process of reflection strengthens the stage of internalization of values within the framework of theory, so that physical experience does not stop as a momentary sensation, but is crystallized into a deeper religious understanding and attitude.

Although in general the implementation of the outbound Bamboo Bridge is effective and in line with the purpose of forming religious character, the results of the study also show that there are several limitations that affect the optimality of its implementation (Chusna & Putri, 2025). Among them are the variation in teachers' ability to integrate religious values explicitly at each stage of the activity, time constraints due to the dense learning agenda, and the absence of special evaluation instruments that systematically monitor the development of students' religious character after activities (Khoiriah, Sutarto, & Wanto, 2023). In addition, the intensity of the implementation that is still periodic makes some students need repetition so that behavior changes become more permanent. These findings show that, from the point of view of discussion, the implementation of Bamboo Bridge has led to a religiously oriented experiential learning model, but it still needs to be strengthened in the aspects of mentoring consistency, character evaluation system, and more comprehensive integration with madrasah culture so that the impact on the religious character of grade II students becomes stronger and more sustainable.

The discussion of the second problem formulation focuses on how the optimization strategy and the process of integrating religious values are carried out in the outbound activities of the Bamboo Bridge so that it does not stop as a physical game, but becomes a vehicle for learning planned Islamic characters. The first strategy appears at the planning stage, when teachers and madrassas formulate activity objectives explicitly in the religious realm, not just social-emotional. Values such as patience, tawakal, discipline, trust, helping, and responsibility are formulated as behavioral achievements that are expected to emerge through the Bamboo Bridge experience (Hermin, 2025). The plan also contains the determination of key moments for the insertion of moral messages, for example before students start, when facing difficulties, and when solving challenges. Thus, the integration of religious values has begun from the program design stage, in line with the theoretical framework of optimizing learning activities in madrasas.

The next strategy appears in the way teachers package the initial briefing as a space for internalizing grades, not just technical briefings. Before the activity began, the teacher conveyed a brief advice that linked the courage to face the bamboo bridge with the courage to carry out Allah's commands, the discipline of obeying the rules of the game with obedience to the sharia, and the attitude of helping each other with the command to help in kindness. The language used is adjusted to the level of development of grade II students, but still maintains the strength of the religious message (Muflichah, 2025). The teacher also invites students to read prayers together and reminds them that every effort must be accompanied by tawakal, so that children realize that the physical activities to be carried out are part of worship and a means to get closer to Allah. This method shows the integration of values from the pre-activity stage consciously and systematically.

In the implementation process, the integration of religious values takes place through hands-on guidance when students face challenges on the Bamboo Bridge. The teacher directs students who are in doubt to say basmalah, takbir, or recite short prayers when starting the steps, so that courage is built in a spiritual frame, not just a psychological motivation (Mulyana, 2024). When there is a

long queue, the teacher reminds the importance of patience and respect for the turn of friends as a mirror of noble morals. When there are students who are in a hurry or precede in an orderly manner, the teacher emphasizes that this behavior is not in accordance with Islamic manners. Thus, every dynamic that arises in the field is used as a contextual momentum to instill religious values through correction, strengthening, and repetition, in accordance with the principle of habituation in character education at Madrasah Ibtidaiyah.

The optimization strategy is also seen in the arrangement of social interaction between students which is directed to give rise to the value of Islamic ukhuwah. The teacher encourages students to encourage each other before climbing the Bamboo Bridge, help their friends who are having trouble maintaining their balance, and give a round of applause after their friends successfully complete the challenge (Jannah, Rodliyah, & Usriyah, 2023). These practices are then tied up with the explanation that supporting and empowering each other is part of the commandment to help in kindness, as taught in Islam. In this way, teamwork and solidarity are not only understood as social skills, but also interpreted as concrete implementations of religious values in the context of play. This kind of social interaction management shows how Bamboo Bridge is optimized as a character learning medium that touches cognitive, affective, and psychomotor aspects.

After all students participated in the activity, the teacher used the reflection session as a key strategy to consolidate the physical experience into a deeper understanding of religious values. In this session, the teacher asks open-ended questions about students' feelings when they are afraid, when waiting for their turn, or when helping a friend, then associating the students' answers with the concepts of patience, tawakal, gratitude, and ukhuwah. Reflection is not only done orally, but can also be expressed in the form of short stories or simple pictures for students, so that they are invited to recall their experiences and values (Badriyah, 2025). This reflective approach is in line with experiential learning theory which emphasizes the importance of the process of thinking about experience to form new concepts and attitudes. Thus, the integration of religious values does not stop in the field, but is strengthened through the processing of meaning after the activity.

