

Ethnomathematical Exploration of the Traditional Banjar Basimban Game as a Learning Medium for Mathematics Instruction in Elementary Schools

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ARTICLE INFO	ABSTRACT
Keywords: Ethnomathematics Traditional games Banjar Basimban Learning medium	<i>This research is a qualitative descriptive study that aims to explore ethnomathematics in the traditional Banjar Basimban game and its use as a mathematics learning medium. The research participants included one Banjar cultural expert, one mathematics education expert, one elementary school teacher, and 20 elementary school students who were involved in learning activities using the Basimban game-based LKPD. Data were collected through interviews, observations, documentation, and students' reflections. Thematic analysis was used to analyze the data. Findings indicate that the Basimban game has strong potential as an ethnomathematics-based mathematics learning medium. Based on the results of interviews with experts, this game contains various mathematical concepts, such as counting operations in the activity of counting the number of votes obtained by players, the concept of comparison through the comparison of the number of votes between players, and statistics through the collection and sequencing of game result data. In addition, the Basimban game also contains character and social values, such as honesty, patience, cooperation, and sportsmanship. The implementation of Basimban-based LKPD in learning activities resulted in active student engagement, enthusiasm, and effective problem-solving during gameplay. Thus, Basimban traditional games not only have the potential to serve as a means of preserving local culture but can also be used as an alternative to contextual, interactive, and meaningful media for mathematics learning.</i>

INTRODUCTION

Mathematics lessons for students play a fundamental role in developing students' numeracy skills, particularly in critical and precise thinking (Djamilah et al., 2023; Djamilah, Istiqamah, et al., 2025). Mathematical concepts are fundamental to students' decision-making and problem-solving, enabling them to use logical thinking skills to solve problems accurately and thoroughly. According to the 2022 Programme for International Student Assessment (PISA), Indonesian students' mathematical literacy remains low, with an average score of 366, placing Indonesia approximately 69th among 81 participating countries. Furthermore, the OECD reports that only 18% of Indonesian students achieve Level 2 or higher in mathematics (OECD, 2023).

Some causes of poor mathematics skills among Indonesian students include unengaging learning methods (Djamilah & Fajriah, 2019; Tanujaya et al., 2021), an overemphasis by teachers on individual and class-based achievement and learning outcomes (Handican et al., 2023), and students' perceptions of mathematics as a difficult subject (Kunwar et al., 2022). As a result, students often struggle to learn mathematics, particularly due to its abstract concepts and perceived lack of relevance to daily life.

One interactive, student-centered learning medium is game-based learning (Djamilah, Ulfah, et al., 2025; Lee et al., 2024). Such media offer meaningful learning experiences that can enhance students' interest and confidence in mathematics (Gil-Doménech & Berbegal-Mirabent, 2019). However, existing learning media often emphasize digital games and technologies that may be less student-friendly and contain content that is not age-appropriate (Liu et al., 2020). Excessive reliance on digital games can diminish logical thinking and contextual problem-solving abilities, as reduced physical activity and limited social interaction can lead to diminished cognitive abilities.

Mathematics, as a knowledge concept that fosters critical, logical, and systematic thinking, should be connected to students' social development (Aure, 2020; Djamilah & Ariyanti, 2020; Khusna et al., 2024). The advancement of technology has significantly altered social interactions, including among students. Excessive use of technology, even in educational contexts, can result in negative consequences such as addiction and diminished social interaction, leading to various social issues (Armakolas et al., 2024).

To improve the mathematics learning process and foster social interaction among students, an effective learning method is needed. Traditional game-based learning offers a promising approach to address these challenges. Engaging students in traditional games can facilitate meaningful learning experiences and improve their understanding of mathematical concepts. Additionally, encouraging direct social interaction through such activities may contribute to the preservation of local culture. This approach aligns with the eighth ideal, which emphasizes the integration of harmonious living with cultural values.

