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Musical Storytelling with Sinhala Children's Songs: Enhancing Memory and Attention in Young Learners

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ABSTRACT

Childhood cognitive development involves the development of language, reasoning, attention, and problem-solving skills, which are essential for academic success and overall cognitive functioning. This study aimed to investigate the effects of musical storytelling on the cognitive functioning of children aged five to eight years, specifically focusing on memory and attention. Utilizing a between-subjects, quasi-experimental research design, the study employed purposive sampling to select Sinhala children's songs that integrated narrative elements underscoring the value of songs as a multifaceted educational tool that enhances cognitive functions. A sample of four groups, each consisting of twenty children, was divided into an experimental group, which was exposed to musical storytelling, and a control group, which listened to stories without songs. This study addressed a gap in research by exploring the cognitive benefits of musical storytelling in non-Western contexts. Data collection included memory tests, attention tasks, behavioral observations and content analysis. Content analysis of the selected songs depicted their rich thematic elements, narrative structures, and musical components, which were instrumental in engaging children and enhancing comprehension. The findings revealed that children exposed to musical storytelling demonstrated enhanced memory recall and sustained attention compared to the control group. Additionally, observational data indicated higher levels of engagement and emotional connection during storytelling sessions with songs. These results support the hypothesis that integrating narrative elements into songs can help memory and attention development by utilizing music's rhythmic and melodic qualities to support memory retention and maintain attention. The positive outcomes suggest that incorporating musical storytelling into childhood education can create a stimulating and effective learning environment, promoting cognitive and emotional growth.

1. Introduction

Cognition encompasses a wide range of mental processes including perception, attention, memory, working memory, pattern recognition, executive function, reasoning, and language development (Samuel et al., 2017). These processes are foundational for academic success and overall cognitive functioning throughout life. Among emerging strategies to support cognitive development in early childhood, musical storytelling has gained attention as a creative and multifunctional approach. By blending the engaging elements of music rhythm, melody, and repetition with the narrative structure of storytelling, musical storytelling creates a dynamic and immersive learning experience that captures attention and supports memory retention.

The purpose of this study is to investigate the cognitive impact of musical storytelling on children aged five to eight. Specifically, it explores whether children exposed to stories delivered through Sinhala children's songs demonstrate enhanced memory retention, attention, and engagement compared to those who experience storytelling without musical elements. This age group was selected because it marks the developmental transition from Piaget's preoperational to concrete operational stage, during which children develop stronger logical thinking, memory processing, and the ability to comprehend structured narratives.

The study employs Story Recall and Song Lyric Recall Tests to evaluate how well children retain and understand content presented through different modalities. Additionally, levels of behavioral engagement and attentional focus are observed during the sessions, as both are closely linked to improved memory and learning outcomes. By examining these cognitive and behavioral responses, the research aims to assess the effectiveness of musical storytelling as a pedagogical tool.

There is substantial evidence supporting music's role in enhancing various aspects of cognitive development. For instance, Gromko (2005) found that music education significantly improves early reading skills such as phonemic awareness. Similarly, Degé and Schwarzer (2011) demonstrated that rhythmic and melodic elements in musical activities enhance phonological processing and memory retention. Research by Putkinen, Tervaniemi, and Huotilainen (2012) highlighted the impact of informal musical experiences on auditory discrimination and attention, skills crucial for language development. In addition, Howard-Jones, Taylor, and Sutton (2002) observed that combining music with narrative storytelling fosters creative thinking and problem-solving, reinforcing the multifaceted benefits of this approach. While previous research has explored how Sinhala children's songs support moral and emotional development by conveying values and ethical lessons (Wijesuriya, 2024), the present study focuses on their potential cognitive benefits.

While many studies highlight the positive role of music in enhancing memory, attention, and learning outcomes in early childhood education, some research presents a more cautious or nuanced perspective. For instance, Moreno and Mayer (2000) and Ransdell and Gilroy (2001) suggest that music can sometimes act as a cognitive distractor, particularly when learners are processing complex information or when the music is not well-integrated with instructional content. Additionally, the effects of music on learning are not always consistent across all learners and can vary based on factors such as age, familiarity with the material, and individual cognitive styles. These findings highlight the importance of context in evaluating music's educational value.

Another limitation in the current body of literature is its strong focus on Western music traditions and narratives, leaving a gap in understanding how these benefits apply

across different cultural settings. Despite a wealth of evidence supporting musical storytelling for cognitive development, there is a lack of research in non-Western contexts particularly concerning the use of Sinhala children's songs in early education. By examining how musical storytelling with Sinhala songs influences memory and attention, this study contributes to a more inclusive understanding of music's educational potential and offers culturally relevant insights that help bridge this gap in literature.

2. Materials and Methods

This study employed a between-subjects, quasi-experimental design conducted in a natural classroom setting to explore the effects of musical storytelling on children's cognitive development, specifically focusing on memory recall and attention. The study consisted of a single-session intervention involving two separate groups of primary school children aged 5 to 8 years. The comparison was drawn between one group exposed to a musical version of a story and another group that heard the same story in a spoken, non-musical format.

A total of 40 children were purposively selected and divided into two equal groups of twenty. The experimental group listened to the story as a Sinhala children's song with narrative elements embedded in the lyrics and melody, while the control group listened to the same narrative delivered in a traditional spoken format without music. Group allocation was arranged based on classroom grouping and schedule convenience. Both sessions were conducted in the school classroom during regular teaching hours.

Two Sinhala children's songs were selected using purposive sampling based on their educational relevance, narrative richness, and appropriateness for early learners. The chosen songs were "Rabbit and Tortoise Race" and "The Blackest Black" (Mage Podi Yalu, 2023). A content analysis framework was used to examine the songs, focusing on their narrative structure, moral and educational themes, vocabulary, repetition, musical engagement, and cultural relevance. The analysis followed a theory-informed interpretive approach, where findings were presented alongside relevant theoretical insights to better explain the cognitive and educational value of the songs. These songs were selected for their potential to promote memory retention and sustained attention in children.

Each group took part in a single storytelling session lasting approximately 30 minutes. The session included an introduction to the story theme, storytelling (in musical or spoken form), followed by a memory recall test, and observational recording of attention. The sessions were conducted by the researcher, who maintained consistency in tone, language, and delivery style across both groups. The story content, duration, and voice used were kept the same for both conditions to ensure comparability.

Memory recall was measured through a brief test of 5–7 open-ended questions administered immediately after the session. The questions were designed to assess children's ability to remember story events, character actions, and moral lessons. Examples included: "Why did the rabbit lose the race?" and "What did the black boy try to do to become white?" Responses were recorded manually and categorized as correct, partially correct, or incorrect based on accuracy and completeness.

Attention was assessed using a structured observation checklist during the storytelling sessions. Key behavioral indicators included sustained eye contact with the storyteller, active participation (e.g., singing, clapping, gesturing), signs of distraction (e.g., fidgeting, looking away, unrelated talking), and the number of redirects needed to regain attention. Observations were conducted by the researcher and supported by the class

teacher, who independently observed a subset of the group. This served to enhance the consistency of observations through informal inter-rater validation. The results were analyzed using descriptive statistics. Percentages were calculated to summarize the differences between the two groups in terms of correct recall responses and observed attention levels. No inferential statistical testing was conducted; therefore, the findings reflect observable trends rather than statistically verified differences.

Table 01. How elements connected to cognitive development

Element	How it connected to cognitive development
01. Narrative Elements	Narratives help children organize events and understand cause-and-effect relationships, enhancing logical thinking and comprehension, which are crucial for cognitive development.
02. Themes	Themes encourage critical thinking and ethical reasoning by helping children abstract and apply lessons to broader contexts, supporting the development of higher-order cognitive skills.
03. Musical Features and Repetitive Patterns	Musical rhythms and repetition aid memory retention and improve attentional control, reinforcing learning and cognitive focus.
04. Educational Elements	Educational content within songs links new information to existing knowledge, enhancing cognitive processing and concept formation.
05. Engagement Level	Active engagement leads to better information retention and a deeper understanding of the material, essential for cognitive development.
06. Memory Aids	Mnemonic devices and repetitive phrases in songs support the development of working memory, a critical aspect of cognitive function.
07. Attention-Drawing Features	Attention-drawing elements help maintain focus, crucial for problem-solving and effective learning, which are vital cognitive skills.
08. Language Development	The interplay between language and music fosters language acquisition and verbal expression, foundational to cognitive growth and communication skills.
09. Visual Imagery	Vivid imagery stimulates imagination and enhances the ability to retain visual information, supporting cognitive visualization and memory.
10. Cultural Relevance	Culturally relevant content makes learning more meaningful and enhances cognitive engagement by connecting with children's backgrounds and experiences.
11. Emotional Impact	Emotional responses to songs and stories reinforce memory and deepen cognitive engagement, helping in the development of emotional intelligence and cognitive connections.

2.1 Ethical considerations.

Ethical considerations were observed throughout the study. Although formal ethical approval was not sought, the research adhered to essential ethical guidelines. Parental consent was obtained for all participants. All procedures were designed to ensure the participants' safety and well-being. No personal or identifying information was collected, and all data were handled confidentially to protect participant anonymity.