The optimization of the integration of religious values is also related to the continuity between Bamboo Bridge activities and the religious culture of the madrasah in daily life. Teachers and homeroom teachers are directed to refer back to the Bamboo Bridge experience when reprimanding or appreciating students' behavior in class, for example when reminding them of the importance of prayer time discipline, patience in waiting for their turn to speak, or responsibility for assignments (Parhan, Syahidin, Somad, Abdulah, & Nugraha, 2024). In this way, the values practiced on the bamboo bridge do not become separate experiences, but are integrated into the learning routine and culture of the madrasah. The synergy between outbound activities and the religious environment is in line with the theory of character formation that emphasizes the role of habituation and school culture as key factors for the success of internalizing values. This layered integration strengthens the function of the Bamboo Bridge as an instrument of religious character education.

However, the results of the study also revealed that the strategy of optimizing the integration of religious values in Bamboo Bridge still faces several challenges. Not all teachers have the same capacity to develop religious language that is contextual and attractive to students, so the depth of value integration between groups can be different (Safitri, Jabu, & Samtidar, 2023). In addition, the unavailability of character evaluation tools specific to religious indicators causes the assessment of changes in students' attitudes to depend more on the subjective impressions of teachers and parents. The limited learning time also makes reflection sessions not always carried out ideally in each implementation. These findings show that, to achieve higher optimization, it is necessary to

strengthen teacher capacity, develop religious character evaluation instruments, and manage more proportionate timings so that the process of integrating values in Bamboo Bridge activities can take place more consistently, systematically, and measurably.

The discussion of the third problem formulation focuses on the impact of Bamboo Bridge outbound activities that have been optimized on the formation of religious character of second grade students of Madrasah Ibtidaiyah Alam Ya Bunayya Bungo (Maulina, 2020). Based on the results of the study, the most prominent impact appears to be on changes in student behavior in aspects of discipline, courage, responsibility, and social concern that are increasingly connected to religious values. This activity not only provides a physical experience in the form of successfully crossing a bamboo bridge, but also forms an inner experience that encourages students to control themselves, obey the rules, and respect their friends. From the perspective of experiential learning theory, concrete experiences are the basis for the formation of value understanding through the process of reflection and habituation (Fitriana & Mirza, 2026). Therefore, the outbound impact of the Bamboo Bridge is not understood as an instant result, but rather as a gradual change that grows through the repetition of experience, teacher mentoring, and consistent strengthening of the madrasah religious culture.

The first impact that can be identified is the increase in student discipline in following the rules, both during the activity and in the context of daily learning. When students follow the Bamboo Bridge, they are required to obey the order of the turns, follow the teacher's instructions, and keep themselves and friends safe (Agustin & Munisah, 2025). This pattern of regularity, when associated with religious values, helps students understand that discipline is not just a technical rule, but a part of Islamic morality that needs to be habituated. The results of interviews with teachers showed that after the activities were carried out regularly, some students became more orderly in line, easier to direct, and more obedient to class provisions and joint worship activities. These findings confirm that when the experience of discipline at Bamboo Bridge is framed in a religious message, then the impact goes beyond the playing field and begins to enter the realm of students' daily behavior in the madrasah.

The second impact can be seen in the growth of students' courage and confidence who are oriented towards the value of tawakal and self-confidence in a positive way. Before participating in the activity, some students show fear, hesitation, or reluctance to try because they are worried about falling or failing to cross a bamboo bridge (Suris, 2025). This change shows that courage is formed not only in a psychological sense, but also in a spiritual sense, that is, courage accompanied by awareness to strive and surrender to Allah. In the context of religious character formation, this kind of attitude is important because it instills in students that every difficulty can be faced with effort, prayer, and trust in God's help, so that the confident character does not develop individualistically, but religiously (Jamilah, 2021).

