Mothers' Perception Regarding Music and Movement for Fostering Cognitive Development in Children Aged 3-5 Years in Bangladesh

By

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A thesis submitted to Brac Institute of Educational Development in partial fulfillment of the requirements for the degree of Master of Science in Early Childhood Development

Brac Institute of Educational Development
Brac University
April, 2026

Declaration

It is hereby declared that,

1. The thesis submitted is my own original work while completing degree at Brac University.

2. The thesis does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.

3. The thesis does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.

4. I have acknowledged all main sources of help.

Student's Full Name & Signature:

_____

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Approval

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Ethics Statement

Title of Thesis Topic: Mothers' Perception Regarding Music and Movement for Fostering Cognitive Development in Children Aged 3–5 Years in Bangladesh

Student name: Lubaba Rahman

1. Source of population: Dhaka

2. Does the study involve (yes, or no)

   a) Physical risk to the subjects (no)
   b) Social risk (no)
   c) Psychological risk to subjects (no)
   d) discomfort to subjects (no)
   e) Invasion of privacy (no)

3. Will subjects be clearly informed about (yes or no)

   a) Nature and purpose of the study (yes)
   b) Procedures to be followed (yes)
   c) Physical risk (yes)
   d) Sensitive questions (yes)
   e) Benefits to be derived (yes)
   f) Right to refuse to participate or to withdraw from the study (yes)
   g) Confidential handling of data (yes)
   h) Compensation and/or treatment where there are risks or privacy is involved (yes)

4. Will Signed verbal consent for be required (yes or no)

   a) from study participants (yes)
   b) from parents or guardian (no)
   c) Will precautions be taken to protect anonymity of subjects? (yes)

5. Check documents being submitted herewith to Committee:

   a) Proposal
   b) Consent Form
   c) Questionnaire or interview schedule

Ethical Review Committee:

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Abstract

This qualitative study explores Bangladeshi mothers' perceptions, practices, and challenges in using music and movement activities to support cognitive development in their 3 to 5 year old children. Through 6 in-depth interviews with 6 mothers and 1 focus group discussion with 8 mothers (total 14 urban middle-income mothers from Dhaka), 5 key themes emerged: mothers' perceived cognitive benefits of music and movement for memory, attention, language, and concept learning; integration into everyday home routines such as feeding, bathing, and bedtime; pros and cons of digital media use with YouTube providing accessible content but creating screen dependency; family, cultural, and household challenges including in-law resistance, academic pressure, and time & energy constraints; and support needs for culturally relevant Bangla content, family awareness, and community spaces. Findings reveal mothers recognize cognitive value but prioritize academics, face barriers, heavily depend on digital platforms amid content gaps, and need shared family support plus appropriate resources to sustain home-based practice. Recommendations highlight needs for culturally relevant content, family awareness, and policy support to integrate music/movement into home learning.

Keywords: music and movement; cognitive development; mothers' perceptions; early childhood; urban Bangladesh; digital media

Dedication

This thesis is dedicated to my nephew, Meeran, soon to be born, with hopes that his life will be filled with curiosity, joy, and love.

Acknowledgement

First and foremost, I thank the Almighty for giving me the strength and patience to complete this thesis.

I would like to convey my heartfelt thanks to my respected supervisor, Farasha khan, for the immense support, valuable guidance, time, and continuous motivation provided throughout the entire research process. This work would not have been possible without such constant encouragement and academic direction.

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List of Acronyms

ECD	Early Childhood Development
FGD	Focus Group Discussion
IDI	In-depth Interview
NGO	Non-Governmental Organization
RAMSR	Rhythm and Movement for Self-Regulation
UNICEF	United Nations International Children's Emergency Fund

Chapter I: Introduction & Background

Introduction

ECD is a critical phase because the experiences children have during these years strongly shape how they grow, learn, and understand the world (Britto et al., 2017). Center on the Developing Child at Harvard University states that a child's brain is extremely active in the early years, forming more than one million new neural connections every second.