One traditional game that can be integrated with mathematics is Basimban. The game uses simple equipment, such as a baseball and pebbles or magic seeds, which are thrown and caught according to specific rules. Basimban embodies cultural values including precision, sportsmanship, patience, and social interaction among participants (Suhra, 2023). The unique characteristics of this game lead to distinct representations of mathematical concepts, particularly in grouping, sequence patterns, and object retrieval strategies. This research highlights the novelty of focusing on Banjar culture and revitalizing the stages of the Basimban game to represent mathematical concepts

rooted in local traditions. Basimban thus provides a culturally relevant context for learning, integrating real-life experiences into the study of ethnomathematics (Rosa & Orey, 2011)

Previous research has explored ethnomathematics, particularly the use of traditional games as a medium for mathematics learning, including studies on dengklak (Fauzi & Lu'luilmaknun, 2019a), engklek (Tambunan & Simanjuntak, 2021; Zuhri et al., 2023a), bekles (Hendriawan & Faridah, 2022), congklak (Tampubolon et al., 2023; Tusolihah et al., 2022), gobak sodor (Aprillian et al., 2023), canang (Astuti et al., 2023), ekar (Febriandi et al., 2023), and porok (Husna et al., 2023). These studies confirm that traditional games can serve as effective media for mathematics instruction. Most existing research has focused on traditional games from regions such as Java, Sumatra, and Nusa Tenggara. In contrast, limited attention has been given to traditional Banjar games as a medium for mathematics learning, highlighting the novelty of the present study. This research aims to address this gap by investigating the potential of traditional Banjar games in mathematics education.

Based on the research background, the following questions are addressed: (1) What mathematical concepts are present in traditional Banjar Basimban games? (2) How can traditional Banjar Basimban games be utilized as a medium for mathematics learning?

LITERATURE REVIEW

Learning methods continually evolve to meet student needs. Effective method selection requires teachers to connect learning materials with students' real-life experiences (Widayati et al., 2025), thereby enhancing the meaningfulness of instruction. The use of appropriate methods fosters contextual learning that situates knowledge within everyday life, bridging academic content with lived reality (Naja et al., 2022). In mathematics education, enjoyable learning emphasizes outcomes achieved through exploration, interaction (Jannah et al., 2024), and experiences relevant to students' lives, including the use of local cultural media. Contextual learning media can be implemented through traditional Banjar games that are modified to align with the local context (Zuhri et al., 2023b).

Ethnomathematics is an approach that links mathematical concepts with the culture and practices of specific communities. It is defined as the study of mathematical ideas and practices within cultural traditions (Nurtriana & Nuryadi, 2025). Ethnomathematics is understood as the discovery of mathematical concepts embedded in a society's cultural values (Kusuma et al., 2024). More broadly, it is regarded as a socio-cultural construct that evolves within human societies (Näslund-Hadley et al., 2025).

Traditional games are typically associated with specific ethnic groups, tribes, or communities. In educational contexts, these games function as contextual learning media that support conceptual understanding through real-world contexts. In mathematics education, traditional games can facilitate numeracy development (Tampubolon et al., 2023), provide recreational opportunities (Yabo, 2020), and serve as pedagogical tools that connect mathematical concepts with students' cultural backgrounds. Basimban is a traditional Banjar game in South Kalimantan that has been passed down through generations as part of the community's local wisdom. Unlike bekel, a Javanese game that employs metal objects with designated points, Basimban is played using small stones or pebbles readily available to children. Both Bekel and Basimban share similar rules that involve sequential throwing and catching patterns based on agreed-upon guidelines (Kamid et al., 2022). While Bekel uses metal pieces and small, bouncy balls, Basimban emphasizes a stone-to-stone (sihi) system. The game begins with collecting, grouping, sequencing, and coordinating hand movements with small stones or pebbles (Adi et al., 2021).

Traditional games are beneficial as an alternative development tool, as they encompass physical movement, socio-emotional, moral, and cognitive aspects. They also contribute to cultural preservation (Komalasari et al., 2025), foster critical thinking skills (Sangadah et al., 2025) and support the development of strategic abilities (Cahyadhi & Sryanawati, 2023). Utilizing Basimban from an ethnomathematics perspective provides both cognitive and cultural advantages. Integrating ethnomathematics into instruction enhances the relevance (Rezeki et al., 2021), inclusivity, and meaningfulness of mathematics by connecting lessons to students' cultural practices. Additionally, ethnomathematics-based learning can increase student engagement by situating content within familiar cultural contexts (Serepinah & Nurhasanah, 2023). Consequently, Basimban holds significant potential as a medium for mathematics learning, facilitating conceptual understanding and revitalizing Banjarese cultural values in education.