The third impact is related to the development of a responsible attitude towards students, both towards themselves and towards the group. In Bamboo Bridge activities, each student has the responsibility to follow the procedures correctly, maintain balance, and not take actions that endanger themselves or others (Muzakki & Nurdin, 2022). At the same time, students are also required to support their groupmates so that the entire series of activities can take place in an orderly and safe manner. Teacher mentoring that links obedience to rules with the concept of trust helps students understand that responsibility is part of religious character, not just a school's demands (Hapsariningrum, Al-Wasewi, & Esmaeili, 2025). This impact can be seen in changes in the attitude of students who are starting to be more aware of small tasks, such as tidying up

supplies, adhering to schedules, and completing assigned roles. Thus, the outbound Bamboo Bridge contributes to the formation of responsibility rooted in moral and spiritual values.

The fourth impact can be seen in increasing social concern and the spirit of helping among students. The process of crossing the Bamboo Bridge presents a situation that requires the child to not only focus on self-success, but also to pay attention to the condition of friends who are afraid, difficult, or in need of moral encouragement (Safrilsyah et al., 2024). In situations like these, teachers direct students to encourage, help in a safe way, and show empathy for friends who haven't dared to try. This kind of experience strengthens the value of Islamic ukhuwah and helping in kindness which is an important part of religious character. The results of interviews with teachers and parents indicate that some students have become more sensitive to the needs of friends, are easier to work with, and show caring attitudes in classroom activities and at home. This shows that Bamboo Bridge effectively cultivates the social dimension of children's religiosity.

In addition to social and emotional impacts, Bamboo Bridge's outbound activities also affect the habituation of patience and self-control skills (Rochma, Ni'maturrohmah, Farhah'Izzati, Putri, & Fanani, 2023). During the activity, students had to wait their turn, adjust the rhythm to the conditions of the bridge, and accept the fact that not all desires could be fulfilled immediately. In the context of elementary school age, the experience of delaying desires and controlling emotions is an important part of the character education process (Veiga, Guerreiro, Marmeleira, Santos, & Pomar, 2023). When teachers relate these experiences to Islamic teachings on patience, perseverance, and manners towards others, students gain a more concrete understanding of how religious values are practiced in real situations. This impact can be seen from the tendency of some students to become calmer, less easily crying when facing difficulties, and more able to wait in an orderly manner. Thus, Bamboo Bridge not only forms motor skills, but also spiritual-emotional characters.

Meskipun dampak positif kegiatan outbound Bamboo Bridge cukup nyata, penelitian ini juga shows that the results of religious character formation are not yet even and final for all students. Differences in family backgrounds, the intensity of teacher mentoring, the frequency of activities carried out, and the continuity between outbound experiences and religious habits at home affect the strength of the impact produced (Rochma et al., 2023). Therefore, the impact of this activity needs to be understood as part of a sustainable character education process, not as a single intervention that directly results in permanent change. Within the framework of character formation theory, concrete experiences will only become stable characters if they are accompanied by consistent repetition, example, habituation, and evaluation. Thus, optimized Bamboo Bridge outbound activities have been proven to make a significant contribution to the formation of religious character of grade II students, especially in the aspects of discipline, courage, responsibility, social concern, and patience, although it still needs further strengthening so that the impact is more profound and sustainable.

The analysis of this study shows that the optimization of Bamboo Bridge outbound activities has strong pedagogical relevance in the formation of religious character of grade II students because these activities bring together physical experiences, social interactions, and the cultivation of religious values in one complete learning process. In the context of nature-based madrasas, Bamboo Bridge is an effective medium to translate abstract religious concepts into concrete experiences that elementary school-age children can understand. The findings of the study show that changes in student behavior, such as increased discipline, courage, responsibility, patience, and social concern, do not arise by chance, but are the result of structured activity design, teacher mentoring, and direct integration of religious values in each stage of the activity. Thus, analytically, it can be affirmed

that the main strength of this activity lies in its ability to transform character learning from normative-verbal patterns into an experience-based internalization process that is more lively, contextual, and meaningful for students.

The success of Bamboo Bridge's outbound activities in forming religious character has not fully stood firm if it is not supported by a sustainable support system. Research shows that there are limitations in the consistency aspect of grade integration by teachers, character evaluation instruments that are not yet standardized, and the frequency of implementation that still needs to be strengthened so that the impact of habituation becomes more permanent. This indicates that Bamboo Bridge should be positioned not as a single solution, but as part of a religious character education ecosystem that includes madrasah culture, teacher examples, and family strengthening. Theoretically, these findings make it clear that religious character is formed through a gradual process that requires simultaneous experience, reflection, habituation, and evaluation. Therefore, the optimization of outbound activities will achieve maximum results if it is systematically integrated with the overall culture of Islamic education in madrasas.