3. Results and Discussion

The content analysis framework used in this study was carefully designed to evaluate the potential impact of children's songs on cognitive and emotional development. Each factor was chosen to provide a comprehensive understanding of how the songs contribute to cognitive development. Narrative elements and vocabulary complexity were analyzed to assess the richness of the story and the appropriateness of the language for promoting comprehension and language development. Themes and educational elements were included to evaluate the songs' ability to impart moral lessons and specific educational content. Musical features, repetitive patterns, and memory aids were examined for their role in enhancing engagement, attention, and memory retention. Additionally, the framework considered the level of engagement and attention-drawing features to understand the practical effectiveness of the songs in maintaining children's attention. Visual imagery and cultural relevance were assessed to ensure the content was relatable and stimulating for the children's imagination, while emotional impact was analyzed to support the songs' ability to create a positive learning experience. By incorporating these

factors, the framework provided a thorough evaluation of the songs' potential to support cognitive and emotional development in children.

Song 01

hiṅci piṅci hāvā yaddi tani velā (Little Rabbit got lost while going)

vilē unnu ibba dækala wature nævilā (got wet in the water by seeing the tortoise in the pond)

ibba dækapu hāvā (The rabbit who saw the tortoise)

Iwure næwatilā (Stopped at the river shore)

Ottu tiyala api duwamuda æhuwā lan welā (Asked going closely,"shall we race placing a bet?")

Duwannata hækī tamuse hapanekī (You are good at running)

Occara oya kiyana nisā duwala balamuda (Let's run and see that you boast)

Hæbæyi hāvo mata issara wenna denawada (But can you let me run front)

Hæbæyi hāvo mata issara wenna denawada (But can you let me run front)

Hāva duwa yanā nidannata wunā (The Rabbit kept running, and fell in to sleep,)

Ibbā hemin hemin niyama tænata lan wunā (The tortoise reached the end slowly)

Nidā unnu hāvā ūta udin pæradunā (The sleeping rabbit got defeated)

Nidā unnu hāvā ūta udin pæradunā (Over the tortoise) *(Mage Podi Yalu, 2023)*

3.1 Narrative elements

The story begins with Little Rabbit going on an expedition by himself, setting the scene for curiosity and discovery. Rabbit explores the outside world and comes across many natural things, such as getting soaked by a pond. The fact that the scene opens with Rabbit on a journey emphasizes his sense of adventure and his desire to learn more about the world. According to Jerome Bruner (1991), narratives offer a framework for arranging experiences and events, assisting children in making sense of the world. Children can better comprehend the order of events and the cause and effect between acts and results when they hear the song's narrative.

The introduction of contrasting characters, like Little Rabbit and Tortoise, supports cognitive development by encouraging children to recognize and understand different personality traits and their

associated behaviors. Tortoise, a calm and patient figure representing steadiness and perseverance, allowing children to study and consider these opposing attributes. According to Vladimir Propp's (1968) analysis of folktales, common character roles and functions help structure stories in a way that is both familiar and educational for children.

Rabbit, arrogant and confident, challenges a tortoise in a pond to run a race. The tortoise accepts, and Rabbit takes the lead. However, he sleeps, believing he has time to win. Tortoise advances slowly, and Rabbit loses. The story ends with Tortoise crossing the finish line first, highlighting the importance of slow and steady wins and warning against impatience and arrogance.

A well-structured plot consists of an exposition, rising action, climax, falling action, and resolution, according to Freytag's Pyramid (1894, pp. 114–116). This arrangement assists in children's comprehension of the events that led up to the climax and resolution as well as the tension that builds through.

3.2 Themes

This song highlights the importance of perseverance in overcoming short-term failures. The tortoise's steady effort demonstrates the value of prolonged effort, highlighting the importance of preserving work and dedication over time. The tortoise's slow pace contrasts with Rabbit's quick pace, emphasizing the importance of patience. Despite his slow pace, the tortoise eventually succeeds, showcasing that patience and perseverance can yield better results than hurrying. This is introduced by Albert Bandura's social learning theory (1977, pp. 22–24), which holds that children acquire new behaviours through observation. Children learn that patience may be rewarded and is a valued quality to aspire to by witnessing the tortoise's patient approach and its favourable outcome. Children can learn from this comparison. The phases of moral development proposed by Lawrence Kohlberg (1984) offer a framework for comprehending the significance of humility in moral development, implying that humility is necessary for developed moral thinking.

3.3 Musical Features

The melody of the song is simple and repetitive, making it easy for children to learn and sing along. The use of the same melody for the introduction and interlude helps to create a cohesive musical structure. Daniel Levitin examines the connection between music and the brain, describing the ways in which music impacts our emotions, memory, and thought processes (Levitin, 2006, pp. 89–91). According to Levitin, musical repetition, like a repeated melody, helps with memory recall and engagement. The song uses the six-eight rhythm as an example of a fast and repeated rhythmic pattern that can capture children's attention and keep them physically involved, which is essential for maintaining interest and improving the learning experience.

The melody in a song is simple and effective in memorization and engagement, as it reinforces the narrative and makes it accessible to young children. The musical phrases align with the lyrics, enhancing the storytelling aspect of the song. A melody that supports the narrative makes it easier for children to follow and maintain their interest throughout the performance.

The song's limited range of notes makes it easy for children to sing, prevents vocal strain, and is comfortable for young voices. This is crucial for children's songs, allowing all, regardless of vocal ability, to participate. The work of Edwin Gordon focusses on the steps involved in a child's musical development and how they learn music. Gordon emphasises in this book the value of teaching young children to play with a small range of notes and straightforward melodies (Gordon, 2007, pp. 45–47). These

components are necessary because they complement young children's vocal and cognitive capacities, which facilitate their learning and participation in singing exercises.

The song's key turning points are sung in a group voice, enhancing the narrative's memorable moments and fostering a sense of unity and excitement among the children. This collaborative singing style enhances the narrative's overall impact.

The song uses a lively six-eight rhythm, enhancing the overall enjoyment and dynamism of the musical experience. This energizing rhythm helps maintain a steady pace and adds movement to the story, encouraging children to move or dance along with the song. The book written by Patricia Campbell focusses on how children engage with and comprehend music in their everyday life. It highlights how important rhythmic patterns and group singing are for promoting social and musical growth (Campbell, 1998, pp. 34–36). Children benefit from group singing at crucial times, as demonstrated in "When Little Rabbit Goes Alone," since it fosters a sense of community and unity and strengthens their emotional bond with the song and the narrative.

This song is an engaging and educational song with a lively six-eight rhythm, limited note range, and simple melody. It is easy to learn and is also entertaining for children due to its alignment with the story and the use of group singing to enhance the storytelling element.

3.4 Educational Elements

Children are exposed to new words in context through the song. Lexical terms such as "bet," "defeated," and "tortoise" improve their language proficiency. The song enhances children's vocabulary and word use comprehension in narratives by guiding them through a logical sequence of events, enhancing their narrative comprehension skills. The moral, "slow and steady wins the race," teaches patience and perseverance, making it a memorable experience. The song encourages children to examine the rabbit's actions and the tortoise's methodical approach, highlighting the benefits of perseverance and the drawbacks of arrogance, and encourages critical thinking through questions like "What can we learn?".

3.5 Engagement Level

This song is a captivating story for children due to its relatable characters and clear plot. The story revolves around a race between a tortoise and a rabbit, with the song's vibrant rhythm and melody attracting children's attention. The storyline and catchy tune keep them engaged, making it easier for them to follow the plot. Engaging content decreases cognitive overload and helps in attention maintenance, according to the Cognitive Load Theory (Sweller, 1988). This notion is supported by the song's distinct narrative and rhythmic structure, which make the information interesting and simple to follow.

The song's arrangement can enhance engagement, particularly in repeating sections, by encouraging children to sing along with repetitive lyrics and an easy-to-remember melody. They can also participate by repeating phrases in a chorus and enhancing the interactive experience by imitating movements or gestures. According to Bandura's (1977) Social Learning Theory, children acquire knowledge through participation and imitation. Children are encouraged to participate in by the song's repetitious and participatory manner, which reinforces learning through active engagement.

The story, featuring sympathetic characters and amusing narrative turns, offers moral lessons and a significant conclusion that "slow and steady wins the race" making it a delightful and entertaining experience for children. Krathwohl, Bloom, and Masia's 1964 Affective Learning Theory places a strong emphasis on the function of emotions

in learning. Engaging information improves learning and retention by boosting motivation and provoking favorable emotional reactions. This notion is supported by the pleasant emotional experience created by the song's music and captivating plot.

3.6 Visual Imagery

The song aids children in visualizing characters and their actions through vivid descriptions. The phrases "the tortoise reached the place slowly, slowly" and "the rabbit kept running, but slept" effectively describe the characters' activities and pace. This type of imagery is crucial for comprehension, making the story more interesting and memorable for children.

The song's imagery enhances children's comprehension and enjoyment by allowing them to visualize events in succession. Sentences like "little rabbit goes alone, got wet with the water" help children relate to the story, improve comprehension, and recall lessons, thereby promoting cognitive development.