Among the domains of child development, cognitive growth is especially critical, as it prepares children with important skills that form the base for academic readiness and future success. According to Malik and Marwaha (2023), cognitive development in children refers to skills such as, thinking, attention,memory, language, reasoning, and problem-solving, which together helps children to make sense of their surroundings and work accordingly. Bergen (2018) explained that, this stage of development is important because it sets the foundation for later academic learning, social understanding, and decision-making skills.

Ginsburg (2007) stated that, play offers children the opportunity to explore, experiment, and apply new ideas in a safe and enjoyable way. When children involve in play, they develop skills such as, decision-making, self-regulation, and problem-solving. These skills directly strengthen cognitive pathways linked to memory and reasoning. These experiences does not only stimulate imagination but also reinforce concentration and flexible thinking, which are essential for later learning success. Within play-based learning, different types of activities can promote cognitive growth, with one especially

meaningful combination being music and movement, where children use both mind and body to engage in learning (Bergen, 2018).

Music and movement are powerful tools for supporting children's cognitive development, as they engage both the mind and the body in meaningful ways. When children move their bodies along with music, they strengthen their coordination, notice patterns more easily, and build memory and problem-solving skills. Simple activities like singing songs, counting with rhythm, reciting rhymes, practicing letters, or moving to beats can support early skills such as counting, patterns recognition, and sorting or classifying information (Brightwheel, 2025). Movement and music can help children stay focused and involved, and these activities may activate brain pathways that support learning and cognitive growth.As preschoolers grow, they become more aware of how their bodies work, which helps them control their muscles, stay balanced, and carry out actions that require coordination and the use of both sides of the body (Wang, 2003).

Music provides rich sensory input through melody, rhythm, and lyrics which promotes pattern recognition, sequencing, and language development, which form the foundation for early math and reading skills (Parlakian & Lerner, 2010). Movement-based activities strengthen neural connections that support higher order cognitive functions and have been linked to improved performance in school (Center on the Developing Child at Harvard University, n.d.) .

Understanding parents' perceptions and practices is essential for supporting children's cognitive development through more engaging, playful experiences. However, the extent to which parents in Bangladesh recognize these benefits remains unclear.

In this study, four main chapters are organized. Chapter II presents a review of relevant literature on cognitive development, music and movement, and parental perceptions, with a focus on both global and Bangladeshi contexts. Chapter III outlines the methodology of the study, including the research design, participants, data collection tools, and analysis procedures. Chapter IV presents the findings from the in-depth interviews and focus group discussion, followed by a discussion that connects the results with existing literature. Finally, the study concludes with key insights and recommendations based on the findings.

Statement of the Problem

Many parents in Bangladesh still do not recognize music and movement as meaningful learning activities. They view these activities as entertainment, something children do when they are free, not something that supports development. According to Konal (2021), most parents reported that they sing or play music with their children at home, yet they were unaware of the developmental benefits. This limited awareness often intersects with how parents manage children's daily routines. On the other hand, children frequently receive screen-based stimulation instead of sensory or movement-based play. For example, a study found that 92% of Bangladeshi children aged 3–5 years use a parent's smartphone (Abdulla et al., 2023), and research shows that frequent screen exposure can negatively affect cognitive and socio-emotional development (Swider-Cios et al., 2023). In real life, it is very common to see parents giving phones to keep children quiet while they eat or work. Music and movement rarely seem to receive the same attention.

National data reflect these concerns. Although 74.9% of children aged 36–59 months were considered developmentally "on track," this still means that over 25% were not meeting expected milestones (Hasan et al., 2023). These findings show that children are not receiving the stimulation they need for achieving healthy developmental outcomes.

Cultural expectations also influence parental behavior. Parents tend to believe that academic performance equals success. So, they focus on academic performance more (TBS Report, 2023).

There is almost no research in Bangladesh that examines parents' beliefs or practices regarding music and movement and how these influence children's cognitive development. By listening to mothers' experiences, in interviews and a focus group discussion. The insights can guide designing programs that actually fit families' real lives, helping parents make everyday home routines more meaningful, engaging, and supportive for their children's learning.