CONCLUSION

The conclusion of this study shows that the optimization of Bamboo Bridge outbound activities at Madrasah Ibtidaiyah Alam Ya Bunayya Bungo has a significant role in the formation of religious character of grade II students if carried out in a planned, directed, and integrated manner with Islamic values. The implementation of activities not only functions as a recreative extra-curricular activity, but develops into an experiential character learning medium that allows students to practice discipline, courage, responsibility, patience, and social concern in real-life situations. The process of integrating religious values takes place through activity planning, initial briefing, teacher assistance during implementation, and reflection after the activity, so that the physical experience experienced by students can be transformed into a more meaningful moral and spiritual understanding. The results of the study also show that the impact of this activity appears to be on changes in the behavior of students who are more orderly, more courageous, more concerned about their friends, and more able to control themselves. However, the success of the optimization still requires strengthening the aspects of consistency of value integration by teachers, frequency of implementation, and more systematic character evaluation so that the formation of religious character takes place in a more deep, sustainable, and measurable manner

AUTHORS' CONTRIBUTION

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.
Author 2: Conceptualization; Data curation; In-vestigation.
Author 3: Data curation; Investigation.

REFERENCES

Agustin, R. A., & Munisah, E. (2025). Peranan guru dalam membangun disiplin belajar siswa kelas III Sekolah Dasar Negeri 05 Kelapa Tujuh tahun pelajaran 2023/2024. *Griya Cendikia*, *10*(1), 235–248.

Badriyah, B. (2025). Rethinking Character Education in Islamic Elementary Schools: Trends, Transformations, and Strategic Solutions in Madrasah Ibtidaiyah. *Ta'limDiniyah: Jurnal Pendidikan Agama Islam (Journal of Islamic Education Studies)*. https://doi.org/10.53515/tdjpai.v5i2.186

Banafsa, N. C. G., Nurjannah, N., & Laksana, M. Z. F. (2025). Strategi membangun budaya religius di sekolah dalam membentuk karakter sosial pada peserta didik. *Jurnal Multidisiplin Ilmu Akademik*, *2*(3), 490–500.

Bhoki, H., Are, T., & Ola, M. I. D. (2025). *Membentuk karakter siswa melalui budaya positif sekolah*. CV. Ruang Tentor.

Cahyaningrum, D., Asri, N. W. A. M., Ibrahim, I. D. K., Putri, B. K. M., & Mujahidi, K. (2025). Penguatan Kepercayaan Diri dan Motivasi Belajar Siswa Sekolah Menegah Pertama Melalui Kegiatan Outbound Berbasis Experiential Learning di Tanwirul Qulub, Lombok Tengah. *ABDISOSHUM: Jurnal Pengabdian Masyarakat Bidang Sosial Dan Humaniora*. https://doi.org/10.55123/abdisoshum.v4i4.6544

Chusna, C. A., & Putri, T. A. (2025). Penguatan Karakter Islami Siswa MI Ma'arif Al Maksum melalui Implementasi Pesantren Ramadhan Kolaboratif. *Al-DYAS*. https://doi.org/10.58578/aldyas.v4i2.6424

Duchatelet, D., Cornelissen, F., & Volman, M. (2023). Features of Experiential Learning Environments in Relation to Generic Learning Outcomes in Higher Education: A Scoping Review. *Journal of Experiential Education*, *47*, 400–423. https://doi.org/10.1177/10538259231211537

Fitriana, I., & Mirza, I. (2026). Nilai-Nilai Tafsir Tarbawi Dalam Pembelajaran Berbasis Pengalaman (Experiential Learning). *AL-Muaddib: Jurnal Kajian Ilmu Kependidikan*, *8*(1), 388–403.

Hapsariningrum, N., Al-Wasewi, I. H. H., & Esmaeili, Z. (2025). The Role of Islamic Religious Education Teachers in Forming Students' Disciplined and Responsible Characters. *Jurnal Pendidikan Agama Islam Indonesia (JPAII)*. https://doi.org/10.37251/jpaii.v6i1.1566

Hermin, H. (2025). Strategi guru akidah akhlak dalam menghadapi tantangan penanaman karakter siswa di era digital (Studi MTsN Parepare). IAIN Parepare.