The song's characters stand for many qualities and characteristics. The tortoise symbolises endurance and patience, while the rabbit stands for speed and arrogance. The moral lessons of the tale are communicated through these symbolic representations. Children discover that patience and persistence are frequently the keys to success, even though quickness and self-assurance can be useful. The story's instructional significance is further reinforced by its symbolism, which gives these abstract characteristics a more concrete and understandable form for children.

3.7 Cultural Relevance

Rabbits and tortoises are universal symbols in various cultures, often featured in folklore, fables, and children's stories. Aesop's Fables, a timeless story about the rabbit-tortoise race, is popular due to its universality and lesson that "slow and steady wins the race." By making the story inclusive, it remains relevant to a global audience and helps develop universal virtues like humility, patience, and perseverance, making it relatable and valuable for children.

3.8 Emotional Impact

A range of emotions are evoked by the story of the tortoise and the rabbit. Children may identify with the tortoise since he endures hardships yet perseveres. They might also experience surprise and laughter when the overconfident rabbit, who appeared destined to win, loses. In order to fully engage children with the story, it is helpful to evoke emotions such as empathy and astonishment. Emotional reactions strengthen the moral lesson and increase the story's impact and memory. Affective Events Theory (Weiss, & Cropanzano, 1996) states that attitudes and behaviours are shaped by emotional experiences. The story is made more memorable and its moral precepts are reinforced by the emotional reactions it inspires.

The narrative fosters empathy by demonstrating how unique talents and skills belong to each individual. According to Hoffman's (2000) Empathy Development Theory, children's comprehension and capacity for empathy can be improved by exposure to sympathetic story scenarios. Children can learn to respect and admire patience as well as the worth of many abilities by witnessing the tortoise's triumph despite his slow pace. Children's social and emotional development depends on their ability to empathize. Children develop a more accepting and caring perspective by learning to understand and value the differences in people through developing empathy for the tortoise.

The transition in the story from the excitement of the race to the calm of the tortoise's triumph fosters dynamic emotional

engagement. The peaceful resolution offers a sense of completion and fulfilment, but the initial excitement keeps children interested. Children's interest and attention are sustained by the story's mood shifts. Children are guaranteed to remain engaged with the story and its teachings owing to the plot's dynamic emotional swings. According to Gross' (2002) Emotional Regulation Theory, children can better control their own emotions by first experiencing and comprehending a range of emotions. The story's dynamic mood-shifts offer children a safe setting to explore and comprehend a range of emotions.

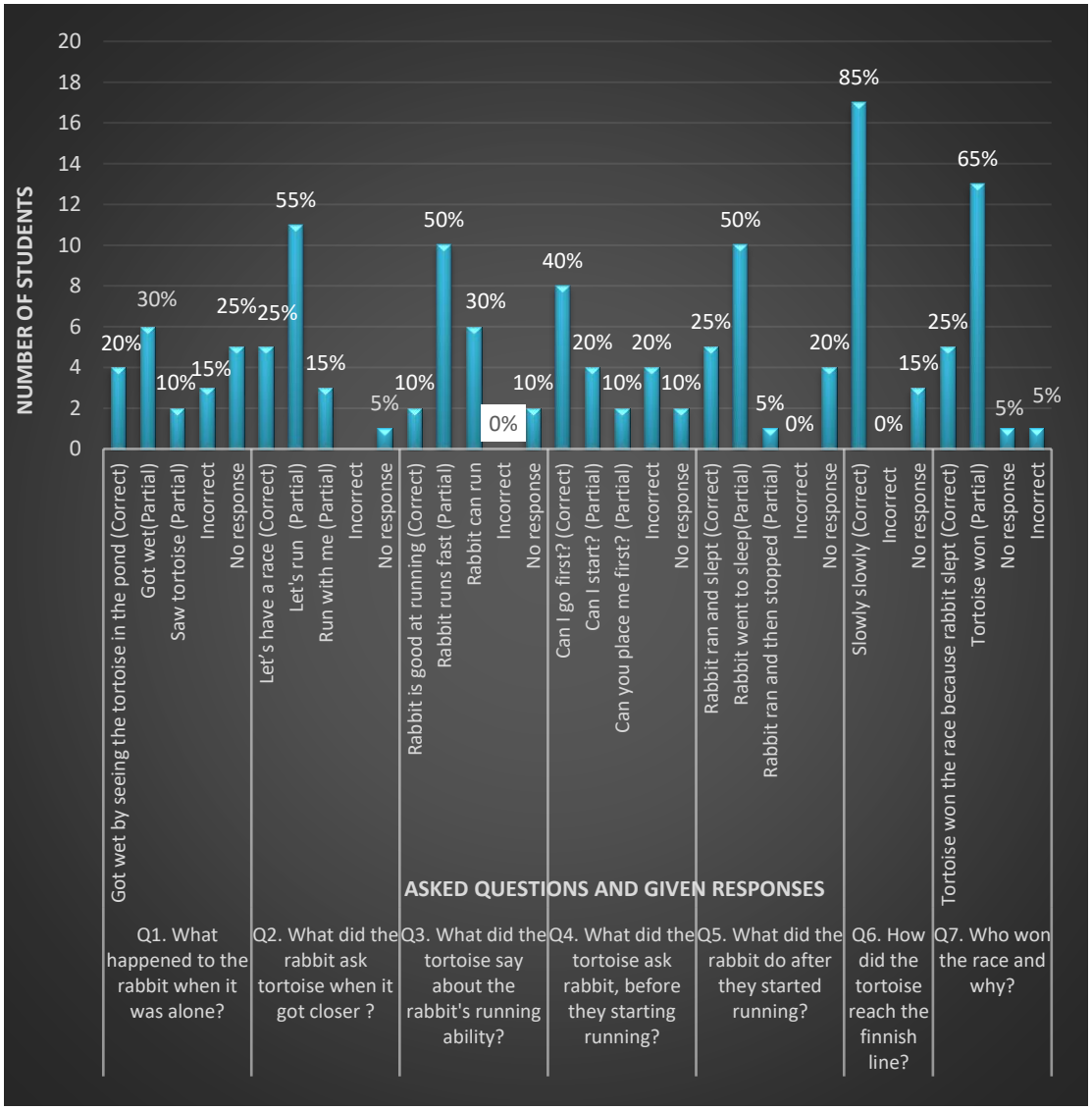

Figure 1. Percentage Distribution of Student Responses to Memory Recall Questions. This table shows the percentages of different answers given by students to the memory recall questions during the session. The values are based on the number of students who provided each type of response (correct, partially correct, or incorrect) for each question.

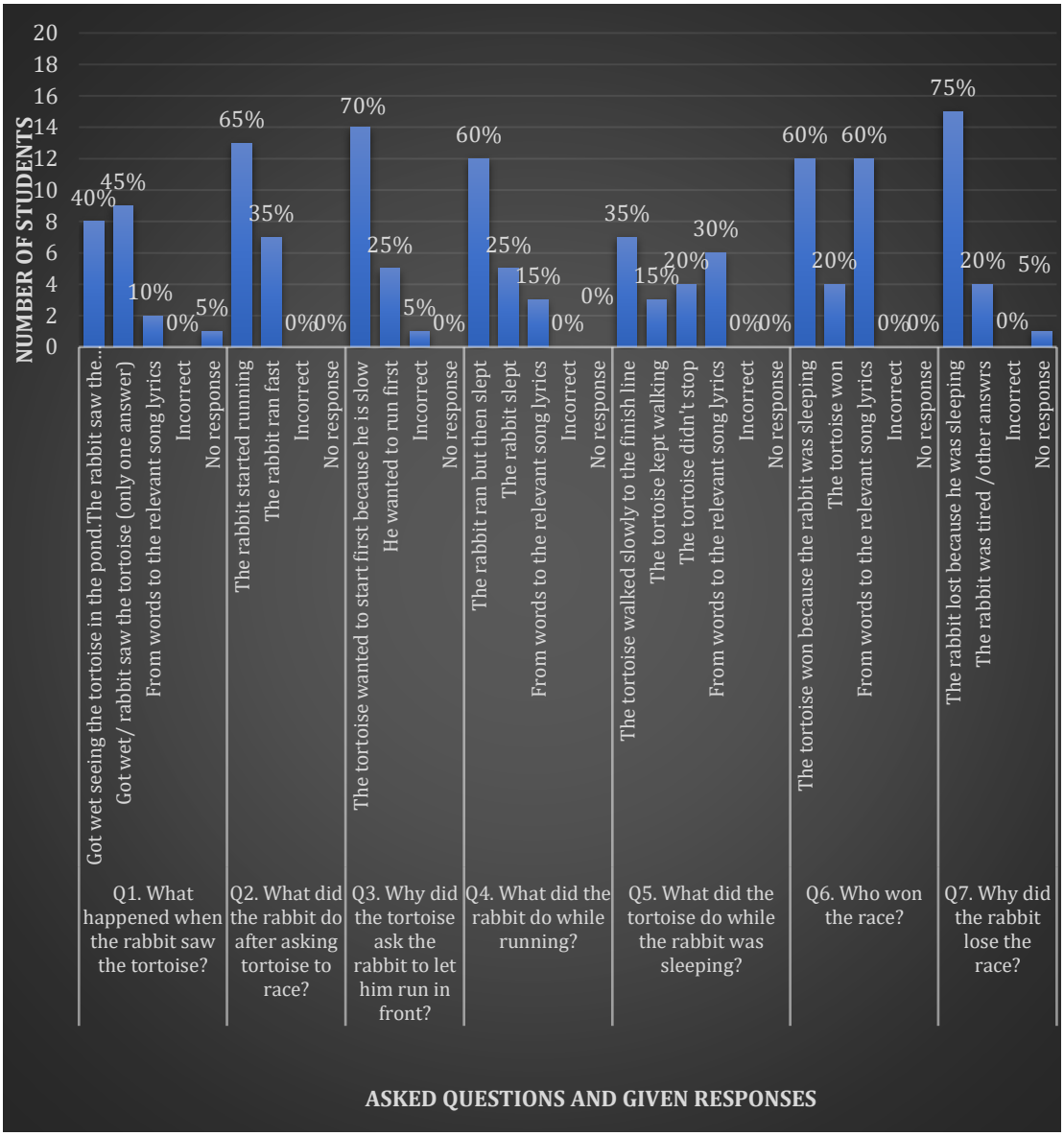

Figure 02. Percentage Distribution of Student Responses to Memory Recall Questions. This table shows the percentages of different answers given by students to the memory recall questions during the session. The values are based on the number of students who provided each type of response (correct, partially correct, or incorrect) for each question.

3.9 Interpreting Group Differences in Recall and Attention

The Song Lyrics Recall Test results showed a consistently higher percentage of correct answers across most questions when compared to the Story Recall Test. While both groups performed relatively well on simple, surface-level questions, the differences became more evident when questions required recalling sequential events or deeper understanding of the narrative.

In the song-based session, correct responses were not only higher in quantity (75% correct on average) but also richer in detail. For example, when asked "Why did the rabbit lose the race?", children in the song group were more likely to explain both the rabbit's overconfidence and the fact that he fell asleep showing better comprehension of cause and effect.

In contrast, the non-song group produced more partial and vague responses. For questions that involved time-based sequencing or specific actions (e.g., "What did the tortoise do after the rabbit fell asleep?"), several students either skipped the question or gave simplified answers like "He won." This suggests weaker memory traces or lower narrative understanding when the story was delivered without musical cues.

Furthermore, the rate of non-responses was noticeably higher in the non-song condition. Children were more likely to leave questions blank, indicating a lapse in either recall or confidence in their memory. This trend supports the interpretation that the absence of melody and rhythm reduced the encoding strength of key narrative points in their short-term memory.

3.10 Observational Data

The children's attention during the storytelling sessions varied noticeably depending on whether the story included the song "Rabbit and Tortoise Race" or not. The children were far more engaged when the story was accompanied by a song. Many of the children were swaying, clapping, or singing along to the repeating chorus, suggesting that the song's melodic and rhythmic features had captured their interest. There were more instances of unexpected laughing and enthusiastic emotions, especially when the rabbit slept, but their gazes stayed attached on the storyteller. The children's excited faces and active engagement suggested that the musical story evoked a stronger emotional response.

While children were still paying attention during the regular storytelling session without the song, their level of participation seemed to be lower. A few children exhibited indications of distraction during the story, looking around the room, but a few children remained focused, particularly at important points like the tortoise's slow and steady movement. There were fewer noticeable indications of enthusiasm or excitement, and the emotional reaction seemed lower when there were no musical elements present.

A clear comparison of children's attention levels during storytelling sessions with and without the use of song is provided by the accompanying graph and table. Based on the data, it is highly likely that including a song improves the children's attention levels during these sessions.

With seventeen children staying attentive throughout story telling with song session, compared to 13 during the song-free session, more children were able to gain the attention. This means that whereas just 65% of the children were able to maintain their focus without the song, 85% of them did so while it was playing. It seems that including a song increases student engagement and helps them pay attention for the duration of the lesson.

As compared to the five children (35%) in the session without a song, fewer children (15%) displayed signs of distraction during the song-filled session. This suggests that the song reduced distractions, maybe because of its rhythmic and repeated qualities, which probably kept children engaged longer than a conventional storytelling method would have.

During the song-based session, there were also fewer children who needed prompts. Out of all the children, only two (10%) required prompts when the music was playing, but four (20%) did so when it wasn't. This shows that instead of requiring outside stimuli to help children to pay attention again,

the song might have served as a cognitive basis to help them stay on task.

The information clearly indicates that including a song in storytelling sessions helps to keep children engaged longer. The song decreased the amount of distractions and the need for instructions, in addition to helping children stay attentive. These results imply that a songs' captivating and structured style can significantly enhance attention and minimise cognitive disengagement during learning tasks.

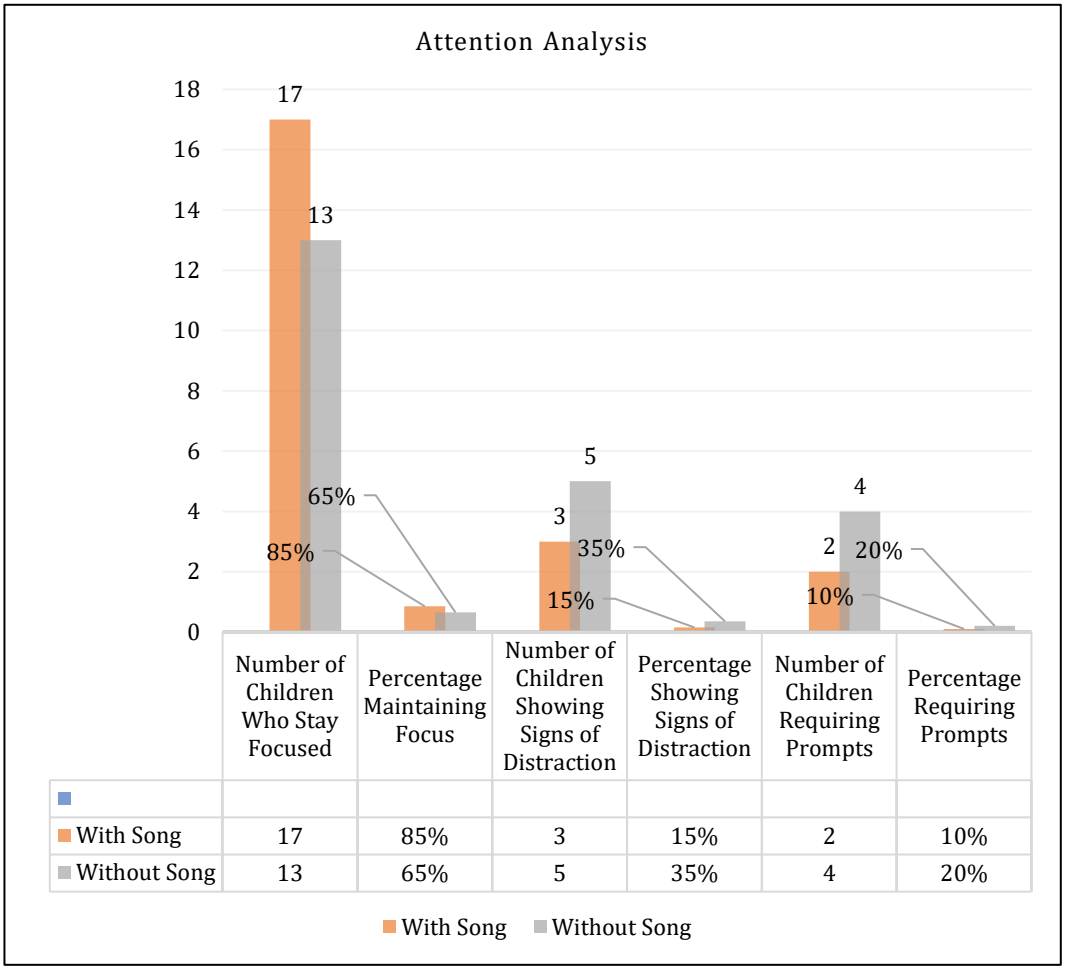

Figure 03. Comparison of Observed Attention Behaviors in Song and Non-Song Groups. This figure compares the number of students in each group (with song vs. without song) who remained focused throughout the session, showed signs of distraction (such as fidgeting or looking away), and required verbal cues or reminders to regain attention. The data provides a visual summary of observed attentional engagement across the two conditions.

Active engagement is critical to improving memory and understanding, as evidenced by the high participation rates during the storytelling session, particularly when children actively responded to questions. Better recall and comprehension were shown

by children who participated more in the narrative process, either by responding to questions or by showing emotions in response to significant events. It indicates that emotional involvement, like expressing joy or worry as the tale is being told, helps children stay engaged and improves their recall and comprehension of the details. This helps make learning for young children more meaningful and remembered, which supports the theory that emotional involvement and learning are closely related.