Purpose of the Study

The purpose of this study was to explore mothers' perceptions, practices, and challenges related to the use of music and movement in supporting the cognitive development of children aged 3–5 years in Bangladesh. This study looked at how mothers value music and movement in their children's cognitive development. It also explored how they use these activities at home and what challenges affect their use. The specific objectives of the study were:

1. To explore mothers' understanding about music and movement and its role in fostering their children's cognitive development.

2. To examine how mothers integrate music and movement activities into everyday home practices and learning experiences.
3. To identify the challenges mothers face in using music and movement to support cognitive development at home.

Significance and Justification of the Study

Global research recognizes music and movement as beneficial. This study is significant because it focuses on understanding how mothers perceive and use music and movement in supporting their children's cognitive development within the home environment.

Focusing on urban middle-income households in Dhaka is especially meaningful. These families usually have access to resources and education. According to Naved (2016), mothers are usually the primary caregivers of children in Bangladesh. So, understanding how mothers think about music, movement and cognitive development can reveal what is possible in their everyday routines and what kinds of early learning practices they genuinely value.

At the policy and program level, this study offered meaningful insights. The findings can guide early childhood care and education providers, NGOs, and parenting programs to design interventions that reflect the real situations and needs of mothers. By aligning strategies with what families can actually do at home, these initiatives become more practical and effective. It will also help children to strengthen their cognitive development beyond the formal classroom environment. These insights can guide home-based learning ideas, parental guidance materials, and community initiatives that aim to enrich young children's early learning experiences in meaningful ways.

As mothers understanding, knowledge, and practices are shaped by many factors a qualitative approach was necessary here. Speaking directly with mothers through in-depth interviews and a focus group discussion allowed them to express themselves in their own words. This approach captured nuance and context, which helped to understand the perceptions that shape children's learning and development at home.

Research Topic

Mothers' Perception Regarding Music and Movement for Fostering Cognitive Development in Children Aged 3–5 Years in Bangladesh

Music and movement activities support young children's cognitive development. In modern times in Bangladesh, mothers often guide these activities at home, but little is known about how they perceive and use them. This study explored mothers perceptions and practices, and the challenges they face in fostering their children's cognitive development through music and movement.

Research Questions

1. What is mothers' perception regarding music and movement and its role in fostering cognitive development in their children?
2. How do mothers incorporate music and movement activities into their children's daily routines to support cognitive development?
3. What are the challenges mothers face in using music and movement to support their children's cognitive development?

Operational Definitions of Key Terms

- **Mothers' Perception**: Mothers' perception means how mothers understand, interpret, and think about music and movement, and how they believe these activities contribute to their children's learning and thinking.
- **Middle-Income families:** Urban households in Dhaka that self-identify as middle-income, with stable income sufficient to meet basic household needs.
- **Music and Movement:** Music and movement refer to activities that combine both rhythmic sound (singing, chanting, instruments) and physical movement, such as, action rhymes with music, singing with gestures, dancing with rhythm or songs, or moving any part of the body to music.
- **Fostering:** In this study, it means how mothers support, encourage, and help their children's cognitive development through everyday music and movement activities at home.
- **Cognitive Development:** Cognitive development refers to children's early thinking skills, including attention, memory, problem-solving, understanding, following instructions, reasoning, and other early mental abilities.

Chapter II: Literature Review

Theoretical Foundations: Cognitive Development and Embodied Learning

The early childhood period is the most crucial phase of life because during this time, significant changes are noticed in the physical, social, cognitive, emotional, family environment, and linguistic domains. (Likhar et al., 2022) During this period, a child's brain is highly adaptable as billions of neural connections are formed by the combination of genetics, experiences and

environment. That’s why, early childhood development must be understood through both biological and experiential frameworks.Nurturing, stimulating experiences, nutrition, and social interaction is necessary for ideal brain development (UNICEF, n.d.).