Hidayah, U., Tobroni, & Faridi. (2025). Strengthening Ecological Fiqh Values in Building SDGs Madrasah Models Through Environmental Outdoor Education. *IJLHE: International Journal of Language, Humanities, and Education*. https://doi.org/10.52217/ijlhe.v8i1.1729

Huda, N., Widodo, B. S., Karwanto, Aseri, M., & Wahyudin. (2024). Strategies for Strengthening Character Education in Islamic Boarding Schools Through Extracurricular Activities. *Munaddhomah: Jurnal Manajemen Pendidikan Islam*. https://doi.org/10.31538/munaddhomah.v5i3.1397

Jamilah, I. D. (2021). Metode bercerita dalam membentuk karakter keberanian siswa Kelas B di RA Al Murtadho Kedungwaru Ngawi. Universitas Islam Negeri Maulana Malik Ibrahim.

Jannah, I. N., Rodliyah, R., & Usriyah, L. (2023). Cultural Transformation in Religious Activities Based on Ahlussunnah Wal Jama'ah Values in Islamic Boarding Schools. *Nazhruna: Jurnal Pendidikan Islam*. https://doi.org/10.31538/nzh.v6i2.3404

Judijanto, L., Wibowo, G. A., Karimuddin, K., Samsuddin, H., Patahuddin, A., Anggraeni, A. F., … Simorangkir, F. M. A. (2024). *Research design: Pendekatan kualitatif dan kuantitatif*. PT. Sonpedia Publishing Indonesia.

Khoiriah, B. H., Sutarto, S., & Wanto, D. (2023). Strategi Guru Dalam Menanamkan Nilai-Nilai Religius Bagi Peserta Didik Di Ra Tunas Literasi Qur'ani. Institut Agama Islam Negeri Curup.

Mann, J., Gray, T., Truong, S., Brymer, E., Passy, R., Ho, S., … Cowper, R. (2022). Getting Out of the Classroom and Into Nature: A Systematic Review of Nature-Specific Outdoor Learning on School Children's Learning and Development. *Frontiers in Public Health*, *10*. https://doi.org/10.3389/fpubh.2022.877058

Maulidin, M., Hidayatullah, M. R., & Darisman, E. K. (2025). The Impact of Outdoor Activity-Based Learning on Elementary School Students' Motivation and Social Skills Development. *Jurnal Penelitian Dan Pengkajian Ilmu Pendidikan: E-Saintika*. https://doi.org/10.36312/e-saintika.v9i2.3181

Maulina, R. (2020). Penguatan Karakter Melalui Kegiatan Outbound Di SD Alam Ungaran, Kabupaten Semarang. *Semarang: Universitas Islam Negeri Walisongo Semarang*.

Miskiyah, M., Nurhidaya, A. R., & Ashar, A. (2025). Permainan Tradisional untuk Perkembangan Kemampuan Sosial dan Emosional Anak Usia 5-6 Tahun. *Ihya Ulum: Early Childhood Education Journal*, *3*(1), 393–402.

Muflichah, M. (2025). Keteladanan Guru Pendidikan Agama Islam Dalam Membentuk karakter Disiplin Peserta Didik Di Mts Manbaul Ulum 06 Serpong Tangerang Selatan. Universitas Islam Sultan Agung Semarang.

Mulyana, A. (2024). Strategi pengembangan nilai-nilai keagamaan dalam membentuk kecerdasan spiritual siswa di MI Asy-Syifa Balikpapan Kalimantan Timur. Universitas Islam Sultan Agung (Indonesia).

Muttaqin, Z. (2025). Pendidikan Agama Islam Sebagai Fondasi Moral Siswa Sekolah Dasar. *Naturalistic: Jurnal Kajian Dan Penelitian Pendidikan Dan Pembelajaran*. Retrieved from https://api.semanticscholar.org/CorpusID:282801133

Muzakki, Z., & Nurdin, N. (2022). Formation of Student Character in Islamic Religious Education. *EDUKASIA: Jurnal Pendidikan Dan Pembelajaran*. https://doi.org/10.62775/edukasia.v3i3.219

Nurrohmah, N., Syaifurrahman, A., & Lestari, F. A. (2025). Implementasi Pendidikan Agama Islam dalam Membentuk Karakter Peserta Didik di Era Teknologi AI (Artificial Intelligence). *Jurnal Pengabdian Masyarakat Dan Riset Pendidikan*. Retrieved from https://api.semanticscholar.org/CorpusID:280717509