METHOD

This study employs a qualitative descriptive approach to investigate ethnomathematics within the traditional Banjar game, Basimban, and its potential as a medium for mathematics instruction. The initial stage utilized an exploratory method, involving interviews with one Banjar cultural expert, recognized for expertise in Banjar culture and literature, and one mathematics education expert specializing in ethnomathematics. Both informants possess acknowledged qualifications in cultural and ethnomathematical fields. These interviews aimed to establish coherence and enhance the theoretical foundation, which was further developed through a literature review focusing on mathematics learning media and the mathematical concepts present in the Basimban game. The second stage involved implementing the traditional Banjar game, Basimban, as a mathematics learning medium for students at SDN Mawar 7 Banjarmasin. This phase examined the application of ethnomathematics through the use of Basimban in mathematics education. Data collection instruments included interview protocols and observation field notes. The collected data were analyzed using thematic analysis to identify mathematical concepts embedded in the Basimban game and to inform its application as a mathematics learning medium.

RESULTS AND DISCUSSION

Results

a. Interviews with Banjar Arts and Culture Experts

In the first exploration stage, interviews with Banjar arts and culture experts provided significant information about the traditional game Basimban. The credibility of the research findings was established through interview data analyzed using thematic analysis. The analysis began by identifying meaningful statements from the interview transcripts (open coding), followed by grouping codes with similar meanings into broader categories. Each category was then interpreted to generate findings regarding the traditional Basimban game as part of Banjar culture. The interview coding process is presented in Table 1.

Table 1. Thematic Coding of Interview Data from the Banjar Arts and Culture Expert

Interview Data	Initial Code (Open Coding)	Category	Interpretation
"In the Banjar language, <i>Basimban</i> generally means playing. Specifically, <i>Basimban</i> refers to a traditional Banjar game that uses stones."	Basimban means playing; game using stones	Definition of Basimban	<i>Basimban</i> has a general meaning as a play activity and a specific meaning as a traditional Banjar game that uses stones.
"The Basimban game can also use rubber balls or other locally available balls. The stones may also be replaced with <i>sihi</i> (shell seeds)."	Rubber ball; stones; <i>sihi</i>	Game equipment	Basimban can be played using stones, <i>sihi</i> (shell seeds), or balls, allowing the game equipment to be adapted to the surrounding environment.
"This game has been passed down from generation to generation, from parents to their children."	Traditional game; passed down through generations	History of the game	Basimban is a traditional Banjar game that has been preserved and transmitted across generations as part of the community's cultural heritage.
"The game is not played alone; it symbolizes friendship, togetherness, social relationships, and cooperation."	Friendship; cooperation; social relationships	Cultural values	Basimban embodies social values, including friendship, communication, solidarity, and cooperation among players.
"Basimban has the potential to be used as a learning medium in schools."	Learning medium	Educational potential	Basimban has the potential to be utilized as a learning medium in school settings.
"Basimban also develops children's skills and creativity while instilling ethical and moral values such as honesty."	Skills; creativity; honesty	Character education	Besides developing students' skills, Basimban also promotes character values, particularly honesty and creativity.
"A player is declared the winner if they collect the largest number of <i>sihi</i> or stones."	Counting objects; determining the winner	Mathematical concepts	Basimban involves basic numeracy activities through counting and comparing quantities to determine the winner.

In the Banjar language, Basimban generally denotes a play activity. Traditional Banjar society features a wide variety of games, such as gasing, badaku, kasti, basan, and dandang kites. Beyond this general meaning, Basimban specifically refers to a traditional Banjar game that uses stones as playing pieces. These stones may also be substituted with *sihi*, an object crafted from sea shells. In practice, Basimban may also use balls, including rubber balls or other locally available types. The tools needed for Basimban include *sihi*, shells, or stones, as well as a ball. The Basimban game equipment is illustrated in Figure 1.



Figure 1. Basimban game equipment

The traditional game of Basimban has two types: Basimban with a ball and without a ball. Both types share similar goals and basic gameplay, but differ in the equipment used and the level of difficulty for participants. In Basimban without a ball, players focus on hand coordination when picking up and managing the *sihi*. In contrast, Basimban with a ball requires additional coordination to synchronize hand movements with the ball's bounce. These distinctions offer a varied playing experience that can be tailored to participants' abilities and developmental stages. Figure 2 presents the procedures for playing both types.