According to Malik & Marwaha (2023), cognitive development refers to how children think, explore, and perceive things, along with their problem-solving skills and knowledge acquisition. The cognitive domain which is also known as the intellectual domain refers to the intellectual growth of a child, their brain development, and their ability to comprehend and to learn the world around them. Through cognitive development, a child can understand the environment, concentrate, develop ideas and plans, process thoughts, form memories, and express creativity (Brightwheel, 2025).

According to Britto et al (2017), cognitive skills also develop through play, daily interactions and responsive environments. Piaget's ideas talk about how children experience the world around them. He suggests that, when children experience an incident, they process new information by adjusting and recognizing mental schemas through accommodation and assimilation. Children ages 3-5 falls under this preoperational stage. They use symbolic thinking,imagination , imitation, pretend play and learn through actions and sensory experiences. They use imagination, gestures, movement, and symbolic actions to understand the world (Malik & Marwaha, 2023). These can be gained by engaging in music and movement activities.

On the other hand, Vygotsky's theory of cognitive development highlights the importance of social interaction and culture in learning. He stated that, children learn through guided participation from more knowledgeable other, such as a teacher or parent or peers. If mothers provide this type of assistance by playing with their children, it will help them develop attention, memory, and early thinking skills (McLeod, 2025). This transforms music and movement into meaningful learning experiences for the children.

Play theorists throughout history have successfully established that play is essential for children's learning and development (Blaise et al., 2014). According to Ginsburg (2007), children can develop decision-making, self-regulation, and imaginative thinking skills within emotionally safe environments through play.

The idea of embodied learning ties these concepts by stating that cognition is grounded in physical experience. Juntunen (2024) states that embodied learning views cognition as embedded in lived physical experience, and children understand music intensely when they are involved in whole-body movement. Physical movement i.e. activities like dancing, moving around, and responding to musical cues help children to shape their thoughts, attention, perceive patterns, and build expressive and cognitive understanding. This connection between body and mind reveals that, movement not only supports in physical development it also activates children's thinking and cognitive processes.

According to Carleton University (2020), when someone move their bodies to respond , they involve both motor and cognitive systems. It also makes their learning more memorable and profound. This theoretical approach lays a

solid base for considering music and movement as means for cognitive development in early childhood**.**

Music and Movement in Cognitive Development

Music and movement activities enhance early cognitive development. Global research shows that when children engage with rhythmic patterns, songs, and movement, they improve memory, strengthen problem-solving and critical thinking skills, and develop language. Structured activities, such as, action songs, rhythm games, dancing with music, and playing simple instruments, support memory, coordination, concentration, and understanding of cause and effect.Long term engagement in music and movement can enhance memory, language skills, and overall brain development, including social and emotional growth (Irvine, 2024).

Executive functions and self-regulation are also strongly supported by music and movement. Puckering et al. (2014) found that a short-term music or dance intervention improved task-switching ability, an important aspect of executive functioning. Lukács et al. (2024) reported that music programs with body movement enhanced executive functions, verbal intelligence, phonemic awareness, and early literacy skills.,Suppalarkbunlue et al. (2022) also found that music-movement activities improved inhibitory control in preschool children, demonstrating that classroom routines with music and movement can strengthen early executive function skills.

Music and movement helps in Higher order thinking executive function and behavioral regulation as well. Wang et al. (2024) showed that, activities combining music and movement improved cognitive processes linked to emotion and motivation, such as, ability to delay gratification and make affective decisions. Bentley (2023) evaluated the RAMSR program, which used rhythmic and coordinated movement to improve self-regulation. He found that, children showed significant improvements in self-regulation, inhibition, and school readiness. Williams and Berthelsen (2019) similarly that rhythm-based movement interventions enhanced self-regulation in children from underprivileged areas. Pogue (2018) highlighted that creative movement activities encourage children to plan, respond to cues, and regulate behavior, skills closely linked to problem-solving and flexible thinking.

