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Jemparingan as Cultural Heritage and Character Education: Philosophical Values and Preservation Strategies in Contemporary Society

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ABSTRACT

Jemparingan, the traditional seated archery of the Ngayogyakarta Hadiningrat Sultanate, represents a unique cultural heritage that integrates physical practice with spiritual self-development. Addressing the need for character education in the digital age, this study investigates how Jemparingan fosters essential focus and discipline within Generation Z. Utilizing a historical and anthropological approach, the research analyzes the sport's historical evolution from a royal-exclusive tradition to a modern cultural practice, while examining its philosophical emphasis on the unity of mind and body. The study further evaluates current preservation challenges and identifies key policy efforts necessary to sustain this tradition. Results indicate that the sport's distinct cross-legged technique demands acute concentration and fine motor control, serving as an effective pedagogical tool for instilling self-regulation. The paper concludes that integrating Jemparingan into modern educational frameworks offers a strategic avenue for cultural continuity and for supporting the psychological development of contemporary adolescents.

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INTRODUCTION

The tradition of archery or Jemparingan occupies an important position in the cultural history of the Javanese people, especially in the Yogyakarta Palace and Pakualaman Duchy. Archaeological evidence shows that the practice of archery has been passed down since the days of the Ancient Javanese kingdom. This is evident from the deer hunting relief at Wukir Temple, which dates back to the 8th century during the reign of King Sanjaya. The Canggal inscription contains information about the use of arrows as weapons by the soldiers of the Medang Kingdom, confirming that archery had become a strategic military skill since the early emergence of the Javanese royal social structure (Rakhmawati et al., 2023). These early depictions illustrate that archery was not merely a technical activity, but an integral component of power, defense, and cultural expression in ancient Java.

Visual traces of archery reached their most complex narrative form at the 9th-century Prambanan Temple. The Ramayana relief panels depict archery not only as a combat technique, but also as a symbol of accuracy, courage, self-control, and fulfillment of dharma. The climax of the Ramayana epic—when Rama shoots Rahwana (Rahvana) with a full draw technique—shows archery as a spiritual means of upholding justice, not merely an act of revenge (Soekmono, 1973; Stutterheim, 1987). Reliefs depicting Rama's archery training sessions under the guidance of Resi Wiswamitra also emphasize the function of archery as a process of mental and physical discipline (Narayan, 2006; Pramudawardhani, 2024). Representations of archery are also found on the Karmawibangga panels of Borobudur Temple, which depict hunting scenes and Bodhisattvas holding bows, indicating that archery permeated various layers of Javanese life across Hindu and Buddhist traditions (Das, 2020).

The transformation of archery practices occurred during the Islamic Mataram era in the 16th century, when Jemparingan evolved from military training for soldiers into a traditional sport. During this period, Jemparingan competitions were held not only within the royal court but also participated in by people from various social groups (Yohanda & Ahmad, 2021). The uniqueness of Jemparingan lies in the technique and procedure of archery in a cross-legged sitting position—not standing—which originated from the custom of nobles shooting arrows while chatting casually, demonstrating a combination of physical agility and social etiquette (Rahayu et al., 2025). This seated technique later became a defining cultural identity marker distinguishing Jemparingan from other archery traditions.

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Figure 1. Prambanan relief depicting Rama shooting Rahwana (Rahvana).
Source: Documentation from the Regional Cultural Preservation Center X, 2023

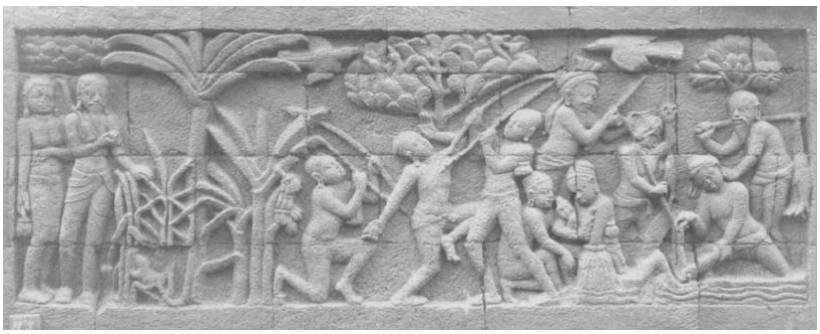


Figure 2. One of the Karmawibangga Borobudur relief panels depicting the use of archery. Photo from the 1890s
Source: National Museum van Wereld Culturen Collection

The tradition of Jemparingan was later revived by Sri Sultan Hamengkubuwana II, and its existence continues to be preserved by the abdi dalem through the Paguyuban Jemparingan Gandhewa Mataram. The philosophical values of Jemparingan are formulated into four core teachings: *nyawiji* (concentration), *greget* (spirit), *sengguh* or *ora mingkuh* (self-confidence without abandoning responsibility), which are seen as the foundation of Javanese knightly character (Rakhmawati et al., 2023). Thus, Jemparingan functions not only as a traditional sport, but also as a medium for cultivating ethical awareness and personal discipline.