Song 02

Kaluma kalū katta kalū (The blackest black)

Lipē tiyena dæli aňguru (Like the coals in the black hearth

Ahasē pāvena kalu væhi valākulū (Like Black rain clouds floating in the sky)

Wattē wæda karana kolū namath kalū hamath kalū (The boy who works in the garden is black in name and skin)

Kaluwara māse pōya dawasa wagēlū (and black in skin like a dark day)

Sudu wennata āsa kalū detun warak nānawalū (The black boy who wants to be white takes two or three baths)

Akkage saban piyaru tika iwarailū (Sister's soap and the powder are finished)

Kōpi biwwa nisai kalū panditayek pawasuwalū (A scholar said that drinking coffee turns black)

*Inpasu kōpi bīma athæriyālū (*Then stopped drinking coffee)

Hō, hō mata terenawā kiri biwwot sudu wenawā (oh, I understand that drinking milk turns white)

*Maduwē wæssige kiri tika adu wenawā (*The cow's milk in the shed is running low)

Ira awwata kalu wenawā sevana tæn soyā yanawā (The sun darkens the skin and looks for a place of shade)

Sudu lamayin dækkama kaluta andenawā (The Kalū (black boy) cries when he sees White children)

Sudu pātai kalu pātai pāta dekak bawa ættayi (It is true that white and black are two colors)

Pirisiňdu lesa sitīma lokuma sam patai (Being clean is a great asset)

Sudu wunāta kalu wunāta kāget lē ratu pātai (White or black, everyone's blood is red)

Pātak gæna tæwenne nūgatkamatai (Regretting a colour is ignorance). (Mage Podi Yalu, 2023)

3.12 Narrative Elements

A black child who aspires to be white is the main character. His journey highlights his realizations and struggles while reflecting on the themes of racial identity and self-acceptance. The boy's darkness is first described in the song with powerful imagery, likened to "coals in the black hearth" and "black rain clouds floating in the sky." Piaget's theory of cognitive development states that children between the ages of 2 and 7 who are in the preoperational stage think in pictures and symbols. They comprehend and remember things better when presented in vivid images (Piaget, 1952, pp. 67–69)

The boy quits drinking coffee, takes several baths, uses up his sister's soap and powder, everything in an attempt to get white. He believes that coffee causes skin to turn darker. According to Bandura's social learning theory, children pick up attitudes and behaviours through seeing and copying what others do (Bandura, 1977, pp. 22–24). The boy's attempts to lighten his skin tone reflect how society views race.

The boy considers the meaninglessness of attempting to lighten his skin tone after realizing that consuming milk won't make him white. The message of the song is that skin tone is not as significant as cleanliness and that black and white are merely colours. According to Erikson's phases of psychological development, children are creating an identity and a sense of industry at this age (Erikson, 1950). Acknowledging the pointlessness of altering one's skin tone is a step towards developing a positive sense of self.

The message of the story's ending underscores that all people are created equal, regardless of their skin tone, stressing that ignorance focusses on surface differences and that everyone has red blood in them. During the traditional stage of moral development, children begin to understand more expansive concepts of equality and fairness. Nucci and Turiel (2009) assert that a child's social surroundings and educational experiences have an impact on their conception of justice and equality. By reinforcing these crucial ideals throughout this stage of moral development, the moral lesson offered in the song's conclusion helps children acquire a sense of equality and justice.

3.13 Themes

The song's main themes are self-acceptance and the futility of superficial change. According to Bandura's social learning theory, which describes behaviours acquired through imitation and observation, the boy's wish to change the colour of his skin is a reflection of internalized cultural influences (Bandura, 1977). The boy's realization that his efforts are in vain introduces the concept of self-acceptance, emphasizing to children the value of accepting who they really are instead of trying to fit in with social norms.

The moral lesson emphasizes that although appearance matters, a person's skin tone has no effect on their value. Given that everyone's blood is red regardless of skin tone, this is consistent with the idea of equality. The lesson also discusses the dangers of ignorance, which emphasizes differences on the outer layer rather than acknowledging our common humanity.

3.14 Engagement Level

With lines like "the boy who works in the garden is black in name and black in skin" and "the blackest black like the coals in the black hearth," the song captivates young listeners. These descriptions evoke powerful visual images in children's minds, making the information remember and relatable. This use of imagery is consistent with the dual coding theory proposed by Paivio Paivio (1986, pp. 53–55), which holds that memory and understanding are improved when verbal information is combined with visual imagery.

Participation is encouraged by the song's repetitious pattern, which includes themes like the children's attempts to lighten his skin tone ("the black boy who wants to be white takes two or three baths" and "oh, I understand that drinking milk turns white"). Children will probably sing along with these repeated lines, which will help them remember and strengthen the message of the song. This is related to Gordon's theory of music learning, which holds that hearing music repeatedly fosters a sense of rhythm and familiarity, which strengthens learning (Gordon, 2007).

The song is entertaining because of its storyline, which revolves around a child's realistic yearning to fit in and modify his appearance, and because of its eventual conclusion, which emphasises self-acceptance. According to Csikszentmihalyi's flow theory, children are more likely to find an activity enjoyable and stick with it if it connects with their personal experiences (Csikszentmihalyi, 1990, pp. 71–74). The recurring melody and relatable content combine to enhance the song's overall appeal and level of engagement.

3.15 Visual Imagery

Some of the song's impressive and moving descriptions include calling the boy's skin "the blackest black like the coals in the black hearth" and describing it as "black rain clouds floating in the sky." Because of the vivid visuals that are created by this detailed language, listeners are able to see the children and their surroundings. These descriptions draw attention to the boy's visible difference and enhance the listener's emotional connection with the story, which makes the narrative more engaging. This strategy is in line with Vygotsky's theory of cognitive development, which contends that rich sensory experiences can make difficult concepts easier to understand (Vygotsky, 1978, pp. 85–90). The song supports children in understanding abstract social concerns linked to identity and cultural expectations by giving them practical visual imagery.

The song vividly depicts a boy's desperate attempts to lighten his skin tone, involving extreme actions like giving up coffee, bathing frequently, and using excessive soap and powder, helping children understand his struggle and its meaninglessness. This use of imagery is justified by Vygotsky's theory, which claims that vivid representations facilitate the internalisation of social concepts (Vygotsky, 1978, pp. 89–97). The visual stimulates the song's emotional and cognitive effect by giving the boy's struggle a tangible form, which helps listeners comprehend the song's underlying message more fully.

The boy's black skin in the song and his attempts to lighten it represent social pressures and the established notion that lighter skin is more attractive. The metaphor for the naive attempts to adapt to conventional notions of beauty is ‘drinking milk to get white and avoiding coffee to stay dark’. This is where Barthes' semiotics theory comes in, since it clarifies how signs and symbols have meaning in a cultural setting (Barthes, 1957/1972, pp. 110–115). The song critiques societal attitudes towards race and identity, using symbols to challenge the notion that skin color determines worth, effectively conveying the message of self-acceptance and rejecting superficial beliefs.

3.16 Emotional Impact

As a boy struggles with his identity, the song evokes strong feelings, especially when the lyrics compare his skin to "the blackest black like the coals in the black hearth" and "like black rain clouds floating in the sky." Audiences can relate to the boy's situation because of the sight of him desperately trying to change the colour of his skin, having many baths, and using up all the soap and powder. Albert Bandura's Social Learning Theory, which holds that people can acquire empathy and moral knowledge by witnessing the emotional experiences of others, is consistent with this emotional reaction (1977, pp. 22–24).

The song highlights the boy's natural need for acceptance, which promotes empathy and compassion for people with varied skin tones. The phrase "The black boy cries when he sees white children" creates empathy in children by highlighting the emotional suffering the boy experiences as a result of his perceived differences. This is supported by Martin Hoffman's Hoffman (2000) theory of empathy development, which claims that reading stories about people who experience emotional hardships might help people become more empathic. According to him, stories like this teach children to empathise with others and identify their emotions, which fosters empathy and social awareness.

The song explores a boy's identity confusion and promotes an inclusive view of diversity through lyrics like "Ignorance cares about a color" and "White or black, everyone's blood is red." This emotional journey from struggle to acceptance generates dynamic engagement. The Aristotelian concept of catharsis (1968, pp. 144–155) is applicable in this situation since it describes how going through a variety of emotions while listening

to a story can result in an emotional release and a clearer comprehension of the moral lesson. The song's theme of equality and self-acceptance is reinforced by the change in tone from sadness to acceptance, which enables listeners to understand their feelings.

3.17 Musical Features

Particularly for children, the song's straightforward and repeating rhythm makes it simple to understand and remember. "The blackest black," which is repeated at the beginning of the song along with "Kaluma kalu katta kalu," is the first line that the song emphasises. The repetition helps the listener internalise the message of the song and enhances its memorability.

The song's continuous beat with a six-eight-time signature enhances storytelling by providing a smooth, flowing pace. This engaging rhythm keeps listeners focused, making it easier for children to follow. The song's three verses, chorus, and repeating key lyrics reinforce the message and aid in remembering. The narrative is well-balanced, with the verses building the plot and the chorus restating the key theme to make sure the main idea is retained.

3.18 Repetitive Pattern

The song emphasizes the main point through repeated phrases like "The Black Boy" and acts like bathing, highlighting the boy's struggle with societal views of his skin tone. The pointlessness of his attempts to change his look is highlighted by the repeating of these tasks. The structure of recurring verses and choruses aids in memory retention and understanding, making it easier for listeners to follow a predictable rhythm.