Early academic skills and broader cognitive outcomes are also enhanced through music and movement. Hidayatulloh et al. (2020) found that movement and music based activities helped young children understand numbers, patterns, geometry, and measurement, supporting early mathematical learning. Walton (2014) noted that music and movement teach early literacy skills, improve long-term memory, and support children's reading activities. Similarly, children's preference for repetition of activities supports cognitive growth through deep engagement (Neuman & Wright, 2014).Supartini et al. (2020) found that, preschoolers who participated in a structured music and movement intervention showed improvements in cognitive and psychomotor outcomes. Kaiser (n.d.) emphasized that, music and movement help children learn patterns, build

coordination, develop language skills, and strengthen problem-solving by engaging many parts of the brain simultaneously. Geist and Geist (2008) added that children naturally move when they hear music because their bodies respond automatically to rhythm. Even babies react to music when parents rock or sing to them.It helps them learn patterns and rhythm, i.e showing a strong link between music, movement, and early cognitive development.

Therefore, by getting involved in music and movement based activities, children can strengthen memory, language, executive function, self-regulation, and early academic skills, laying a strong foundation for lifelong learning.

Parental Perceptions of Music, Movement, and Learning

Parents play an important role in influencing children's learning experiences at home. According to research, many parents see music and movement as pleasure rather than tools to help children learn. Blasi and Foley (2006) found that while parents accepted that their children appreciated musical activities, they barely linked these experiences with developmental outcomes. According to Diaz-Donoso's (2019) research, parents differed in investing in music and movement activities according to their personal beliefs, cultural expectations and available resources.

Parents' attitudes toward play also shapes how they view music and movement. According to O'Gorman and Ailwood (2012),some parents were suggesting that play-based learning may not be academically effective. According to international study, many families prioritize early academic preparation over

play and creativity (Garvis et al., 2021). Zaman (2024) noted that while parents perceive play as an important tool, they may not actually include it into daily routines.

Studies specifically focused on arts and music highlight similar trends. According to Wills (2021), most of the parents had previous musical experiences and viewed music as important but the majority of the participants did not engage in musical activities during study time. Kremer-Sadlik et al. (2010) discovered that some parents in Rome and Los Angeles saw arts and music as helpful for their children's learning. Others mentioned these activities as good for spending leisure time and not mandatory.

Similarly, according to Pan et al. (2025), many parents in Hong Kong consider music and movement to be enjoyable, but others do not see them as a learning approach and consider them unrelated to academic results. Konal (2021) revealed that while parents in Bangladesh use music informally at home and found their children nbaturally enjoying and moving with the music, they hardly identified connections between these activities and developmental domains. This makes it important to see how Bangladeshi mothers interprets these activities in daily life.

Parenting Norms, Academic Pressure, and Home Environments in Bangladesh:

In Bangladesh, academic expectations for young children are very strong. According to Akter (2022), early schooling practices in Dhaka depends widely on memorization, conventional assessments and formal tasks. This also limits opportunities for play-based activities. Similarly, Panday (2023) stated that,

academic pressure begins from early age and shapes family decisions about children's learning. In many Bangladeshi families, academic success is closely tied to future security, which leads parents to prioritize formal learning over creative or play-based activities (Hasanat, 2023). Alam and Ogawa (2023) found that many Bangladeshi parents choose early childhood programs based on academic promises, rather than focusing on the developmental benefits.

Practical Barriers such as, hunger and sleep deprivation reduced preschoolers' play participation and increase behavioral issues (Chen et al., 2024; McDonald et al., 2024). Besides these, environment, time and space can be challenges faced by the parents to encourage play and creative activities for their children. Urban families in Dhaka often live in compact apartments with limited space for movement-based play (Alahee & Islam, 2025). According to Perry-Jenkins et al.(2019), working mothers, due to having an immense workload and other household responsibilities often fail to make enough time for children to incorporate play-based activities. As a result, they are often left with screen time and devices. Abdulla et al. (2023) reported that digital exposure has increased rapidly in Bangladesh. As a result, children don't get enough time for sensory or physical play. This mirrors global trends where digital toys and media increasingly shape young children's home learning (Marsh, 2017). International research states that heavy screen use in the early years can negatively impact children's socio-emotional skills and cognitive outcomes. (Swider-Cios et al., 2023). Despite these challenges, very little is known about how Bangladeshi

mothers interpret activities such as music and movement within their resources, limited time, and space.

Existing studies in Bangladesh mostly explore parental beliefs about play or early education in general, but no published research directly investigates mothers' perceptions of music and movement as tools for cognitive development or how they use these at home. Addressing this gap is very important for developing culturally appropriate and practical strategies that assist families in incorporating music and movement into their daily routines in meaningful ways.

Chapter III: Methodology

Research Approach/Design

A qualitative research approach was used in this study. The purpose was to explore mothers perceptions regarding the role of music and movement in supporting the cognitive development of children aged 3-5 years. A qualitative design is appropriate because it enabled detailed exploration of personal experiences and subjective meanings. Six In-depth interviews(IDI) with six mothers were conducted separately to capture their perspectives. One focus group discussion (FGD) with eight mothers were conducted which helped to get deeper insights from the participants. Guidelines for both IDI and FGD were developed to ensure consistent and comprehensive data collection process.

Research Participants

The participants were mothers of children aged 3–5 years from middle-income families, residing in urban Dhaka and who incorporate music and

movement activities in their children's daily life. Mothers were selected because in Bangladesh, they are typically the primary caregivers of children (Naved, 2016). According to Savage (2024), children aged 3 to 5 years show rapid development in problem-solving, attention, communication, and early thinking skills. So, the study focused on this age group to explore how music and movement may support their cognitive development. A total of 14 mothers participated in In-depth interviews (IDI) and focus group discussion (FGD).

Table 1: Demographic Information (IDI)

Participant ID	**Education Level**	**Occupation**	**Number of Children**	**Child's Age**	**Family Type**	**Area**
IDI 1	Honors	Housewife	2	3 years	Nuclear	Mirpur
IDI 2	MBBS	Doctor	1	4 years	Joint	Uttara
IDI 3	BBA	Housewife	1	3.5 years	Nuclear	Banani
IDI 4	MBA	Job	1	5 years	Joint	Mirpur
IDI 5	BBA	Job	2	3 years and 5 years	Joint	Banani
IDI 6	Masters	Housewife	1	4.5years	Joint	Uttara

Table 2 : Demographic Information (FGD)

Participant ID	Education Level	Occupation	Number of Children	Child's Age	Family Type	Area
FGD 1	Masters	Teacher	1	4 years	Joint	Mirpur
FGD 2	Honors	Housewife	1	4.5 years	Nuclear	Bashundhara
FGD 3	Masters	Housewife	2	5years	Nuclear	Dhanmondi
FGD 4	Honors	Housewife	1	4.5 years	Joint	Gulshan
FGD 5	MBA	Job	1	5years	Nuclear	Banasree
FGD 6	MBA	Job	1	4 years	Joint	Uttara
FGD 7	Masters	Job	2	3 years and 4.5 years	Nuclear	Bashundhara
FGD 8	Honors	Job	1	3.5 years	Nuclear	Gulshan

Research Site

The study was conducted in selected urban areas of Dhaka, including Mirpur, Banani, Uttara, and other urban neighborhoods. Participants for both the focus group discussion and in-depth interviews were recruited from these areas based on availability and relevance to the study criteria. IDIs were conducted

offline. Participants chose the locations to ensure privacy and comfort. The FGD was conducted online via Google Meet.

Sampling / Participant Selection Procedure

A purposive sampling method was used based on three criteria, i) mothers who has children age 3 to 5 years ii) mothers who incorporate music and movement activities in their childrens daily routine, and iii) mothers who belong to middle-income families .6 IDI with 6 mothers and 1 FGD with 8 mothers were selected to ensure rich and diverse qualitative data. Participants were recruited through personal networks, such as neighbors, relatives, and friends. A preliminary screening survey was conducted to select participants who match the study criteria. Mothers who showed interest was contacted and briefly informed about the purpose of the study. This approach helped ensure that the participants have experiences that are directly relevant to the research questions.

Data Collection Tool

Guidelines for focus group discussions (FGDs) and in-depth interviews (IDIs) were developed and audio recording and initial notes were taken to explore mothers perception on music and movement in fostering cognitive development in children.