Pangastuti, R., Suyudi, H., Bahtiar, M., & Abdullah, Z. (2025). Education Management Strategies for Internalizing Moderate Religious Values in Learning Quran, Hadith, and Aqeedah Akhlaq in Madrasah Ibtidaiyah. *Munaddhomah: Jurnal Manajemen Pendidikan Islam*. https://doi.org/10.31538/munaddhomah.v6i1.1544

Parhan, M., Syahidin, S., Somad, M., Abdulah, M., & Nugraha, R. H. (2024). Developing a Contextual Learning Model in Islamic Education to Improve Applicable Knowledge and Foster Knowledge-Based Virtues. *Jurnal Pendidikan Islam*. https://doi.org/10.15575/jpi.v10i1.35205

Puteri, S. M. (2025). Kontribusi Pendidikan Agama Islam dalam Edukasi Moral dan Etika Anak Usia Sekolah Dasar. *Journal of Character and Elementary Education*. https://doi.org/10.35508/jocee.v4i3.23051

Rizqi, M. (2024). Analisis peran guru dalam menanamkan karakter religius siswa melalui problem based learning: Studi kasus pembelajaran IPS di SMP Islam Sabilurrosyad Gasek Karang Besuki Malang. Universitas Islam Negeri Maulana Malik Ibrahim.

Rochma, A. V. N., Ni'maturrohmah, M., Farhah'Izzati, N. A., Putri, R. V. A., & Fanani, E. (2023). Relationship Between Outbound Activities And Formation Leadership Character For Students In Elementary School, Junior High School, And Senior High School: Literature Review. *Health Frontiers*. https://doi.org/10.62255/mjhp.v1i1.5

Safitri, C. D., Jabu, B., & Samtidar, S. (2023). The Integration of Islamic Values in English Language Teaching Context: Practices and Challenges. *Celebes Journal of Language Studies*. https://doi.org/10.51629/cjls.v3i2.156

Safrilsyah, S., Ibrahim, I., Marwan, M., Yusoff, M., Subhan, S., & Darusman, M. R. (2024). Urgency of Noble Characters' Education and Building Students' Prosocial Behaviors. *Jurnal Ilmiah Peuradeun*. https://doi.org/10.26811/peuradeun.v12i3.1183

Setiyani, A., Judijanto, L., Nurmalita, N., Irianto, I., Aryani, L., Fatubun, R. R., … Merung, A. Y. (2026). *Metodologi penelitian kualitatif*. PT. Sonpedia Publishing Indonesia.

Sujarwo, A. (2024). Implementasi manajemen pendidikan Islam berbasis karakter: Strategi pembangunan karakter siswa di madrasah. *EDUKASIA Jurnal Pendidikan Dan Pembelajaran*, *5*(1), 2059–2070.

Suris, S. N. P. (2025). Upaya Guru dalam Meningkatkan Kedisiplinan Siswa melalui Pembiasaan Positif di MI Makrifatul Ilmi. *Jurnal Ilmiah El Makrifah PGMI*, *2*(1), 70–82.

Syafri, U. A., & Budin, H. Bin. (2025). Teachers, Parents, and the Digital Challenge: Understanding Islamic Character Formation in Singapore's Madrasa Education. *Nazhruna: Jurnal Pendidikan Islam*. https://doi.org/10.31538/nzh.v8i3.239

Syahidi, K. (2025). Internalisasi Nilai Peduli Lingkungan Melalui Model Pendidikan Sekolah Alam dalam Pembentukan Karakter Siswa. *Journal of Community Service*, *1*(1), 29–37.

Veiga, G., Guerreiro, D., Marmeleira, J., Santos, G., & Pomar, C. (2023). OUT to IN: a body-oriented intervention program to promote preschoolers' self-regulation and relationship skills in the outdoors. *Frontiers in Psychology*, *14*. https://doi.org/10.3389/fpsyg.2023.1195305

Yufarika, S. D. A. D., Supriyatno, T., & Zuhriyah, I. A. (2025). Strategi pembentukan karakter religius di Madrasah Ibtidaiyah. *Al-Madrasah: Jurnal Ilmiah Pendidikan Madrasah Ibtidaiyah*, *9*(2), 552–573.

Copyright Holder :
© Uci Rahma Yani et al. (2026).

First Publication Right :
© Journal Emerging Technologies in Education

This article is under: