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Developing Empathy in Children through the Moral Lessons in Buddhist Jataka Tales

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Research Article

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Developing Empathy in Children through the Moral Lessons in Buddhist Jataka Tales

This study examines the impact of Buddhist Jataka tales, rich in compassion, kindness, and selflessness on fostering empathy in children. The study employed an exploratory quasi-experimental design using a pre-test–post-test control group approach aiming to explore the potential influence of Buddhist Jataka tales on children's empathetic behaviour in a natural classroom setting rather than to establish definitive causal conclusions. Forty-one Grade 5 students (10 years old) from a government school in Colombo participated in this exploratory pilot study. Participants were assigned to an experimental group and a control group according to the school's classroom organization. The experimental group engaged with three Buddhist Jataka stories, followed by discussions. Both groups completed questionnaires, with a follow-up, two weeks later. Results showed increased and sustained empathetic behaviour in the experimental group, suggesting that Buddhist Jataka tales can effectively support emotional and ethical development in educational settings.

Keywords

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1. Introduction

Studies on empathy from different perspectives have increased today, largely showcasing its significance to humans for varying aspects of life such as motor, psychological, skills, and personality development(Schonert-Reichl, 2011). Empathy has been identified as a crucial factor in social interactions and relationships, as well as cultivating positive behaviour, attitudes, and academic success (Song, 2022;Schonert-Reichl, 2011;Caprara et al., 2000). Also, empathy has shown a close relationship with moral development in children(Blair, 1995;Zhou, 2022).

Recent research has found that empathy develops in children at a very young age(Hoffman, 2000). The researchers have emphasized the importance of schools not only for cognitive development but also for emotional, affective, and prosocial development. Empathy can be developed in school education, and one major way is through fictional literature (Learn & Cueto, 2017). Among various strategies for improving empathy in school, realistic children's literature, in discussing empathy through the use of stories, is an ideal means(Cress & Holm, 1998). Real life incidents with realistic characters in stories provide children with valuable experiences that help them refine their

understanding of the world and develop essential life skills. Whether it's through the struggles and triumphs of characters, the exploration of different cultural contexts, or the exposure to diverse perspectives, literature offers an avenue for children to develop a deeper sense of empathy. Literature not only gives children a sense of life (Schoafsma, 1989), but also exposes them to essential social skills (Hodges, 1995).

Scholars have explored various works of literature to enhance empathetic behavior in children across different contexts. The current study tries to explore the relevance of Buddhist Jataka stories to enhance empathy in children. Jataka stories recount the past lives of the Buddha. As a celebrated genre of literature, the Jataka stories address complex societal issues and depict how people confront and resolve them. The realistic portrayal of characters responding to real life challenges makes the Jataka stories relevant across contexts and time (Dilani, 2024). The purpose of the Jatakas is both instructional and entertaining (Malalasekara , 1996). Moreover, Buddhist Jataka stories are relevant to any person, whether a child, young person, or adult, especially due to their didacticism. Martin Wickramasinghe states that a young person who reads at least about twenty Jatakas, gains experience, wisdom, and maturity of a man of sixty years while becoming well-disciplined in his/her manners and achieving control over sinful emotions(Wickramasinghe, 2007). Accordingly, given the high literary value, realistic nature, didactic purpose, entertainment value, and timeless applicability of the Jataka tales, they serve as a valuable resource for cultivating empathy in children. Also, Buddhist Jataka tales vividly illustrate empathetic behaviours, characteristics, incidents, and themes, especially to cultivate empathy in children. By exposing children to diverse human experiences and ethical dilemmas, Jataka tales encourage them to understand others' perspectives, foster compassion, and develop social skills that are vital for their growth and interactions in society.

1.1.Research Objectives

i. To examine the impact of Buddhist Jataka tales on the development of empathy in children.

ii. To identify which themes, characters, incidents and moral lessons in Jataka tales are most effective in fostering empathy.

iii. To analyze sex-based differences in empathetic responses among boys and girls after exposure to Jataka tales.

iv. To examine how children's empathetic responses evolve over time after exposure to Jataka tales.

2. Literature Review

2.1.What is Empathy?

Humans as social beings, empathy is an essential quality, particularly in social relationships. Empathy is the ability of a person to attend to, understand, and attune to the feelings, bodies, and minds of others by directly observing or imagining their emotional states(Hollan, 2012). Simply empathy means feeling with others. Empathy is a complex multimodal construct having cognitive, affective, and behavioural components (Telle & Pfister, 2016). The affective component is the ability to feel, share, and respond to others' emotions. While the cognitive component refers to perspective-taking, the behavioural component involves prosocial actions, such as helping and supporting others(Ornaghi et al., 2020; Eisenberg et al., 2010). Cognitive and emotional aspects have been identified as major components of empathy(Blair, 1995; McDonald & Messinger, n.d.), and the current study also focuses on these two aspects of empathy. Empathy develops through a combination of biological and environmental factors such as genetics, facial mimicry, and imitation. Additionally, a child's temperament, along with parenting factors such as warmth, synchrony, and the overall quality of the parent-child relationship, play significant roles in shaping empathetic abilities(McDonald & Messinger, n.d.).

2.2.Empathy in Children

Children develop empathetic behaviour learned by the parents and family environment(Blandon & Scrimgeour, 2015). Hoffman outlines four developmental stages of empathy in children: Initially, infants cannot differentiate themselves from others, but may cry in response to another infant's cry, which is a precursor to empathy. As children learn to distinguish themselves from others, they begin to recognise differences in feelings. As children develop language, they can empathize with a broader range of emotions. Also, perspective taking becomes part of this development. At the advanced stage, children can empathize with both present situations as well as with ongoing issues affecting individuals, groups, or society(Hoffman, 2000). At a very young age, maternal socialization practices contribute greatly to the emotional regulation practices of children(Ornaghi et al., 2020). Research has shown sex-based differences in empathic responses, indicating that females tend to exhibit higher levels of empathetic behavior than males(Toccaceli

et al., 2018). The present study aims to explore these differences further by examining empathetic behavior in girls and boys.

2.3.Teaching Empathy

The research confirms that children can be trained for empathetic behaviour since their childhood. At a very young age, parents can take the initial steps, and then teachers in schools can contribute greatly to developing empathy. Children with higher empathetic behaviour have shown better academic performance also(Zhou, 2022). Empathy is a fundamental aspect of education in drama and the arts, as these disciplines encourage individuals to understand and connect with different perspectives, emotions, and experiences. While empathy is highly valued in medical education for fostering compassionate patient care(Zhou, 2022), it is equally significant in children's development, helping them build strong social connections, emotional intelligence, and a sense of kindness toward others. Exposing children to real-life experiences helps them encounter challenges in life. One of the best ways teachers can assist in this regard is by transferring real-life experiences through children's literature(Cress & Holm, 1998;Learn & Cueto, 2017). Practicing empathy-related behaviours and perspective skills through realistic literature, children can generalize the fictional situations to their life incidents(Cress & Holm, 1998). This research is closely connected to the current study as it emphasizes exposing children to empathetic situations within stories, to help them engage with realistic scenarios. Using children's literature, rather than relying solely on teaching theories, is an effective approach to enhancing empathy. Stories provide a safe space for children to engage with complex emotions, build confidence in discussing difficult topics, and foster self-transformation through active involvement. Additionally, research has shown that exposing children to social issues through literature increases their awareness of social justice, empathy, and compassion, helping them develop a deeper understanding of the world around them (Bouley, 2008). The characters in children's literature navigate life's stressors and traumatic events, allowing young readers to engage in self-reflection, recognize and express their emotions, and explore their identities through the stories they encounter. By incorporating storytelling and interactive games, educators can create a strong foundation for developing empathy, and empowering children to be compassionate, emotionally intelligent, and socially aware (Iuspa & Foerch, 2023). Literature is used as a vehicle for fostering compassion. Through reading aloud and focused discussions of stories with children, Cindy D'On Jones promotes kindness and care for self and others in children(Jones, 2024).

Rev. Kadahingala Hemasiri Thero has conducted a study exploring the psychological principles of emotional management found in Theravāda Jataka stories. While his research focuses on a different theme than the current study, he examines 50 Jatakas, highlighting their role as a framework for managing emotions, fostering compassion, and achieving inner peace in a world filled with emotional challenges and distraction. He further recommends the study of Jataka stories as an educational tool, emphasizing their effectiveness in enhancing emotional competence in both children and adults(Hemasiri, 2024).

While many researchers have discussed the benefits of teaching empathy in various ways, Zhou, drawing on research conducted by Meyers and others, identifies three potential harms of tutor-based empathy; (1) Teacher empathy exists on a continuum, (2) Tutors may empathize more easily with some students than others, and (3) Tutors may find it easier to empathize at certain times rather than others(Zhou, 2022). Even though empathetic pedagogy is an integral part of education, it may occasionally present certain challenges.

2.4.Research Gap

The reviewed literature demonstrates that storytelling has been widely used as a tool to teach empathy to children in various contexts. However, no study has been identified that specifically explores the use of Theravāda Buddhist Jatakas to enhance empathy in children. This study aims to address that gap.

3. Methodology

3.1.Research Design

This study employed an exploratory quasi-experimental design using a pre-test–post-test control group approach. The study aimed to explore the potential influence of Buddhist Jataka tales on children's empathetic behaviour in a natural classroom setting rather than to establish definitive causal conclusions. The purpose of this exploratory study was to investigate whether exposure to selected Buddhist Jataka tales could contribute to observable changes in children's empathetic behaviour and to assess the feasibility of conducting larger-scale research in this area.

3.2.Sample

The study involved children aged 10 and above from a government school in Colombo, Sri Lanka, comprising both boys and girls. The children were randomly divided into two groups: an experimental group and a control group. The experimental group consisted of 11 girls and 10 boys,

while the control group included 11 girls and 09 boys. This random assignment ensured a balanced comparison between the two groups while maintaining gender diversity.

3.3.Instruments

Considering the multimodal nature of empathy, at least two types should be tested in measuring empathy(McDonald & Messinger, n.d.), and the affective and cognitive domains are commonly evaluated through different scales. Standardised questionnaires are commonly used for this purpose, with specific subscales designed to assess each domain depending on the nature and the objectives of the study(Sesso et al., 2021). The questionnaire, as an instrument, has been recommended for children up to 11 years of age(Neary, 2023).

The current study employed two complementary instruments, as recommended for ensuring reliability(Sesso et al., 2021); a normal questionnaire and a questionnaire with pictures. The questionnaire was adapted from the standardized empathy assessment tool developed by Carolien Rieffe at Leiden University, the Netherlands. Certain modifications were made to align the questionnaire with the specific objectives of the study and the themes of the stories used in the research. The questionnaires were given in Sinhalese.

3.4.Procedure

The experimental group was exposed to three different Jataka stories; Sāma Jātaka (540), Asampadāna Jātaka (131), and Sīlānisaṁsa Jātaka (190), on three consecutive days. Each story was narrated and discussed by the class teacher. The stories featuring young human characters were purposively selected for their moral lessons, which emphasize virtues such as compassion, kindness, gratitude, friendship, looking after parents and selflessness. Subsequently, the questionnaire and the questions based on the narratives were given. After two weeks, another brief questionnaire with pictures of similar daily incidents was given to assess whether they maintained the same empathetic behaviours over time. All the discussions, narrations and questionnaires were conducted in Sinhalese, their mother tongue.

3.5.Data Analysis

The data collected from the discussions and questionnaires were transcribed, translated into English and thematically analysed. The discussion is presented under themes derived such as cognitive and affective empathy, impact of Jatakas on empathy, empathy towards animals, empathy in daily life and long-term impact of Jatakas on empathy.

3.6.Ethical Concerns

To ensure the study remained natural and yielded the most authentic results, the children were not informed about the study's purpose. Since storytelling was already a part of their curriculum, they did not perceive any difference in their usual learning activities. However, the parents were informed about the study by the class teacher. The story discussions were conducted by the class teacher to create a comfortable environment for the children and prevent any feelings of embarrassment. Thus, permission for the study was granted by the class teacher and the parents. Additionally, the questionnaires were also administered by the teacher, maintaining a familiar and supportive setting for the students.

4. Summaries of the Jataka Stories

4.1.Asampadāna Jātaka(131)

Once upon a time, a wealthy man from Rājagaha, known as the Millionaire, had a close friend named Piliya, who was also very rich and lived in Benares. Unfortunately, Piliya lost all his wealth and became poor. He traveled to Rājagaha with his wife to seek help from the Millionaire. The Millionaire welcomed him warmly and gave him half of all his wealth, including money, livestock, and property. Piliya returned to Benares and lived comfortably again. Later, the Millionaire also faced hard times and lost all his wealth. Remembering how he had helped Piliya, he traveled to Benares with his wife, hoping for help from his old friend. However, Piliya was not kind. He did not welcome the Millionaire and only gave him a small amount of cheap food, even though he had plenty of riches. Disappointed but not wanting to break their friendship, Millionaire accepted the gift and left with his wife. A former servant of the Millionaire who was given to Piliya, saw them, felt sorry, and took them in, providing food and shelter. Later, the servant and other former workers informed the king about Millionaire’s kindness and Piliya’s ingratitude. The king called both men and confirmed the story. As punishment, the king wanted to give all of Piliya’s wealth to Millionaire. But Millionaire refused to take more than what he had given Piliya before. The king agreed, and Millionaire regained his lost wealth. He returned to Rājagaha, lived a generous and kind life, and passed away peacefully.

4.2.Sīlānisaṁsa Jātaka(190)

In this Jataka tale, during the time of the Supreme Buddha Kassapa, a devout lay Disciple and a wealthy Barber traveled together by ship. A week into their voyage, the ship was wrecked, and the two men survived by clinging to a plank, eventually washing ashore on a deserted island. There, Barber caught and cooked birds, offering some to Disciple. Disciple declined, relying instead on

his faith in the Buddha, the Dhamma, and the Saṅgha, and meditated on their blessings. Moved by Disciple's virtue, a mighty Serpent King on the island transformed himself into a ship, while a sea spirit, serving as the helmsman, called out near the island where they were sheltered, offering passage to India. Disciple was invited aboard, but Barber was denied passage because of his immorality. However, Disciple offered the merit of his own good deeds to Barber. Barber was then allowed to board. The ship transported both of them safely to Benares, where the sea spirit magically provided both men with wealth. Before departing, he taught them an important lesson that virtue, generosity, and goodness bring great rewards, and also good company can lead one to safety and prosperity.

4.3.Sāma Jātaka(540)

Suvaṇṇasāma, a pious and devoted son known as Sāma lived in the forest with his blind and elderly parents. One day, he was accidentally struck by a poisoned arrow shot by King Piliyakkha, who had intended to hunt a deer. Despite being gravely wounded, Sāma revealed his identity as the only son of blind parents, who looks after them. He did not worry about his own pains and wounds but only about the parents. The king, moved by Sāma's selflessness and devotion to his parents, regretted his actions and vowed to care for them. Sāma, showed the king his parents' hut. As Sāma lied dying, the king, overwhelmed with guilt and sorrow, received divine intervention. A goddess, who had been a mother to Sāma in a previous life, appeared and advised the king to care for Sāma's parents. She assured him that by fulfilling his promise, Sāma's life will be restored, and the king will earn his way to heaven. The king followed the goddess's guidance and, after comforting Sāma's parents, lead them to where their son lied. There, they expressed their grief, but the mother, believing in the power of truth, performed a solemn asseveration, which miraculously reversed the poison's effects, restoring Sāma to life. At the same time, Sāma's parents regained their sight. Overwhelmed by gratitude, Sāma greeted the king and offered him food and water, while the king realized the profound lesson in compassion, selflessness, and duty.

5. Discussion

5.1.Cognitive and Affective Empathy

While cognitive empathy is the individual's ability to understand another's emotional state, affective empathy is the response to the emotional display of another person. This display may be facial, vocal expressions, and body movements(Blair, 1995). This study explored children's

cognitive and affective empathic responses, examining differences based on gender, and the following table o1 below shows the summary of the findings.

Table 01: Cognitive and Affective Empathy

Item	Control Group		Experimental Group	
	Girls (11)	Boys(09)	Girls(11)	Boys(10)
Cognitive Empathy	05-Negative(at least 01) 06- All Positive	07-Negative(at least one item) 02- All Positive	04-Negative (at least one item) 07- Positive	04-Negative (at least one item) 06- All Positive
Affective Empathy	06-Negative(at least 01) 05- All Positive	09-Negative(at least one item)	03-Negative (at least one item) 08- All Positive	05-Negative (at least one item) 05- All Positive

The questionnaire included items exploring both aspects of empathy. According to the control group's responses, 7 out of 9 boys responded negatively to at least one cognitive empathy item, indicating difficulty in understanding and responding to others' emotional states. Specifically, all 7 boys struggled to recognise the appropriate timing to request a gift from their father. However, most were able to perceive their mother's emotions, her happiness and sadness. This may be attributed to the Sri Lankan cultural context, where children particularly tend to have a stronger emotional bond with their mothers, who also express emotions more visibly than fathers. In comparison, at least 05 out of the 11 girls also showed negative responses to the cognitive empathy items. Notably, all these 05 girls also struggled to identify the appropriate time to request gifts from their father, similar to the boys. This pattern suggests that the same cultural factors may be influencing both groups, as children in the Sri Lankan context tend to have a stronger emotional connection with their mothers, who express emotions more visibly than fathers. In contrast, a significant disparity is observed in the experimental group of boys. Out of 10 boys, only 4 provided negative responses, while 6 responded positively. Although the difference is not substantial, the girls in the experimental group still performed better than those in the control group. This notable shift suggests the impact of exposure to Jataka stories with the emphasis on empathetic behaviour in them.

Regarding affective empathy, all the boys in the control group provided at least one negative response to the affective empathy items. Notably, every boy reported that they do not feel like crying while watching tragic movies. Additionally, the majority (5 out of 9 boys) gave negative responses to more than half of the affective empathy items, indicating lower levels of affective empathy among boys. In contrast, while a slight improvement in affective empathy was observed among the boys in the experimental group, after exposure to the Jatakas.

In comparison, only 5 out of the 11 girls responded positively to all affective empathy items, while the remaining 6 gave at least one negative response. Interestingly, all 3 girls also stated that they do not cry while watching sad movies. However, the experimental group showed a slight improvement in affective empathy, with the girls demonstrating a greater improvement than the boys. This trend may be influenced by cultural expectations, particularly in the patriarchal Sri Lankan context, where boys are often encouraged to suppress their emotions.

In summary, the analysis indicates that students' cognitive empathy improved significantly after exposure to the Jataka stories, while affective empathy showed a comparatively less improvement. Regarding gender differences, the results suggest that boys demonstrated greater overall improvement in empathy than girls. However, in the control group, without any intervention, girls naturally exhibited higher levels of empathy than boys.

5.2.Impact of Jataka Stories on Empathy Development

As illustrated in the above description and Table 01, Jataka tales play a significant role in fostering empathy among children. The students' responses to the Jataka stories also clearly indicate their deep understanding of both the narratives and the empathy driven lessons they convey. The following table summarizes their responses.

Table 02: Responses to Jatakas

Item	Girls (11)	Boys (10)
Asampadāna Jātaka(131)		
Favourite character		
Millionaire	11	10
Piliya	00	00
Emotion when sharing wealth by Millionaire		
Happy		
Nothing	09	10
	02	
Emotion when not sharing wealth by Piliya		
Sad	09	07
Angry	02	03
Nothing		
Identification of the good character		
Millionaire	08	10
King	01	
Servant	02	
Favourite incident		
i.Millionaire sharing wealth	08	09
ii. Servant Helping	02	01
iii. No answer	01	
Favourite character		
Disciple	09	04
Serpent King	01	06
No Answer	01	

Emotion when eating birds		
Sad	08	02
Angry	03	07
Nothing		01
Favourite incident		
i. Serpent king helping	01	04
ii. Passing merit by the disciple	01	01
iii. Meditation		02
iv. Nothing	01	01
v. No Answer	08	02
Sāma Jātaka(540)		
Favourite character		
Prince Sama	06	07
King	03	02
Blind Parents	02	01
Emotion when the prince was shot		
Angry with the king	03	05
Sad about the Prince	08	06
Nothing		
Favourite incident		
i.Helping the parents by the king	04	02
ii. Recovery of the Prince		
iii. Recovery of the parents	02	03
iv. Prince looking after parents and animals	01	03
v. Crying of the Prince	02	
vi.No Answer	01	02

5.2.1. Identification of Ethical Characters

In all three Jataka stories, both girls and boys consistently identified compassionate, grateful, kind, and helpful characters as their favourites, showing a clear preference for ethical behaviour.

In Asampadāna Jātaka (131), no student selected Piliya, the ungrateful betrayer of friendship, as a favourite character, while generous Millionaire was widely admired, emphasizing children's appreciation for generosity and fairness.

Similarly, in Sīlānisaṁsa Jātaka (190), which highlights virtue, kindness, and karma, Barbar who killed and ate birds was unanimously rejected, indicating children's disapproval of cruelty and harm. Notably, girls (90%) favoured Disciple, demonstrating a strong inclination toward moral virtue, whereas boys (60%) preferred the Serpent King, suggesting that while they valued kindness, they were also drawn to characters with supernatural strength. This difference may reflect a gender based tendency in moral engagement; girls prioritizing ethical purity and boys balancing virtue with power.

In Sāma Jātaka (540), Prince Sāma was the most admired character (Girls-55%, Boys-70%), reflecting a deep appreciation for selflessness and filial devotion. A few students (03 girls and 02

boys) also appreciated the king, possibly recognizing his transformation and redemption. However, the blind parents were chosen less frequently, likely because their role is more passive, suggesting that children may be more engaged with active, decision making characters.

These responses indicate that children naturally gravitate toward ethical and virtuous figures, with subtle gender differences in how they interpret and connect with moral values. Moreover, the responses further highlight the enhancement of children's cognitive empathy. This reinforces the effectiveness of Jataka tales in shaping children's understanding of ethics, empathy, and justice.

5.2.2. Identification of Ethical Themes

The main incidents in the stories played a significant role in effectively teaching empathy by creating vivid mental images for children. Both girls and boys demonstrated a clear understanding of moral values, distinguishing between good and bad behaviours. While they appreciated compassion, selflessness, gratitude, and other virtuous actions, they unanimously rejected negative behaviours.

The Asampadāna Jātaka (131) effectively conveys the importance of generosity and the emotional impact of gratitude versus ingratitude. Children recognized these themes, with their favourite incident being the wealthy man's act of sharing his fortune with Piliya. Notably, two boys expressed interest in the servant’s treatment of Millionaire, further reinforcing their appreciation for generosity and gratefulness.

In the Sīlānisaṁsa Jātaka (190), engagement levels varied between boys and girls. While 90% of the girls struggled to pick a favorite scene, possibly indicating either lower engagement or difficulty in selecting a specific moment, boys showed stronger engagement, particularly with the Serpent King transporting the two and passing on merit by Desciple. This aligns with their inclination toward supernatural characters, as they also admired the Serpent King’s role in transporting Disciple and Babar. This suggests that boys tend to be drawn to stories that combine power and magic with virtue, while girls focus more on the moral lessons.

In the Sāma Jātaka (540), girls inclined towards acts of kindness, particularly helping parents (36%) and the prince’s recovery (18%). Boys, on the other hand, had a more diverse range of responses, engaging with multiple incidents, including the king helping the parents, the prince’s recovery, the parents' recovery, the prince caring for both his parents and the animals, and even the prince’s emotional reaction of crying. This diversity suggests that boys connect with both emotional and action-driven elements of the story.

The findings indicate that children develop cognitive empathy through these Jataka stories, but their engagement and preferences vary based on gender. Girls tend to focus on moral and emotional lessons, while boys are drawn to elements of supernatural power, action, and a broader range of events. However, both groups consistently appreciate themes of kindness, gratitude, and generosity, reinforcing the effectiveness of these stories in cultivating empathy.

5.2.3. Emotional Reactions

While the previous sections discussed the cognitive aspect of empathy in response to Jataka tales, this section focuses on children's emotional reactions to the stories, characters, and incidents. It is evident that both girls and boys responded positively to virtuous characters and events while condemning negative qualities, actions, and characters. However, a clear distinction emerges in how they emotionally processed these situations; boys predominantly expressed anger toward injustice, ingratitude, and unkindness, whereas girls more frequently experienced sadness.

For instance, in the Asampadāna Jātaka (131) , when Piliya refused to share his wealth with the millionaire, most girls felt sad, sympathizing with Millionaire’s loss, while boys felt anger, likely perceiving the injustice of the situation. Similarly, in the Sīlānisaṁsa Jātaka (190), when Babar ate the birds, girls expressed sadness at the loss of innocent lives, while boys reacted with anger, likely identifying Babar as a wrongdoer. Likewise, in the Sāma Jātaka (540), when the prince was mistakenly shot by the king, girls felt sorrow for the prince’s suffering, while boys felt anger toward the king for causing harm.

These emotional reactions indicate that 10-year-old children are capable of recognizing and responding appropriately to emotions, demonstrating a strong sense of empathy. However, the nature of their responses differs significantly by gender. Girls tend to internalize emotions, feeling sadness when their favourite or morally upright characters face hardship. Their responses indicate compassion and emotional sensitivity, emphasizing a nurturing aspect of empathy. Boys, on the other hand, tend to externalize emotions, reacting with anger toward perceived injustice and wrongdoing. Their responses suggest a protective and justice oriented approach to empathy, where they identify a wrongdoer and express frustration toward injustice. This difference highlights how boys may be more action-driven in their moral evaluations, while girls are more emotionally attuned to suffering. This distinction underscores the diverse emotional dimensions of empathy, reinforcing how Jataka tales serve as effective tools in shaping children's moral and emotional development.

5.3.Empathy towards Animals in Children

Research indicates that children aged 6-12 exhibit high levels of empathy toward companion animals, viewing them as close friends (Bosacki & Tardif-Williams, 2019). The findings of the current study, despite its limited data on this aspect, align with this conclusion, demonstrating that both boys and girls show strong empathetic responses toward animals.

One of the questionnaire items, “Does it upset you when someone hits a dog?” received all positive responses, answering “yes”, except boys in both the control group. This suggests that children extend their sense of empathy beyond human interactions to include animals as well, indicating an innate moral concern for their well-being.

Two of the Jataka stories in this study feature animal characters, and children's reactions to them further reinforce their ability to empathize with animals. In Sīlānisaṁsa Jātaka (190), when Babar ate birds, all but one boy expressed either sadness or anger. This strong emotional reaction suggests that children perceive harming animals as immoral. Furthermore, 06 boys identified the Serpent King as their favourite character, and four boys particularly appreciated the Serpent King transporting Disciple and Babar, indicating admiration for animals that demonstrate positive traits such as kindness and helpfulness. In Sāma Jātaka (540), even though the prince’s act of caring for animals is a minor incident and it was not given special attention during teaching, two boys and one girl still identified it as their favourite part of the story. This suggests that children value acts of kindness toward animals.

Although this study did not specifically aim to investigate children’s empathy toward animals, their responses consistently reflect strong emotional connections with animal characters. Children react negatively to harming animals and admire compassionate, protective, or supernatural animal figures. These findings further confirm that children view animals as deserving of moral concern, reinforcing previous research that empathy extends beyond human relationships. Consequently, stories featuring animals as central characters can serve as valuable tools in cultivating empathy and moral awareness in children.

5.4.Empathy in Daily Life

The questionnaire items were carefully designed to reflect everyday experiences of children, including interactions with parents, siblings, teachers, friends, and animals. These relatable events such as a mother cooking, a teacher’s or parent’s mood shifts, a new student joining the class, conflicts between friends, and watching movies ensured that children could easily engage with the

questions without difficulty or confusion. The familiarity of these situations made it easier for them to relate, respond meaningfully, and demonstrate their understanding of empathy in real-life scenarios.

As seen in Table 01, children's responses while sometimes differing were largely positive, indicating their strong moral awareness and emotional sensitivity. This suggests that children have an innate sense of empathy, which helps them navigate their daily social interactions effectively.

The Jataka stories selected for the study were deliberately chosen to align with children's interests, ensuring greater engagement and relatability. As expected, the children enjoyed these stories, finding many of the incidents familiar and easy to understand. This familiarity contributed to their ability to correctly interpret moral lessons, as reflected in Table 02, where they displayed a high level of empathy by accurately distinguishing between positive and negative behaviours and characters.