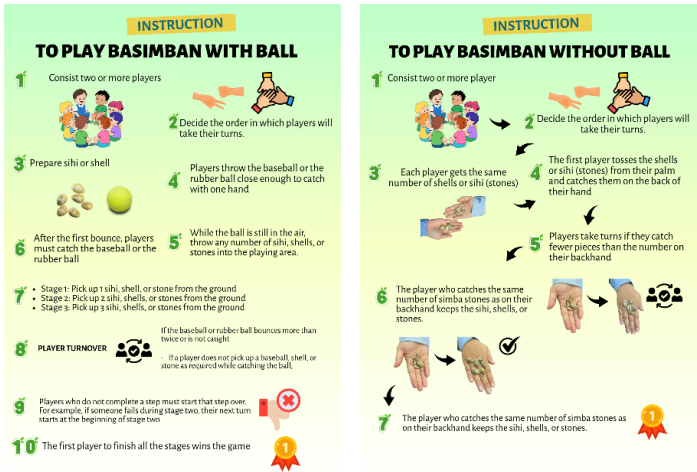


Figure 2. Instruction to play Basimban

The Basimban game demonstrates considerable potential as an educational tool within schools. It serves as an effective means of transmitting traditional gaming culture to children, promoting positive values such as friendships, communication skills, cohesiveness, social relationships, and cooperation. Additionally, the game embodies local wisdom. The materials required for the Basimban game are easily accessible in Kalimantan and play a significant role in the cultural development of the Banjar community, particularly in efforts to preserve traditional games.

b. Interviews with Mathematics Education Experts

To identify the mathematical concepts embedded in the Basimban game and its potential for mathematics learning, interviews were conducted with a mathematics education expert. The interview data were analyzed using thematic analysis through an open coding process by identifying meaningful statements related to mathematical concepts, classroom implementation, and assessment. Codes with similar meanings were then grouped into broader categories and interpreted to generate comprehensive findings. The interview coding process is presented in Table 2.

Table 2. Thematic Coding of Interview Data from the Banjar Arts and Culture Expert

Interview Data	Initial Code (<i>Open Coding</i>)	Category	Interpretation
"The calculations can involve the concepts of multiplication and addition."	Addition; multiplication	Arithmetic operations	The Basimban game incorporates arithmetic operations that can be integrated into mathematics learning.
"Multiplication is essentially repeated addition."	Repeated addition	Multiplication concept	The game can be used to illustrate multiplication as repeated addition.
"Addition is more appropriate, but it can also involve subtraction."	Addition; subtraction	Arithmetic operations	The game also demonstrates the concept of subtraction through the process of taking and leaving objects.
"The concept that can be introduced is the surface area of a sphere."	Surface area of a sphere	Geometry	The ball used in the game has the potential to introduce basic geometric concepts.
"The concept of comparing quantities, for example, between the first and second players."	Comparing quantities	Comparison	The game facilitates students in comparing the quantities obtained by different players.
"Objects are collected in groups of two or three; therefore, the concept of division can also be applied."	Division; grouping	Arithmetic operations	The grouping activity in the game provides opportunities to introduce the concept of division.
"Within one group, roles can be assigned, such as players, judges, and observers."	Players; judges; observers	Classroom implementation	The game supports collaborative learning through role assignment in group activities.
"The first aspects to be assessed are honesty, accuracy, cooperation, critical thinking, and creativity."	Honesty; accuracy; cooperation; critical thinking; creativity	Learning assessment	The game enables teachers to assess students' knowledge, skills, and character through authentic assessment.
"Counting skills are usually more prominent among younger children."	Counting skills	Numeracy	The game has the potential to develop students' numeracy skills from the elementary level.