In the modern context, Jemparingan has evolved as an arena for cultural preservation, discipline building, and social cohesion strengthening. Various communities that organize Jemparingan training have created spaces for cultural interaction that strengthen a sense of togetherness among their supporters. In addition, the current practice of Jemparingan is related to the environmental preservation movement along the Yogyakarta Philosophy Axis, indicating the integration of cultural and ecological awareness among the new generation of practitioners (Agathis et al., 2021). Jemparingan is also seen as a local cultural heritage that is constantly being reinterpreted through a synthesis of Javanese values and Islamic teachings, thereby enriching the cultural identity of the people of Yogyakarta (Junaidi, 2013; Soeroso & Susuilo, 2008). This evolving interpretation demonstrates the adaptability of Jemparingan in responding to cultural and societal shifts.

Globalization poses serious challenges to the sustainability of Jemparingan. The influx of popular culture and the dominance of commercial sports pose the risk of declining interest among the younger generation in traditional sports, as well as the potential loss of authenticity in Jemparingan practices if not balanced with adaptive preservation strategies (Asfina & Ovilia, 2017). Therefore, research, documentation, community strengthening, and innovative preservation programs are needed to maintain the relevance of Jemparingan as both a cultural heritage and social capital of the Yogyakarta community. Modernization and lifestyle changes have led to Jemparingan becoming less known and less valued as part of cultural identity, so its preservation depends on the initiatives of several communities and is not yet strongly integrated into the education system. Such conditions underscore the urgency of examining effective preservation strategies that align with contemporary social and educational needs.

Based on these considerations, this study raises the following research questions:

1. What philosophical and character education values are embedded in the tradition of Jemparingan?

2. How are strategies for the development and preservation of Jemparingan implemented through collaboration among communities, educational institutions, and government bodies?
3. How is the practice of Jemparingan relevant to learning processes and character building among the younger generation in the modern era?

METHOD

To comprehensively analyze the cultural significance, psychological values, and educational potential of *Jemparingan*, this study employs a dual methodological framework combining Louis R. Gottschalk's empirical historical method with Kuntowijoyo's interdisciplinary, anthropological approach. This combined methodology enables a balanced investigation that is both historically grounded and sensitive to the cultural and social dimensions embedded in traditional Javanese archery. By integrating these complementary perspectives, the study ensures analytical depth while maintaining methodological coherence.

Studies on traditional Javanese archery emphasize that *Jemparingan* functions not only as a sport, but also as an activity rich in cultural meaning, contributing to the internalization of focus, discipline, and moral values. As part of Javanese cultural heritage, archery embodies historical practices and reflects the worldview and values held within Javanese society (Zhang, 2024). Its continued practice reinforces cultural identity and strengthens intergenerational cultural continuity, connecting individuals with their roots and cultivating pride in their heritage (Asfina & Ovilia, 2017). Moreover, research shows that traditional archery contributes to psychological well-being by enhancing concentration, patience, and self-discipline—traits central to personal development (Irfan et al., 2022; Zhang, 2024). The practice also fosters self-transcendence and moral growth, aligning with broader principles in contemporary sports psychology (Zhang, 2024). Within educational settings, integrating traditional sports such as archery into school curricula can support the development of global competencies including critical thinking, collaboration, and character building. Through culturally rich and enjoyable activities, schools can utilize archery as a medium for character education, thereby reinforcing both cultural identity and ethical values (Prastowo, 2018; A. Susanti et al., 2022).

In studying the historical trajectory and cultural role of *Jemparingan*, the empirical method of Louis R. Gottschalk provides a foundational structure. His model emphasizes systematic and verifiable collection, including archival research and documentation; rigorous source criticism to evaluate authenticity, credibility, and potential bias; interpretation and synthesis of evidence based on chronological and causal logic; and the objective presentation of historical findings (Gottschalk, 1985). This approach ensures that the historical dimensions of *Jemparingan*—its origins, transformations, and institutionalization—are reconstructed with empirical accuracy and supported by critical evaluation of available sources.