More importantly, the study suggests that while some children already possess empathy, exposure to morally instructive narratives like Jataka tales further refines and strengthens their empathetic responses. By engaging with the stories, children not only identified with virtuous characters but also rejected negative behaviours, reinforcing their understanding of compassion, fairness, and kindness. The combination of real-life relatable scenarios and structured storytelling helps children internalize empathy more effectively. Thus, using familiar and engaging moral stories in education and parenting can be a valuable tool in enhancing children's emotional intelligence, ethical judgment, and social development.

5.5.Long-Term Impact of Jatakas on Empathy

After a two-week interval, children were given a second questionnaire with pictures, similar to the content of the first, to evaluate the long-term impact of exposure to Jataka tales on their empathetic understanding. The selected images, which depicted emotions such as sadness, happiness, tiredness, and sorrow, were carefully chosen from real life Sri Lankan contexts to maintain familiarity and relatability.

The responses indicate that all children from the experimental group correctly identified the emotions in the pictures. This suggests that their ability to recognize and interpret emotions

remained intact even after two weeks, reinforcing the idea that Jataka tales had a lasting impact on their empathetic perception.

In Pic. 01 below, where a sorrowful woman was depicted, children unanimously identified the emotion as sorrow. However, when asked how they would help her, all responses were materialistic, either by giving food or money.

This response pattern suggests that children may have internalized giving material aid as the primary way of helping the needy, possibly influenced by their social surroundings. They did not mention comforting or emotionally supporting the person, indicating a gap in emotional intervention strategies.

Pic. 01



However, in Pic. 02, which featured an injured elderly person, the responses were noticeably different. In addition to material help, children suggested giving medicine, helping to stand up, and feeding. This shift indicates a greater sense of active care and physical support when suffering appears more immediate or requires direct assistance.

Pic. 02



In Pic. 03, children recognized happiness and friendship, indicating their understanding of positive social bonds. Also, in Pic. 04, which featured supposedly an elder sister and brother, while the majority also identified it as a happy scene, some children expressed sadness, possibly perceiving an element of separation, longing, or nostalgia. This variation suggests a nuanced emotional interpretation, where children do not always rely on explicit facial expressions but also infer emotions from contextual clues.

Pic. 03



Pic. 04



The study demonstrates that Jataka tales had a lasting impact on children's empathetic development, as evidenced by their ability to accurately identify emotions in real life pictures. However, their responses reveal an interesting distinction between material assistance and emotional comfort. While they are quick to offer tangible aid, the idea of emotional support through direct interaction is less prominent. This could be influenced by cultural norms or prior experiences of helping the less fortunate. Furthermore, children's nuanced responses to happiness in different contexts suggest that their empathetic understanding extends beyond basic facial expressions, incorporating social and situational awareness. These findings indicate that while children already exhibit strong cognitive and emotional empathy, further exposure to stories emphasizing emotional care and non-material assistance could enhance their ability to offer psychological as well as physical support to those in distress.

Conclusion

The current study aims to explore four key objectives, and the conclusions are presented accordingly.

The first objective was to examine the impact of Buddhist Jataka tales on the development of empathy in children. The study demonstrates that Jataka tales play a significant role in shaping and enhancing children's empathy, both in their cognitive understanding and emotional responses. From their reactions to characters and incidents in all three stories, it is evident that children recognize and appreciate positive behaviours such as kindness, generosity, selflessness, and gratitude, while rejecting negative traits like ingratitude, injustice, and cruelty. A comparison of responses to the questionnaire clearly indicates that while the control group showed lower levels of empathy, the experimental group displayed stronger empathetic responses after exposure to Jataka stories. The analysis indicates that students' cognitive empathy improved significantly after

exposure to the Jataka stories, while affective empathy showed a comparatively less improvement. Additionally, children extended their empathy beyond human interactions to include animals, reacting strongly to stories and real-life images depicting animals in distress or demonstrating virtuous qualities. This suggests that their empathetic abilities are broad, reinforcing existing research on children's emotional connections with animals.

The second objective was to identify which themes, characters, or moral lessons in Jataka tales are most effective in fostering empathy. The findings indicate that children overwhelmingly favored characters who displayed kindness, generosity, helpfulness, and gratitude, while rejecting characters exhibiting negative qualities such as selfishness, cruelty, and ingratitude. They also preferred incidents depicting positive moral behavior, while rejecting scenes involving harm, conflict, or wrongdoing. This suggests that stories emphasizing virtues like compassion and gratitude are particularly effective in fostering empathetic understanding.

The third objective was to analyze sex-based differences in empathetic responses among boys and girls. The study revealed that girls exhibited greater affective empathy, while boys were more inclined toward cognitive empathy. The overall results suggest that boys demonstrated greater improvement in empathy than girls. However, in the control group, without any intervention, girls naturally exhibited higher levels of empathy than boys. Moreover, differences in emotional reactions highlight how children process empathy differently: girls predominantly expressed sadness and sympathy, whereas boys exhibited anger and justice driven responses to certain incidents, showing their tendency to externalize emotions, reacting with anger toward perceived injustice and wrongdoing. Another notable pattern emerged, while girls admired stories emphasizing virtue and morality, boys were more drawn to narratives involving supernatural or magical elements. These findings suggest that empathy manifests differently in boys and girls, with potential implications for using Jataka stories as an educational tool.

The fourth objective was to examine how children's empathetic responses evolve over time after exposure to Jataka tales. The two-week follow-up questionnaire demonstrated that children retained their ability to identify emotions accurately, confirming that their exposure to Jataka tales had a long-term impact on their empathetic development. All the children had responded correctly and logically to all the empathy based questions, suggesting their perfect understanding and retention of lessons learnt. While children exhibited strong empathetic understanding, their

responses to real-life images of people in distress suggested a preference for material aid (e.g., giving food or money) over direct emotional support (e.g., offering comfort or companionship). This indicates that while their moral awareness and empathetic skills were enhanced, further emphasis on non-material forms of care could help children develop a more holistic approach to empathy.

Overall, the findings provide preliminary evidence that structured engagement with Buddhist Jataka tales may enhance empathetic behaviour among primary school children. Although the sample size limits generalizability, the observed trends suggest that larger multi-school studies are warranted. The study further confirms that some children, particularly girls naturally exhibit empathy, but structured storytelling, especially through familiar and culturally relevant narratives, can refine, strengthen, and deepen their emotional intelligence. Jataka tales successfully nurture moral judgment and emotional sensitivity, helping children develop a clearer sense of right and wrong. These insights highlight the power of storytelling and Jataka tales as an educational tool, demonstrating its potential in fostering ethical awareness, and emotional growth.

Funding Statement

Buddhist and Pali University of Sri Lanka funds for publication of the research.

Ethics Declaration

The study was approved by the research committee of the Buddhist and Pali University of Sri Lanka. Prior to participation, the purpose and procedures of the study were explained to the relevant teachers who actually helped in conducting the study. Informed consent was obtained from the parents of all participating children, and consent was also obtained from the participating teachers. Participation was voluntary, and confidentiality and privacy of the participants were maintained throughout the study.

Accordance/Ethical Guidelines

The study adhered to Helsinki declaration and national guidelines.

Ethics approval and consent to participate

This study was conducted in accordance with the relevant ethical guidelines and regulations and adhered to the principles of the Declaration of Helsinki. Written informed consent was obtained from parents and teachers as gradients prior to their participation in the study.

Competing Interests

There is no competing interest.

Data Availability

The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.

Consent to publish

This is to confirm that informed consents to participate and to publish was taken from the participants.

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Appendix 01 (General Questionnaire)

Choose your answer: 😊 Yes 😔 No

1. Can you understand whether your mom is happy or sad?
   😊 Yes 😔 No
2. Do you feel happy when your friends get presents? 😊 Yes 😔 No
3. Can you guess if it's a good time to ask your dad for something?
   😊 Yes 😔 No
4. Can you tell if your teacher is happy or upset by her face or voice?
   😊 Yes 😔 No
5. Do you feel sad if your friend is crying? 😊 Yes 😔 No

6. Do you ever cry when watching sad films? Yes No
7. Do you help a newcomer to the class? Yes No
8. Would you share your lunch if your friend could not bring? Yes No
9. Would you hit someone who hurt your friend? Yes No
10. Does it upset you when someone hits a dog? Yes No
11. Do you feel sorry when your teacher looks tired? Yes No
12. Do you enjoy helping your mom while she cooks? Yes No

Appendix 02 (Questions from the Jatakas)

Choose your answer.

Asampadāna Jātaka (131)

i. Who is your favorite character? Piliya Millionaire
ii. How do you feel when the Millionaire shares his wealth with Piliya?
Happy Sad Angry Nothing
iii. How do you feel when Piliya doesn't share the wealth with the Millionaire?
Sad Happy Angry Nothing
iv. Who do you think are the good people?
Millionaire Piliya King Servant
v. What is your favourite incident in this story ?
……

Sīlānisaṁsa Jātaka (190)

i. Who is your favorite character? Disciple Barber Serpent King
ii. How do you feel when the barber hurts the birds?
Angry with the barber Sorry for the birds Nothing
iii. Which incident do you like the most in this story?
……

Sāma Jātaka (540)

i. Who is your favourite character? Prince Sāma Blind parents The king
ii. How did you feel when the king shot Prince Sāma by mistake?
Angry with king Sorry for the prince Nothing
iii. What is your favourite incident in this story?
……

Appendix 03 (Questionnaire with Pictures)

Write your response.



What do you think about this aunt?

How would you help her?



Who is in this picture?

What do you think about them?



What is happening in this picture?

What can you do in a moment like this?



How does this picture make you feel?

What does this picture remind you of?



What do you think about this grandpa?

Would you like to help him?

How can you help him?