Furthermore, interviews with mathematics education experts indicate that the Basimban game has strong potential for integration into mathematics learning through various contextual concepts. The game incorporates multiple mathematical concepts, including arithmetic operations (addition, subtraction, multiplication as repeated addition, and division as repeated subtraction), comparison (such as comparing the number of sihi collected by the player with the most sihi and the player with the least sihi), and basic geometric concepts such as the surface area of a spherical object. Furthermore, the quantity aspect and the determination of the winner in the game can be linked to the concepts of measurement and comparison of quantities. When implemented in the classroom, the game can be adapted to suit students' developmental stages, ranging from number recognition at lower levels to rational comparison at higher levels. The Basimban game also facilitates group-based learning with designated roles, such as players, judges, and observers, thereby fostering both cognitive abilities and social skills, as well as character development. For assessment purposes, the game enables teachers to observe attributes such as honesty, accuracy, communication skills, cooperation, and critical and creative thinking. Consequently, Basimban is relevant not only as an ethnomathematics-based mathematics learning medium but also as a holistic and contextual educational tool.

The thematic analysis revealed that the Basimban game encompasses a wide range of mathematical concepts that can potentially be integrated into mathematics learning. However, not all of the identified concepts were implemented in the developed student worksheet. The selection of mathematical concepts was carried out selectively by considering the intended learning objectives, the characteristics of elementary school students, and the purpose of developing the learning media. Therefore, the student worksheet was designed to focus on arithmetic operations, simple statistics, and comparison, while the remaining mathematical concepts identified during the exploration stage provide opportunities for further development in future studies.

c. Application in Classroom

Following the exploration of the ethnomathematics context of the Banjar traditional game Basimban as a mathematics learning medium, the next step is its application in classroom instruction. Before implementation, the researcher observed grade IV A students at SDN Mawar 7 and interviewed the class teacher. These observations and interviews showed that while students had learned about the Basimban game in the Local Content subject the previous semester, they had not practiced it directly. As a result, incorporating the Basimban game into classroom learning is considered relevant and may support curriculum implementation.

Next, the author developed an ethnomathematics-based Student Worksheet (LKPD) that integrates the traditional Banjar game Basimban into the learning process. The LKPD is designed to facilitate Basimban play activities, both with and without a ball, and includes learning objectives and general instructions to guide students. The worksheet features questions related to number operations, statistics, and comparison, all contextualized through Basimban game activities. In the number operations section, students determine the total number of sihi collected by all players and calculate the difference between the highest and lowest values. The statistics section requires students to complete a table of game results and rank the number of sihi from least to greatest. In the comparison section, students compare the number of sihi obtained by each player with the highest and lowest values using ratios. The LKPD concludes with a learning reflection and reinforcement of character and cultural values. An excerpt of the developed LKPD is presented in Figure 3.

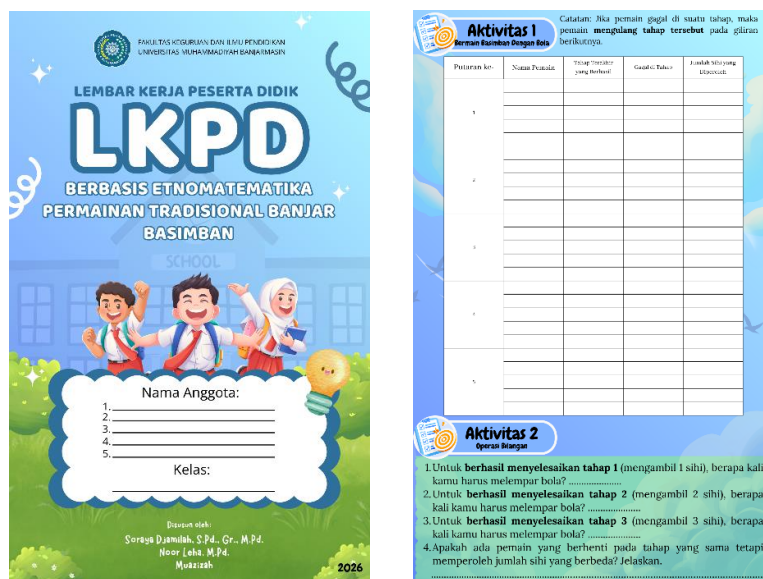


Figure 3. Excerpt of LKPD based on the ethnomathematics of traditional Banjar Basimban games

The second stage involved using the traditional Banjar game Basimban as a mathematics learning medium, implemented with 20 fourth-grade students at SDN Mawar 7, Banjarmasin. The learning activity commenced with a review of the Basimban game's procedures through hands-on practice. Subsequently, the students were divided into five groups of four.

After the students had settled into their respective groups, learning materials, including balls, sihi, and Student Worksheets (LKPD), were distributed. The students then engaged in various learning activities in accordance with the stages outlined in the LKPD. The entire learning process was conducted under the guidance of the researcher and the class teacher. These activities encouraged active student participation in playing while learning, thereby making the learning experience more contextual and meaningful. Documentation of the activity utilizing the traditional Banjar game Basimban as a mathematics learning medium, both with and without balls, is presented in Figure 4.



Figure 4. The Use of the Traditional Banjar Basimban Game as a Medium for Mathematics Instruction

During the learning process, which incorporated play-based activities, students demonstrated adaptability and a high level of motivation. Their enthusiasm and engagement were evident during each stage of the Basimban game, as well as in their willingness to complete the assigned tasks. Additionally, students were able to answer questions on the Student Worksheet (LKPD), which was contextualized with the Basimban game, with relative success. These findings are consistent with previous research indicating that game-based learning can enhance student motivation (Djamilah & Ulfah, 2025).

In the reflection section, three groups reported that the Basimban game was easier to play without a ball. Contributing factors included improved focus when not required to coordinate two objects simultaneously (a ball and a magic wand), the relative difficulty of catching the ball, the need for quick hand movements, the ball's slippery surface, and the limited size of students' hands. Conversely, two groups reported that playing with a ball was easier, citing the ease of catching and the extra time afforded by the ball's bounce. Teacher interviews suggested that these differing perceptions are influenced by students' limited familiarity with traditional games, which is consistent with previous research (Firdaus et al., 2023; Triansyah, 2023a, 2023b).

In the character and culture strengthening section of the Student Worksheet (LKPD), students were asked to identify character values based on their experiences playing Basimban. The character values identified included honesty, cooperation, perseverance, patience, respect for others, and appreciation for regional culture. Based on the findings, honesty and patience were the most frequently identified character values, each recognized by five groups. Perseverance and respect for others were identified by four groups, while cooperation and appreciation of local culture were each mentioned by two groups. These findings indicate that the Basimban game not only supports students' cognitive development but also contributes to the strengthening of character and cultural awareness.

All groups reported that the Basimban game facilitated the development of honesty and patience among students. Group reflection results indicated that participants cultivated honesty during Basimban, as each player was required to accurately report the number of magic stones obtained. The turn-based structure, observed by other group members, promoted honest behavior, since outcomes could be verified by peers. This dynamic reflects the natural emergence of fair play and social supervision within traditional games. These findings are consistent with Lev Vygotsky's social learning theory, which posits that behavioral and value development occur through social interactions (Cong-Lem, 2022; Luong, 2022). In the Basimban game, students acquired mathematical concepts while internalizing the value of truth through interaction, observation, and adherence to agreed-upon rules. Additionally, patience was fostered as students waited for their turns and repeated stages upon failure. Overall, these results suggest that traditional games can support mathematics learning and serve as effective media for character development. This is supported by recent research (Laili & Nisak, 2022; Nizar et al., 2025), which demonstrates that activity-based and experiential learning effectively instill character values in students.

Furthermore, four groups identified the development of perseverance and respect for others as character traits fostered during the games, while two groups emphasized cooperation and respect for local culture. This diversity of responses suggests that traditional games

function not only as recreational activities but also as educational tools that integrate cognitive, social, and cultural dimensions. These findings are consistent with previous studies (Anwar & Ramadhani, 2025a; Luzano, 2025; Singh, 2025), which confirm that incorporating local contexts into mathematics learning enhances student engagement and reinforces social and cultural values.

Figure 5 presents a group photograph taken after all learning activities at the school were completed. The image documents the participation of all students, teachers, and the researcher involved in the activities. This visual evidence confirms that the activities proceeded to the final stage as planned. The inclusion of this documentation enhances the description of the research implementation and provides an accurate representation of the context and conditions during the activities.



Figure 5. Group photo of students and teachers of Grade IV A at SDN Mawar 7 Banjarmasin

DISCUSSION

The findings revealed that the ethnomathematics embedded in the traditional Banjar game Basimban contains various mathematical concepts that can be applied in mathematics learning. The concepts that can be integrated include number operations, comparison, measurement, basic statistics, and geometry. These findings reinforce the view that cultural activities serve as a source of mathematical ideas that develop contextually in everyday life. This is consistent with recent studies demonstrating the relationship between cultural practices and formal mathematical concepts (Oktavia et al., 2024). Similarly, (Putra & Ramdhani, 2025) argued that cultural activities closely related to students' daily lives can help them understand mathematics through meaningful cultural experiences. Furthermore, the integration of culture into mathematics learning is considered capable of promoting inclusive learning environments (Hendri et al., 2025). In addition, it enhances the meaningfulness of learning by connecting students' learning experiences with their cultural identities.

The Basimban game can be implemented as a learning medium that encourages students to actively participate and demonstrate enthusiasm throughout the learning process. This finding is consistent with studies showing that learning media integrated with cultural elements can increase students' learning motivation (Novita et al., 2026), foster active participation in the learning process (Khusnul Khotimah et al., 2025), and provide more meaningful learning experiences for students (Chamidawati et al., 2026). As a traditional educational game, the Basimban game demonstrates the potential of game-based learning to positively influence students' motivation in mathematics learning, which subsequently contributes to improved learning outcomes (Djamilah & Ulfah, 2025).

The study also produced a Student Worksheet (LKPD) based on ethnomathematics that helps connect Basimban game activities with formal mathematical concepts taught in schools. The data obtained through the LKPD illustrate the potential of integrating local wisdom into mathematics learning materials to strengthen the connection between mathematical concepts and students' everyday cultural experiences. Ethnomathematics is also regarded as an effective approach for developing mathematical literacy, as it helps students understand how mathematics is applied within real social and cultural contexts (Fauzi & Lu'luilmaknun, 2019b; Hall et al., 2024).

The findings further revealed that the ethnomathematics of the Basimban game can be associated with character education, particularly in fostering values such as honesty, patience, cooperation, and appreciation of local culture. These values support students' cognitive development while simultaneously contributing to the formation of positive character traits. The ethnomathematics of the traditional Basimban game utilizes culture not only as a context for mathematics learning but also as a medium for transmitting social and cultural values to younger generations. (Anwar & Ramadhani, 2025b) stated that the integration of contextual local culture into mathematics learning can enhance student participation while strengthening cultural identity and social awareness amidst globalization and the digital era. Furthermore, ethnomathematics as a culturally based learning approach contributes to the preservation of local knowledge and strengthens the relationship between schools and communities (Wulandari et al., 2024).

The ethnomathematics of the traditional Banjar game Basimban demonstrates that learning activities involving sensory engagement and physical movement can provide meaningful learning experiences. (Leha et al., 2026) reported that learning approaches based on concrete and multisensory experiences successfully improve students' learning motivation, self-confidence, and independence. These findings suggest that mathematics learning rooted in local culture is capable of creating meaningful, contextual, and enjoyable learning experiences for students.

CONCLUSION

Analysis of the ethnomathematics exploration stages of the traditional Banjar Basimban game and its application as a mathematics learning medium demonstrates that the Basimban game possesses significant potential as an ethnomathematics-based instructional tool. Expert interviews reveal that the game encompasses mathematical concepts such as arithmetic operations, comparison, and statistics, all of which are pertinent to elementary school curricula. In addition, the Basimban game integrates character and social values, including honesty, patience, cooperation, and sportsmanship, thereby supporting holistic education. Classroom implementation findings show that utilizing the Basimban game through Student Worksheets (LKPD) fosters contextual, interactive, and meaningful learning experiences. Students demonstrated high motivation and enthusiasm, successfully solving mathematics problems related to the game. Consequently, the Basimban game merits further development as both a means of preserving local culture and an innovative, relevant mathematics learning medium that addresses students' needs.

Future research is recommended to test the effectiveness of the traditional Banjar Basimban game in enhancing mathematics learning outcomes through experimental designs across a wider range of school levels and diverse educational settings. Additionally, further exploration at the junior high school level could connect the Basimban game to additional mathematical topics, such as probability, number patterns, or basic algebra, thereby broadening the ethnomathematics potential of traditional games.

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Declaration of generative AI Use

The author used AI to assist with language refinement, grammar checking, and manuscript editing during the preparation of this article. All AI-generated outputs were carefully reviewed, revised, and validated by the author. The author takes full responsibility for the accuracy, originality, and integrity of the final manuscript.

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