Complementing this, Kuntowijoyo's interdisciplinary approach expands the analysis to include anthropological perspectives that illuminate the symbolic, social, and cultural meanings associated with traditional archery. His model incorporates interdisciplinary data collection that merges historical documentation with ethnographic observations and cultural studies. It involves applying social criticism to examine power relations, cultural values, and community structures embedded within practices like *Jemparingan*. Through a synthesis informed by anthropology, this method highlights non-material aspects such as ritual significance, identity formation, and cultural symbolism. Finally, Kuntowijoyo's critical interpretation situates historical practices within contemporary social realities, enabling a deeper understanding of how archery continues to function as a medium of cultural expression and moral cultivation. This interpretive lens allows the study to contextualize Jemparingan not merely as a historical artifact but as a living cultural practice.

By integrating these two methodological perspectives, this study captures both the empirical history and the lived cultural experience of *Jemparingan*. Gottschalk's method ensures historical rigor, while Kuntowijoyo's approach uncovers the cultural meanings, psychological values, and educational relevance of traditional Javanese archery. Together, they form a holistic framework that allows this research to analyze Jemparingan as a dynamic cultural heritage practice that continues to shape identity, character, and community in contemporary society.

RESULT AND DISCUSSION

Jemparingan: History and Cultural Essence

The use of arrows has flourished in Java since the Hindu-Buddhist era and has been preserved until the Islamic Mataram period. After the Giyanti Agreement (1755), Prince Mangkubumi established the Yogyakarta Palace with an architectural design that accommodated royal activities, including masculine culture, which was reaffirmed in the Jatisari Agreement. One architectural element that reflects Sultan Hamengkubuwono I's need to hunt using arrows is the Krapyak Stage—a symbolic and functional space for the king and soldiers to practice archery skills (N. Susanti et al., 2023). This space demonstrates how archery was embedded not only in military training but also in the spatial organization of Javanese royal life.

Jemparingan within the palace environment developed as a sport for the nobility (*priyayi*) and became a symbol of social status. Its intensity increased rapidly in the 1930s, especially in 1937 when Jemparingan was known as an exclusive sport due to the high cost of equipment and supplies, making it inaccessible to the lower classes (Utami & Koentjoro, 2018). This practice then spread to the West Java region and became known as Jamparingan. The difference lies in the shape of the bow: Jamparingan uses a shorter and thicker *gondewa*/*gendewo*, while Jemparingan Yogyakarta uses a smaller but longer *gandewo*, showing cultural variations in archery material innovation in Java (Stutterheim, 1987). These distinctions highlight the diverse material innovations that accompanied the spread of archery traditions across regions.



Figure 3. Jemparingan in the Pakualaman Duchy in the 1930s.
Source: Collection of the Nationaal Museum van Wereldculturen



Figure 4. Jamparingan in Bandung in 1934.
Source: Collection of the Nationaal Museum van Wereldculturen

After Indonesia gained independence, Sultan Hamengku Buwana IX's focus on his position as Minister of Defense of the Republic of Indonesia and the unstable security situation in Yogyakarta resulted in limited cultural activities at the palace. As a result, regular Jemparingan training sessions were more often held at Pura Pakualaman. The role of Paku Alam VIII became very important because he gave his full support to the implementation of Gladen Jemparingan, so that this tradition continued even though Yogyakarta was in a state of emergency due to Dutch

military aggression (Documentation of the Regional Cultural Preservation Center X, 2023). Thus, the preservation of Jemparingan in the mid-20th century was significantly shaped by the leadership of the Pakualaman Duchy.

Beyond its historical value, Jemparingan possesses a cultural essence that distinguishes it from modern archery. Traditional Javanese archery emphasizes a holistic approach that integrates physical skill with spiritual elements, self-reflection, and moral development. Mental preparation and archery techniques are attached to rituals and cultural practices that strengthen the archer's relationship with their ancestors and noble Javanese values. Philosophically, Jemparingan teaches patience, self-awareness, inner peace, and spiritual growth, reflecting the Javanese concept of a knight who not only masters technical skills but also character and ethics (Ediyono et al., 2023). This integration of physical and spiritual cultivation positions Jemparingan as a unique embodiment of Javanese moral philosophy.

Modern archery, on the other hand, has developed as a sport oriented towards competitive performance through metrics of accuracy, physical strength, and technical consistency. Biomechanical research shows that muscle strength and bow draw length have a significant influence on shooting results, confirming that performance is the main focus (Humaid, 2014). From a philosophical perspective, modern archery is not always related to cultural and spiritual contexts but is oriented toward competitive achievement (Moenig et al., 2023). In contrast, Jemparingan functions not only as an art of archery but also as a medium for expressing cultural identity, character formation, and the preservation of Javanese knightly values. Its distinction from modern archery demonstrates a shift in orientation from competitive performance to cultural continuity, making Jemparingan preservation an important agenda for sustaining the cultural heritage of Yogyakarta.

The Philosophy of Jemparingan and Javanese Life Values

Jemparingan, a traditional Javanese form of archery, emphasizes not only motor skills but also instills deep philosophical and ethical values. Each technical stage—from readiness, drawing the bow, to releasing the arrow—is built on the awareness that perfection of movement can only be achieved when there is harmony between the body, mind, and spirit. In the early stages, such as *trep lenggah*, *jejeg*, and *donga*, archers learn to prepare themselves thoroughly through posture balance, breathing regulation, and concentration. This is where the values of patience, calmness, and self-awareness begin to take root, making archery not only a physical discipline but also a medium for personal and spiritual development (Rahayu et al., 2025).

Furthermore, in the *pendet*, *seleh*, *noto*, and *trep driji* phases, archery incorporates elements of discipline and precision through a series of ritualistic technical preparations. The traditional clothing worn is not only an aesthetic symbol but also a form of psychological respect and humility before shooting (Usmaedi et al., 2024). The technique of placing the bow and slowly pulling the string teaches that good results come from a careful and unhurried process. This practice connects technical movements with the principle of mindfulness—archers pull the bowstring not with an aggressive orientation, but with deep inner reflection and deliberate awareness. This awareness then reaches its peak in the *nginceng*, *menthang kebak*, and *nitik stages*, where the archer relies on intuition, emotional control, and inner stability to determine the direction of the arrow, replacing the dependence on visual aiming as in modern archery (Alwi, 2020). Thus, jemparingan becomes an in-depth exercise in regulating emotions, building self-confidence, and honing long-term focus skills.

The most fundamental philosophy of Jemparingan is reflected in the principle of "*Pamenthanging Gandewa* / *Pamanthenging Cipta*", namely the harmony between the pulling of the bow (action) and inner ideals (intention). The process of pulling the bowstring to its maximum point is analogous to the process of preparing for life: one must ga the mental strength, weigh the consequences, and orient oneself toward the goal before taking action. The moment of pause just before the arrow is released—*nitik*—becomes a metaphor for the final reflection before making important decisions in life. This philosophy teaches that the outcome of life depends on the sincerity of the efforts made and discipline in undergoing the process (Grayson, 2007). Jemparingan therefore functions as a character-building practice that integrates technical mastery, emotional balance, and spiritual awareness.

The core values of archery are then embodied in four Javanese moral principles: *Nyawiji*, *Greget*, *Sengguh*, and *Ora Mingkuh*. *Nyawiji* means the unity of attention and energy on a goal, teaching archers to develop focus and self-control as the foundation for decision-making. *Greget* fosters determination and fighting spirit, in line with the concepts of intrinsic motivation and growth mindset in motivational psychology. *Sengguh* teaches self-confidence

based on competence, not false confidence, in line with Bandura's self-efficacy theory. Meanwhile, *Ora Mingkuh* cultivates the courage to take responsibility for one's actions and persevere in the face of failure, which is in line with the concepts of grit and resilience in personality psychology (Ogasawara et al., 2022). These four principles show that Jemparingan is not just a competitive sport, but a culture-based moral and character education system.

Spiritual awareness in Jemparingan is also rooted in the Javanese philosophy of "*Eling Sangkan Paraning Dumadi*," which means to remember the origin and ultimate purpose of life. By focusing on the process rather than just the result, Jemparingan guides humans to understand themselves as part of a larger cosmic order. The understanding that everything begins and ends with God makes Jemparingan a means of moral development as well as a path to inner introspection. These values show that Jemparingan is a balanced self-development practice—strengthening the body, sharpening the mind, maturing the emotions, and refining the character. Thus, Jemparingan is not only a cultural heritage but also a medium of character education that is relevant to modern life, especially in shaping a young generation that is disciplined, resilient, ethical, and aware of their purpose in life.

The Relevance of Archery in the Context of Character Education for the Younger Generation

The core philosophy of archery, namely *Pamenthanging Gandewa* or *Pamanthening Cipta*—stretching the bow while concentrating on the target—contains character education values that are highly relevant to the younger generation. This concept teaches that in order to achieve one's goals, one must focus one's thoughts, emotions, and actions in harmony. In practice, archers sit cross-legged and do not aim with their eyes, but rather use their senses to determine the direction of the shot. This technique requires archers to manage their emotions, increase their awareness of their surroundings, and control themselves when facing mental pressure. Thus, each training session becomes a process of self-reflection; the body, breathing, and mind must work in harmony so that shooting accuracy is achieved through inner harmony, not just physical strength. Through repeated Jemparingan practice, young people gradually learn about determination, discipline, emotional management, and the ability to maintain focus even when faced with external stimuli—all of which are essential foundations for contemporary character education.

In addition to these philosophical values, Jemparingan also plays a major role in boosting the confidence of the younger generation through physical and mental exercise. Participation in traditional Javanese archery using the fingertips has been proven to foster self-confidence because archers not only hone their physical skills but also train their mental endurance. Research shows that a three-week archery program can significantly improve students' mood and self-confidence, indicating a direct relationship between archery practice and psychological well-being. In addition, important skills developed during training, such as focus, coordination, precision, and patience, also contribute to the development of self-confidence, especially for elementary school students (Irfan et al., 2022). Activities in archery training groups further strengthen psychological aspects by building collective awareness, mutual support, and healthy social interaction among participants (Sukotjo et al., 2023). The reward system applied in archery training also encourages increased self-esteem, motivation, and sustained enthusiasm for training. Thus, Jemparingan not only functions as a traditional sport but also as a psychosocial platform that supports identity formation and confidence building for the younger generation (Harianto et al., 2023).

The contribution of Jemparingan to children's physical and intellectual development further emphasizes its relevance in the context of character education. A study of elementary school students aged 10–12 years in the Special Region of Yogyakarta shows that Jemparingan has a significant influence on improving fine motor coordination, concentration, and academic performance. The group of students who participated in Jemparingan training at least twice a week for six months showed an 87% improvement in hand-eye coordination, movement accuracy, and the ability to operate small objects, compared to only 52% in the control group. The impact was also seen in a 30% increase in motivation and academic task completion, with a 45% decrease in distractions while studying. Teachers noted that technical aspects of archery, such as *selehang* (a stable cross-legged sitting position) and *manah* (breathing control before shooting an arrow), were important factors in strengthening movement control, calmness, and concentration. As many as 79% of students admitted to being more patient and thorough in doing their schoolwork after participating in regular archery training. These findings show that archery as a cultural practice not only hones physical agility but also strengthens thought processes, self-control, and academic discipline—three core pillars of character education essential for preparing the younger generation to navigate academic and social challenges.

Based on these findings, archery should be considered a local wisdom-based educational strategy that is relevant for nurturing the younger generation in the modern era without abandoning the cultural roots of the

archipelago. Integrating the values of archery into learning activities—both through extracurricular activities and thematic curricula— can create character education models that go beyond theoretical teaching to provide experiential and embodied learning. The philosophy of concentration, mind-body harmony, discipline, self-confidence, perseverance, social cooperation, and self-reflection in Jemparingan can strengthen students' resilience and work ethic from an early age. The philosophy of concentration, mind-body harmony, discipline, self-confidence, perseverance, social cooperation, and self-reflection in Jemparingan can strengthen students' resilience and work ethic from an early age. Thus, Jemparingan is not merely a traditional sport but also a vehicle for cultural preservation and adaptive character education, shaping a generation that is rooted in tradition, competitive in achievement, and grounded in personal integrity.

Table 1. Comparative Outcomes Between Jemparingan Participants and Control Group on Motor, Cognitive, and Behavioral Indicators

Aspects Assessed	Jemparingan Group	Control Group	Key Differences
Fine Motor Development	87% of students showed significant improvement in hand-eye coordination	52% of students showed similar improvement	+35% higher improvement in the jemparingan group
Movement Precision in Tasks	The majority performed very well (accurate & stable)	Varied and tended to be moderate	Jemparingan improves motor control
Focus and Concentration in Learning	87% were more focused in class; task completion +30%	Fluctuating concentration; minimal improvement	Concentration improves through regular training
Distractions in Class	Decreased by 45%	Not significant	Jemparingan trains attention regulation
Supportive Psychological Factors	79% of students were more patient and diligent	41% stated the same	Improved independence and self-regulation
Contribution to Education	Highly relevant for character building, fine motor skills, and discipline	Local culture has not been facilitated in daily activities	Potential for extracurricular integration

Source: Questionnaire data collected from Jemparingan participants aged 9–16 years.