According to Leonard Meyer's Theory of Expectation in Music (1956), the listener develops expectancies as a result of repetition. When these goals are achieved, listening to music becomes fulfilling and everlasting. The song's major themes are further emphasised by the repetition of musical phrases in both the melody and the structure, which also keeps listeners interested and involved in the narrative.

3.19 Educational Elements

The song helps children grow their vocabulary by introducing them to words like skin tone and hygiene. Children may not come across descriptive language in ordinary discourse, but phrases like "the blackest black," "like the coals in the black hearth," and "like black rain clouds floating in the sky" introduce it. Furthermore, words like "baths," "soap," "powder," and "milk," which are associated with cleanliness, are given context that gives them significance and relevance. The sociocultural theory of Lev Vygotsky places a strong emphasis on the role that language plays in cognitive development, especially in relation to how children pick up new vocabulary through significant scenarios and social interaction. The song aids children in understanding the story's main idea and moral through its straightforward format. It follows a boy's dissatisfaction with his skin color, his attempts to change it, and his realization that everyone's blood is red.

According to Jean Piaget's Theory of Cognitive Development Piaget (2013), children are starting to comprehend logical sequences and the relationships between events when they reach the concrete operational stage, which often takes place in the 7–11 age range. Children can better understand the story and its underlying moral because of the song's structure, which follows a clear narrative progression that corresponds with this developmental period.

The song emphasizes the significance of inner characteristics over visible traits, highlighting the unfairness of skin color and societal forces. The message "White or Black, Everyone's Blood Is Red" encourages children to consider the consequences of judgments based on appearances. Understanding oneself and others is a key

component of both intrapersonal and interpersonal intelligences, as highlighted by Howard Gardner's Theory of Multiple Intelligences (1983, pp. 315–320). Children can acquire various types of intelligence by reflecting on their own identities and learning to empathise with others, which is made possible by the song's focus on skin colour and the importance of inner traits.

3.20 Interpreting Group Differences in Recall and Attention

Significant differences appear between the Story Recall Test and Song Lyrics Recall Test in terms of how well they support children's comprehension and recall. When the findings are compared, it is evident that adding a song to the recall process improves children's memory retention both thoroughly and accurately.

Students' memory accuracy on the Story memory Test (without the song) was average. For example, just 25% of the students answered correctly when asked about the boy's skin colour compared to, while 20% only answered half correctly. The recall accuracy was also at or below 45% for questions about the boy's attempts to change the colour of his skin, the usage of soap and powder, and the scholar's statements about coffee.

The responses frequently revealed a poor comprehension and recall of the story's elements, as they were either partially correct or incomplete. However, there is a noticeable improvement in recall when using the song in the Song Lyrics memory Test.

Ten percent of students gave partially accurate responses to the question regarding the boy's skin colour, while seventy-five percent of students answered correctly. Recall accuracy went between 70–100% for other questions, like the colour of the boy's skin and the scholar's statement about coffee. These findings suggest that when a story was linked with a song, children were able to remember and accurately recall the story's details. Children may find it simpler to recall certain elements because of the song's repetitious and rhythmic style, which strengthened the lesson.

Furthermore, when comparing the Song Lyrics Recall Test to the Story Recall Test, there was a notable decrease in the number of incorrect answers and non-responses. This implies that the song improved memory retention while simultaneously lowering confusion and increasing interest in the recalled information. In conclusion, it is evident from the comparison of the two tests that using music in the storytelling process helps children's recall skills considerably.

3.21 Observational Data

The children listened intently and joined in by clapping to beat when the story was told alongside the song. Only a small number of children required reminders to maintain their attention, and even those were promptly remedied when the chorus began to play. Nevertheless, children's interest level was considerably lower when the story wasn't accompanied by song. They started to get easily distracted, engaging in small conversation or displaying a lack of interest, and others needed further encouragement to pay attention. This shows that the song was a major factor in improving children's concentration and lowering distractions, highlighting the value of using music in storytelling to keep the children interested.

When comparing storytelling sessions with and without music, the attention analysis shows a substantial difference in attention and engagement, as seen in the graph and table.

Nineteen out of twenty children (95%) were able to maintain attention during the song-filled session. This high degree of sustained attention indicates that the children's continued engagement and interest were

much enhanced by the song's intervention. Additionally, just one child (5%) displayed signs of distraction, and one other child (5%) needed encouragement to remain attentive. These low numbers show that the song successfully decreased the possibility of distractions and the requirement for additional assistance to keep the children interested.

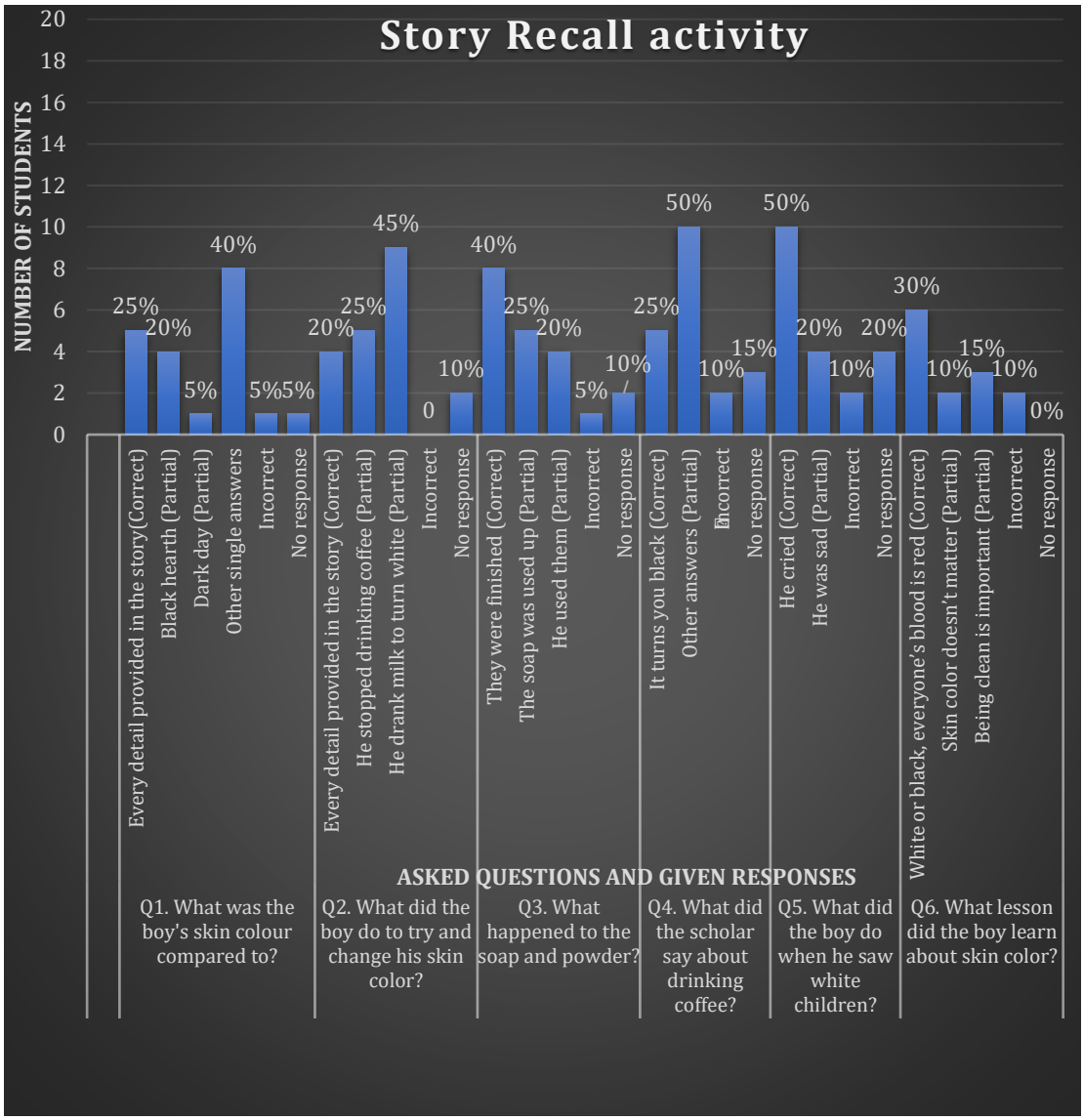

Figure 05. Percentage Distribution of Student Responses to Memory Recall Questions. This table shows the percentages of different answers given by students to the memory recall questions during the session. The values are based on the number of students who provided each type of response (correct, partially correct, or incorrect) for each question