Jemparingan in the Court of Yogyakarta and Surrounding Areas

Jemparingan, a traditional form of archery unique to Yogyakarta, has played an important role in shaping the character and mindset of young people, especially in the Yogyakarta Palace area and its surroundings. This sport is not only based on physical skill, but also fosters mental resilience and mindfulness, which are important assets for young people in dealing with the dynamics of social and academic life. Through the process of shooting without aiming directly with the eyes, teenagers are trained to control their concentration, body movements, and psychological condition simultaneously. This embodied practice encourages the development of sustained focus and mental clarity as pathways for personal growth (Susanto et al., 2024). In practice, each participant is required to maintain patience, discipline, and perseverance to achieve optimal shooting outcomes—values that are gradually internalized in daily life, both in educational and social contexts. Accordingly, Jemparingan functions not merely as a sport but as a cultural pedagogical process that strengthens mental resilience and character formation among the younger generation (Sukma et al., 2022).

In addition to providing positive psychological effects, Jemparingan also plays a major role in building cultural appreciation and identity among teenagers. Involvement in traditional archery activities provides space for teenagers to connect emotionally and intellectually with their ancestral heritage, thereby fostering a sense of ownership of the cultural traditions inherited from the Yogyakarta Palace (El Shandidy, 2023). In the context of globalization that encourages cultural homogenization, activities such as Jemparingan become an important means for the transmission of local values, traditional knowledge, and cultural etiquette that have existed for centuries (Kadhim, 2023). Thus, youth participation in Jemparingan not only fulfills recreational or sporting interests but also functions as a medium for internalizing cultural values that strengthen identity and cultural continuity. This practice further contributes to social cohesion by reinforcing community bonds and intergenerational relationships, supporting emotional and spiritual well-being through constructive social interaction. Moreover, the inclusive nature of Jemparingan, which is accessible to diverse social groups and often involves family participation, positions it as a vehicle for holistic youth development encompassing physical, mental, social, and cultural dimensions (Manik et al., 2024).

Recent developments in the Yogyakarta Palace and its surroundings show that the younger generation's interest in Jemparingan is increasing, in line with the opening up of this tradition to the general public. In the past, Jemparingan was only practiced among the nobility and within the palace, but now this sport has expanded and is accessible to the wider community, including children and teenagers. Various communities and associations, such as

Jemparingan Adiwinoto and Langenastro, actively conduct structured training, providing opportunities for the younger generation to learn, understand, and preserve this tradition. The establishment of initiatives such as the Jemparingan Mataraman village demonstrates the role of community-based movements in positioning Jemparingan not merely as a cultural performance but as a lifestyle and character education practice rooted in local wisdom. In addition, Jemparingan training sessions and tournaments organized by cultural communities, local government agencies, schools, and higher education institutions—such as the Islamic University of Malang—represent strategic efforts to strengthen the sustainability of this tradition in contemporary society. These initiatives not only support the continuity of Jemparingan as cultural heritage but also position it as a relevant instrument for youth empowerment, promoting discipline, self-confidence, focus, and cultural appreciation.

Through this case study of the Yogyakarta Palace environment and its surrounding areas, it becomes evident that Jemparingan has evolved from a palace-based tradition into a dynamic instrument for character education and identity formation among the younger generation. This practice serves as an effective medium for integrating physical, psychological, social, and cultural dimensions within the process of adolescent development. Cross-community and intergenerational interactions fostered through Jemparingan further strengthen social networks and create inclusive learning environments grounded in local traditions, even amid rapid modernization. Consequently, Jemparingan fulfills a dual function: preserving cultural heritage while simultaneously serving as a practical mechanism for character development among youth—an important contribution to the cultural and social life of Yogyakarta and Indonesia more broadly.

Table 2. Positive Impact of Jemparingan

Criteria	Positive Impact of Jemparingan
Character Training	Practicing inner peace before shooting an arrow teaches patience and self-control.
Focus and Calmness	It improves focus, mental calmness, and mental toughness, which are beneficial for students.
Cultural Values	It shapes a knightly character, including enthusiasm, confidence, and responsibility.
Chivalrous Character	Making archery a lifestyle can pass on the knightly character of ancestors.
Courage	Training the attitude and skills of a knight in archery and facing challenges.

Source: Questionnaire data collected from Jemparingan participants aged 9–16 years.

Strategy for Developing and Preserving Jemparingan

The strategy for developing and preserving Jemparingan in contemporary contexts is primarily implemented through education-based and community empowerment approaches. One such initiative is the Sinau Jemparingan program, conducted in collaboration with the Langenastro community and implemented in school settings. In the initial learning stage, participants do not immediately engage in outdoor training arenas but instead undergo introductory and basic training within their respective schools. During this phase, they learn the five fundamental stages of Sinau Jemparingan, which serve as a foundational framework for mastering traditional archery techniques. This staged learning model is intentionally designed to ensure that participants not only understand technical movements but also internalize the characteristics, values, and philosophical foundations of Jemparingan as a holistic practice. A key component of this method is the early introduction to the *gandhewa* (traditional bow), allowing participants to become familiar with the sensation of drawing the bow, its weight, and postural balance before using the *jemparing* (arrow). At this stage, instructors play a crucial role in correcting body posture, hand grip, movement coordination with bodily energy, and breathing regulation, as well as cultivating inner calm. This entire process is grounded in the philosophy of *pamenthanging gandewa pamanthenging cipta*, which emphasizes alignment between technical precision and focused intention. Through this systematic training pattern, participants are expected to achieve balanced coordination between mental focus, physical stability, and emotional control, ensuring that Jemparingan functions not only as a physical activity but also as a medium for character formation and self-regulation.

The role of community engagement constitutes a core element in Jemparingan preservation strategies, as exemplified by Paseduluran Jemparingan Langenastro, a Jemparingan preservation community located in Kampung Langenastran—one of the cultural centers associated with the Yogyakarta Palace. Established around 2012 through local community initiatives, Langenastro currently consists of approximately 55 members from various regions, including Yogyakarta City, Sleman, and Bantul. Langenastro performs a dual function: serving as a training center for traditional Mataraman-style archery and as a space for character education through the internalization of values such as discipline, concentration, emotional control, spirituality, and *paseduluran* (brotherhood). Regular *gladen* (training) activities are conducted using *gandewa* and *jemparing*, accompanied by cultural rituals such as *tumpengan* during

Gladhen Rina Wengi, which reinforce gratitude, strengthen social bonds, and preserve cultural ethics. Langenastro also situates Jemparingan within the broader cultural ecosystem of Kampung Langenastran, an area known for batik, dance, and *macapat* traditions, ensuring that Jemparingan does not function in isolation but instead operates as a cultural hub that revitalizes regional identity. Regeneration efforts are further supported through the formation of new training groups across Yogyakarta, opening opportunities for beginners and even international participants. Preservation strategies are strengthened through visual communication, digital media engagement, and cultural promotion aimed at attracting younger audiences while actualizing knightly values—perseverance, focus, and courage—in contemporary life. As such, Langenastro represents a model of adaptive, community-based cultural preservation responsive to modern educational and social contexts.

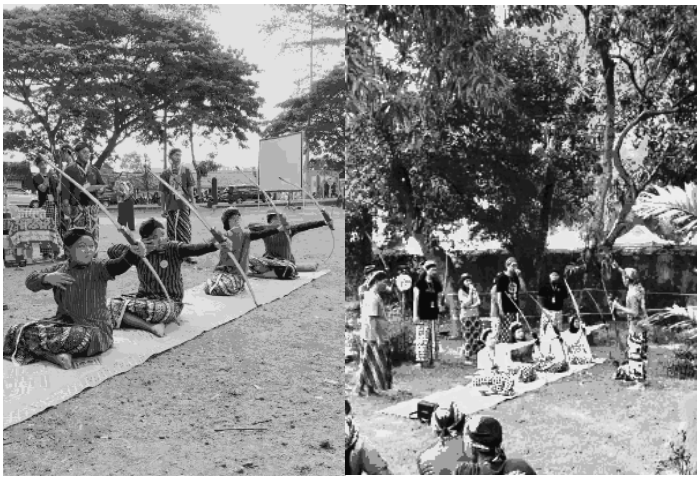


Figure 5. The implementation of Gladen Jemparingan at Banyunibo Temple and Prambanan Temple by Paseduluran Jemparingan Langenastro. Source: Documentation of Jemparingan Langenastro

In addition to Langenastro, preservation efforts are reinforced by other communities such as Garuda Cakra Tamansiswa, one of the leading organizations in Jemparingan conservation, particularly following its official designation as Intangible Cultural Heritage on 21 February 2024. Rooted in Ki Hadjar Dewantara's educational philosophy, this community integrates archery training with character education through the principles of Pancadharma—nature, independence, culture, nationality, and humanity. Regular training sessions conducted within the Tamansiswa educational environment, especially at Taman Wijaya Brata, introduce Jemparingan techniques to participants of diverse age groups. Beyond internal training, Garuda Cakra actively organizes competitions, cultural festivals, and public commemorative events, such as Heroes' Day celebrations, to broaden youth engagement and public awareness.