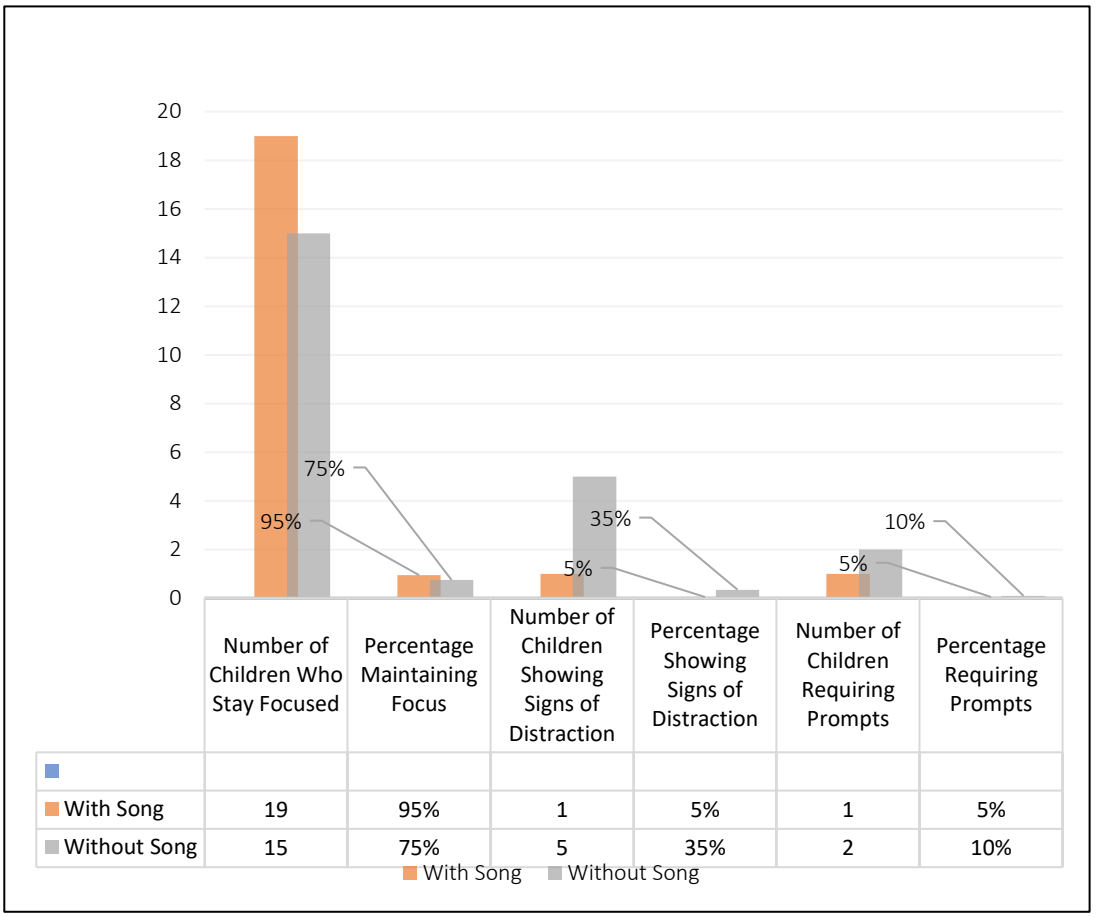

Figure 06. Comparison of Observed Attention Behaviors in Song and Non-Song Groups. This figure compares the number of students in each group (with song vs. without song) who remained focused throughout the session, showed signs of distraction (such as fidgeting or looking away), and required verbal cues or reminders to regain attention. The data provides a visual summary of observed attentional engagement across the two conditions.

In comparison, only 15 out of twenty children (or75%) were able to stay concentrated during the song-free session, indicating a noticeable decline in attention span. Furthermore, two children (10%) needed instructions for gaining their attention, and five children (35%) showed indicators of distraction. The fact that there were more distractions and that prompts were required more frequently indicates that it was challenging to keep children interested and attentive when there was no song.

The engagement study for "The Blackest Black Boy" found that storytelling with the song led to better participation, memory retention, and emotional involvement. Children were interested in the song, singing along, and reacting to certain sections. The song's repetition and beat reinforced the story's meaning, enhancing memory recall. Emotional reactions were more evident, as children responded strongly to the moral lesson and showed empathy for the boy's struggles. Children were less likely to interact or remember specific elements during the session without the song. The

study highlights the potential of song in enhancing storytelling-based learning in cognitive and affective domains, despite the perceived lack of musical components.

The findings suggest that musical storytelling might improve young children's attention span and memory recall. The rhythmic and repetitive nature of the songs reinforced important story elements, serving as mnemonic devices that helped embed key information in memory. This supports existing theories in educational and cognitive psychology, which highlight music's role in strengthening verbal memory and supporting comprehension, particularly in early learners.

The results of this study align with established theories of memory and prior empirical findings, offering strong support for the use of music as a mnemonic aid. According to Paivio's Dual-Coding Theory (1971), information encoded through both verbal and non-verbal channels such as language and melody is more likely to be retained. This is evident in the Song Lyrics Recall Test, where students consistently outperformed those in the Story Recall Test, particularly on interpretive questions. For example, 75% of students in the lyrics condition correctly identified the reason for the rabbit's loss (he was sleeping), compared to only 25% in the story condition, a result consistent with the 40–60% improvement reported in Wallace's (1994) study on memory for sung versus spoken text. Furthermore, this disparity is also supported by Craik and Lockhart's (1972) Levels of Processing theory, which suggests that deeper, more meaningful processing encouraged by the rhythmic and emotional structure of music leads to stronger memory traces. In this study, song-based prompts led to more accurate and reasoned recall, especially in causal inference questions, where students in the music condition performed up to three times better than their story-based counterparts. These findings not only reinforce prior research but also highlight the particular value of music in enhancing both factual and interpretive recall through multimodal and deeper cognitive engagement.

The attention analysis data further reinforces the cognitive benefits of integrating music into early learning environments. Across both observation sessions, children who participated in storytelling sessions with song demonstrated significantly higher levels of sustained attention ranging from 85% to 95% compared to their peers in non-musical sessions (65% to 75%). These outcomes closely match those of Hallam, Price, and Katsarou (2002), who reported that music can enhance attentional focus and emotional engagement, especially among young learners. Notably, distraction levels in the "with song" condition dropped as low as 5%, while students in the story telling condition consistently showed 35% distraction rates. These figures illustrate the effect of music on cognitive regulation, supporting the arousal-mood hypothesis (Husain, Thompson, & Schellenberg, 2002), which shows that music enhances cognitive performance by elevating arousal and positive mood states. Additionally, the decreased need for external encouragements suggests that music also fosters greater self-regulation and task persistence, consistent with self-determination theory (Deci & Ryan, 1985). The magnitude of improvement up to 30% higher focus and 85% lower distraction suggests that musical scaffolding during storytelling not only captures attention but maintains it, offering a compelling, evidence-based argument for incorporating music as a core pedagogical tool in childhood education.

4. Conclusion and recommendation

This descriptive study highlights the potential role of musical storytelling in supporting young children's cognitive development. Observations of children's attention and memory recall during

storytelling sessions with and without the integration of songs suggest that songs may positively influence engagement, focus, and information retention.

The attention analysis indicates that children more consistently paid attention when a story was presented through song. The rhythmic and melodic qualities of music appeared to capture their interest, reduce instances of distraction, and decrease the need for external prompting. This was further supported by observations of increased participation, such as clapping, singing along, and emotional reactions during the musical sessions behaviours that reflected sustained attention and deeper involvement with the narrative.

The comparison between the Song Lyrics Recall Test and the Story Recall Test revealed a pattern of higher correct response rates when the story was embedded in a song. These findings suggest that the repetitive and structured nature of music may serve as a mnemonic aid, assisting children in retaining and retrieving information more effectively.

Beyond memory and attention, the study also points to the emotional dimension of learning. Children appeared more enthusiastic and emotionally engaged during song-based storytelling sessions, responding actively to events within the narrative. Emotional involvement is known to enhance learning by fostering stronger connections to the content, especially in childhood.

Together, the observational data, recall performance, and attention analysis suggest that songs can be a valuable tool in early education. Integrating culturally meaningful musical storytelling such as Sinhala children's songs contributes to a more stimulating, memorable, and emotionally resonant learning environment.

Educators and curriculum designers are encouraged to consider incorporating story-based songs into early childhood learning environments. Songs can be used not only for entertainment but also as intentional pedagogical tools to support memory, maintain attention, and foster meaningful emotional connections with educational content. Future research may build on these findings by expanding sample sizes and exploring long-term impacts across diverse cultural settings.

5. References

Alexander, R. (2017). *Towards dialogic teaching: rethinking classroom talk* (5th ed.). Thirsk: Dialogos.