Collaboration with educational institutions—particularly Tamansiswa schools—expands students' access to Jemparingan as an extracurricular activity. Dissemination through social media platforms and collaborative programs with the Dewantara Kirti Griya Museum further enhances promotional strategies, ensuring wider public recognition. Partnerships with the Yogyakarta City Culture Office and other communities, such as Paseduluran Jemparingan Hanacara, expand preservation networks and institutional support. By integrating traditional practice, character education principles, and modern communication strategies, Garuda Cakra Tamansiswa exemplifies a dynamic and contextually relevant model of cultural preservation for contemporary society.

At a broader scale, the effectiveness of Jemparingan preservation in Yogyakarta demonstrates that sustained collaboration among communities, educational institutions, cultural organizations, and government bodies is essential for long-term success. Such collaboration strengthens collective cultural ownership and ensures sustainability through integration into regional development agendas. Active community participation plays a decisive role in heritage preservation by fostering emotional attachment and collective responsibility for cultural continuity (Usmaedi et al., 2024). Community-based preservation also functions as a platform for cultural knowledge management, ensuring that traditional skills and philosophical values such as Jemparingan are transmitted across generations (Manik et al., 2024). While synergy between communities and government institutions has generated positive cultural validation and social impact, challenges such as inter-agency coordination persist. Nonetheless, the integration of intangible cultural heritage into development strategies contributes to sustainable tourism, local economic growth, and livelihood opportunities for cultural communities. Cultural festivals, public performances, and Jemparingan activities at heritage

sites—such as Banyunibo Temple, Prambanan Temple, and various locations across Yogyakarta—strengthen social cohesion, enhance cultural pride, and expand exposure to Jemparingan among younger generations. Consequently, preservation efforts in Yogyakarta extend beyond maintaining a traditional sport to reinforcing cultural networks, nurturing youth character, and sustaining Javanese cultural resilience in the face of modernity (Yohanda & Ahmad, 2021).

CONCLUSION

Jemparingan has long been understood only as a traditional sport or palace cultural tradition, but the findings of this study confirm that Jemparingan is actually a medium for character education and the formation of the Javanese identity as a whole. The novelty of this research lies in its systematic mapping of how Jemparingan is not only preserved through intergenerational cultural practices, but also reintegrated into the modern education ecosystem through gradual learning designs and community-school collaboration. The structured learning-based preservation approach, such as training stages, internalization of the *pamenthanging gandewa–pamanthenging* cipta philosophy, and intensive mentoring by the community, is an important finding that shows that traditional values can be transformed into contemporary pedagogical instruments without losing their cultural identity.

This study emphasizes findings regarding the strategic position of Jemparingan communities (such as Langenastro and Garuda Cakra Tamansiswa) not only as preservers of tradition, but as cultural learning agents who return culture to the public sphere through character education, mass cultural activities, and visual communication. Jemparingan is no longer just a tradition that is performed or competed in, but a cultural learning system that operates through a community-based collaboration model. This approach shows that cultural preservation can be effective not because it is separated as an artifact of the past, but because it is positioned as a social tool to shape the younger generation, strengthen social cohesion, and create a space for self-reflection in modern life.

Furthermore, this study highlights that innovation in preserving Jemparingan lies in the tradition's ability to adapt without losing its essence. The integration of communication technology in cultural promotion, the opening of practice spaces in schools—not just cultural communities—and the revitalization of Javanese philosophy as a framework for character building are signs that preservation does not have to be defensive, but can be progressive and productive. These findings open up a new perspective that cultural preservation is not only about preservation, but also the revitalization and relevance of culture in the educational and socio-economic ecosystem. Tradition is positioned not as a passive symbol of identity, but as a dialectical system between body, mind, and spirit that plays a role in shaping focused, empathetic, resilient, and conscious human beings. If the collaborative approach between schools, cultural communities, and the government continues, Jemparingan has the potential to become a new paradigm for cultural preservation in Indonesia—where traditions are not merely preserved for the sake of existence, but are brought to life so that they remain meaningful and relevant for future generations.

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