Aristotle. (1980). *Poetics* (pp. 144–155). Oxford: Great Britain at the University Press,. Retrieved from https://www.pdfdrive.com/aristotle-poetics-e33484121.html (Original work published 1968)

Bandura, A. (1977). *Social learning theory* (pp. 22–24). Englewood Cliffs ; London: Prentice-Hall. Retrieved from https://www.asecib.ase.ro/mps/Bandura_SocialLearningTheory.pdf

Barthes, R. (1972). *Mythologies* (pp. 110–115). New York: The noonday press. Retrieved from https://www.pdfdrive.com/mythologies-e177634185.html (Original work published 1957)

Bruner, J. (1991). The Narrative Construction of Reality. *Critical Inquiry*, *18*(1), 4–6. https://doi.org/10.1086/448619

Campbell, P. S. (1998). *Songs in Their Heads : Music and Its Meaning in Children's Lives* (pp. 34–36). Oxford University Press, USA. Retrieved from https://www.pdfdrive.com/songs-in-

their-heads-music-and-its-meaning-in-childrens-lives-e185618735.html

Craik, F. I. M., & Lockhart, R. S. (1972). Levels of processing: A framework for memory research. *Journal of Verbal Learning and Verbal Behavior*, *11*(6), 671–684. https://doi.org/10.1016/s0022-5371(72)80001-x

Csikszentmihalyi, M. (1990). *Flow: the Psychology of Optimal Experience* (pp. 71–74). New York: Harper and Row. Retrieved from https://www.pdfdrive.com/flow-the-psychology-of-optimal-experience-e156767178.html

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic Motivation and self-determination in Human Behavior* (1st ed.). Boston, MA: Springer US. https://doi.org/10.1007/978-1-4899-2271-7

Degé, F., & Schwarzer, G. (2011). The Effect of a Music Program on Phonological Awareness in Preschoolers. *Frontiers in Psychology*, *2*. https://doi.org/10.3389/fpsyg.2011.00124

Erikson, E. (1950). *Erikson's 8 Stages of Psychosocial Development Erikson's Theory*. Retrieved from https://gcwgandhinagar.com/econtent/document/1587961371UNIT-2.pdf

Erikson, E. H. (1950). *Childhood and society* (pp. 219–236). London: Vintage Digital. Retrieved from https://www.pdfdrive.com/childhood-and-society-e185641121.html

Freire, P. (1970). *Pedagogy of the Oppressed* (pp. 79–86). New York: Bloomsbury Academic. Retrieved from https://envs.ucsc.edu/internships/internship-readings/freire-pedagogy-of-the-oppressed.pdf (Original work published 1968)

Freytag, G., & MacEwan, E. J. (1894). *Freytag's Technique of the Drama* (pp. 114–116). Scholarly Press. Retrieved from https://archive.org/details/freytagstechniqu00freyuoft/page/114/mode/2up

Gardner, H. (1983). *Frames of Mind: The Theory of Multiple Intelligences* (pp. 315–320). New York: Basic Books. Retrieved from https://www.pdfdrive.com/frames-of-mind-the-theory-of-multiple-intelligences-e193558646.html

Gordon, E. (2007). *Learning sequences in music : a contemporary music learning theory : study guide* (pp. 45–47). Chicago: Gia Publications.

Gromko, J. E. (2005). The Effect of Music Instruction on Phonemic Awareness in Beginning Readers. *Journal of Research in Music Education*, *53*(3), 199. https://doi.org/10.2307/3598679

Gross, J. J. (2002). Emotion regulation: Affective, cognitive, and social consequences. *Psychophysiology*, *39*(3), 281–291 (285-286). https://doi.org/10.1017/s0048577201393198

Hallam, S., Price, J., & Katsarou, G. (2002). The Effects of Background Music on Primary School Pupils' Task Performance. *Educational Studies*, *28*(2), 111–122. https://doi.org/10.1080/03055690220124551

Hoffman, M. L. (2000). *Empathy and moral development : implications for caring and justice*. Cambridge: Cambridge University Press. Retrieved from https://www.pdfdrive.com/empathy-

and-moral-development-implications-for-caring-and-justice-e177381954.html

Howard-Jones, P., Taylor, J., & Sutton, L. (2002). The Effect of Play on the Creativity of Young Children During Subsequent Activity. *Early Child Development and Care*, *172*(4), 323–328. https://doi.org/10.1080/03004430212722

Husain, G., Thompson, W. F., & Schellenberg, E. G. (2002). Effects of Musical Tempo and Mode on Arousal, Mood, and Spatial Abilities. *Music Perception*, *20*(2), 151–171. https://doi.org/10.1525/mp.2002.20.2.151

Kohlberg, L. (1984). *The Psychology of Moral Development* (pp. 189–191, 409–412). HarperCollins Publishers. Retrieved from https://archive.org/details/essays-on-moral-development-volume-ii.-the-psychology-of-moral-development-the-n/page/194/mode/2up

Krathwohl, David, R., Bloom, B. S., Masia, & Bertram, B. (n.d.). *Taxonomy of Educational Objectives: The Classification of Educational Goals.Handbook II: Affective Domain* (pp. 35–37). New York: David McKay Company, Inc.

Levitin, D. J. (2006). *This is your brain on music : the science of a human obsession* (pp. 89–91). New York, N.Y.: Dutton. Retrieved from https://ams.uokerbala.edu.iq/wp/wp-content/uploads/2014/03/images_%D8%A8%D8%A7%D9%8A%D9%88%D9%84%D9%88%D8%AC%D9%8A_Levitin_-_This_is_Your_Brain_on_Music_-_Science_of_a_Human_Obsession_Dutton_2006.pdf

Mage podi Yalu. (2023). Ransilu Audio.

Meyer, L. B. (1956). *Emotion and Meaning in Music*. University of Chicago Press. Retrieved from https://www.pdfdrive.com/emotion-and-meaning-in-music-phoenix-books-e175935208.html

Moreno, R., & Mayer, R. E. (2000). A coherence effect in multimedia learning: The case for minimizing irrelevant sounds in the design of multimedia instructional messages. *Journal of Educational Psychology*, *92*(1), 117–125. https://doi.org/10.1037/0022-0663.92.1.117

Nucci, L., & Turiel, E. (2009). Capturing the Complexity of Moral Development and Education. *Mind, Brain, and Education*, *3*(3), 151–159. https://doi.org/10.1111/j.1751-228x.2009.01065.x

Paivio, A. (1971). *Imagery and the verbal processes*. New York (Osv.): Holt, Rinehart And Winston.

Paivio, A. (1986). *Mental representations : a dual coding approach.* (pp. 53–55). New York: Oxford Univ. Pr. Retrieved from https://www.pdfdrive.com/mental-representations-a-dual-coding-approach-oxford-psychology-series-e156777517.html

Piaget, J. (1952). *The origins of intelligence in children* (pp. 67–69). New York: International Universities Press. Retrieved from https://sites.pitt.edu/~strauss/origins_r.pdf

Piaget, J. (2013a). *Child's Conception of Number*. Routledge. Retrieved from https://www.pdfdrive.com/childs-conception-of-the-world-selected-works-vol-1-the-childs-conception-of-the-world-1929-vol-x-e175840456.html

Piaget, J. (2013b). The Mechanisms of Perception. In *Routledge eBooks*. Informa. https://doi.org/10.4324/9780203715758

Propp, V. (1968). *Morphology of the folktale* (pp. 25–27). Austin, Tex. [U.A.] Univ. Of Texas Press. Retrieved from https://monoskop.org/images/f/f3/Propp_Vladimir_Morphology_of_the_Folktale_2nd_ed.pdf

Putkinen, V., Tervaniemi, M., & Huotilainen, M. (2012). Informal musical activities are linked to auditory discrimination and attention in 2-3-year-old children: an event-related potential study. *European Journal of Neuroscience*, *37*(4), 654–661. https://doi.org/10.1111/ejn.12049

Rainey, D. W., & Larsen, J. D. (2002). The Effect of Familiar Melodies on Initial Learning and Long-term Memory for Unconnected Text. *Music Perception*, *20*(2), 173–186. https://doi.org/10.1525/mp.2002.20.2.173

Ransdell, S. E., & Gilroy, L. (2001). The effects of background music on word processed writing. *Computers in Human Behavior*, *17*(2), 141–148. https://doi.org/10.1016/s0747-5632(00)00043-1

Rogers, C. R. (1961). *On becoming a person: A therapist's view of psychotherapy* (pp. 122–130). Boston: Houghton Mifflin. Retrieved from http://dspace.vnbrims.org:13000/jspui/bitstream/123456789/4397/1/On%20Becoming%20a%20Person%20A%20Therapist%E2%80%99s%20View%20of%20Psychotherapy.pdf

Samuel, R. D., Zavdy, O., Levav, M., Reuveny, R., Katz, U., & Dubnov-Raz, G. (2017). The Effects of Maximal Intensity Exercise on Cognitive Performance in Children. *Journal of Human Kinetics*, *57*, 85–96. https://doi.org/10.1515/hukin-2017-0050

Santrock, J. (2021). *Child Development 15th Edition*. Retrieved from https://www.mheducation.com/unitas/highered/changes/santrock-child-development-15e.pdf

Sweller, J. (1988). Cognitive Load during Problem Solving: Effects on Learning. *Cognitive Science*, *12*(2), 257–285. https://doi.org/10.1207/s15516709cog1202_4

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes.* (pp. 85–90). Cambridge: Harvard University Press. Retrieved from https://www.pdfdrive.com/mind-in-society-the-development-of-higher-psychological-processes-e165967551.html

Wallace, W. T. (1994). Memory for music: Effect of melody on recall of text. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *20*(6), 1471–1485. https://doi.org/10.1037/0278-7393.20.6.1471

Weiss, H. M., & Cropanzano, R. (1996). Affective Events Theory: A Theoretical Discussion of the Structure, Causes, and Consequences of Affective Experiences at Work. *Research in Organizational Behavior*, *18*, 16–18. Retrieved from https://web.mit.edu/curhan/www/docs/Articles/15341_Readings/Affect/AffectiveEventsTheory_WeissCropanzano.pdf

Wijesuriya, D. M. T. M. (2024). Inculcating Values Through Entertainment: A Study Based on Sinhala Children's Songs. *Vidyodaya Journal of Humanities and Social Sciences*, *9*(01).