Data Collection Method and Process

This qualitative study used in-depth interviews (IDIs) and a focus group discussion (FGD) to explore mothers' perceptions on music and movement in fostering cognitive development in their children. The IDIs were conducted in person, while the FGD was conducted online. Each in-depth interview lasted

approximately 45-60 minutes, and the focus group discussion lasted around 120 minutes.

Before data collection, all participants were clearly informed about the purpose of the study and were notified that the discussions would be audio-recorded and used only for academic purposes. Confidentiality and anonymity were ensured, and informed consent was obtained from all participants before scheduling the interviews.

On the day of data collection, interviews began with brief introductions, followed by a conversational and flexible questioning approach to build rapport and create a comfortable environment for sharing experiences. With participants' permission, data were recorded, and key points were also noted manually. At the end of each session, participants were thanked for their time, cooperation, and valuable contributions.

Data Management and Analysis

The data will be analyzed using thematic analysis, following Braun and Clarke's (2006) six phases:

1) **Familiarization with the Data:** After conducting the in-depth interviews and focus group discussion, all audio recordings and handwritten field notes were first converted into complete, word-for-word written transcripts. Separate transcripts were prepared for each individual interview (IDI) and for the focus group discussion (FGD). To maintain organization, each transcript was assigned a

serial number along with the interview date, which allowed easy reference during analysis.

As the interviews and discussions were conducted in Bengali, all transcripts were carefully translated into English.Transcripts were read and reread multiple times while listening to the audio recordings to ensure accuracy and to become deeply familiar with the data. During this process, initial notes and reflections were written to capture early impressions, recurring ideas, and significant points related to mothers' experiences and perceptions.

2) **Generating Initial Codes:** After becoming familiar with the data, meaningful sections of the transcripts were identified and coded. Coding was done manually, focusing on phrases, sentences, or segments that captured mothers opinions, barriers and practices related to music, movement, and children's cognitive development. Codes stayed close to the participants' language to reflect their actual meanings rather than imposed interpretations.
3) **Organizing Codes into Preliminary Themes:** After coding, similar or related codes were clustered to develop initial themes. These themes represented broader patterns such as perceptions about music and movement, practices, perceived barriers, or about cognitive development.
4) **Reviewing and Refining Themes:**

The preliminary themes were then reviewed against the coded data and the full dataset to ensure they accurately reflected participants experiences. During this stage, some themes were merged, refined, or reorganized, This process helped strengthen the clarity and rationality of the themes.

5) **Defining and Naming Themes:**

   Each finalized theme was clearly defined and given a meaningful name that captured its core idea. Theme definitions explained what each theme included and how it contributed to understanding mothers perceptions, strategies, and challenges related to music and movement activities in everyday life

6) **Producing the Final Analysis:** In the final stage, all themes were brought together to form a coherent analytical narrative. Relevant quotations were selected to represent mothers' voices and support the interpretations. A thematic map was also developed to illustrate how the themes related to one another and how the findings connected with existing literature on cognitive development, parental beliefs, and music and movement activities.

Validity and Reliability

To ensure the trustworthiness of the study, several strategies were followed throughout the research process. The interview guidelines for both in-depth interviews (IDIs) and the focus group discussion (FGD) were reviewed by experts from the BRAC Institute of Educational Development (BRAC IED),

BRAC University, to ensure relevance, clarity, and alignment with the research objectives and questions. The translated versions of the tools were also reviewed to confirm accuracy and appropriateness.

More than one data collection method, IDIs and an FGD were used to support reliability through triangulation. A pilot interview was conducted,and the guidelines were revised based on expert feedback before final data collection. During data analysis, a systematic coding process was followed, and decisions made during coding were documented to maintain transparency and dependability.

Ethical Issues

Ethical guidelines were strictly followed during the research process. Approval was taken from BRAC University before starting data collection. Participation in the study was entirely voluntary.Informed consent was obtained from all participants before conducting the IDIs and FGD. Participants were clearly informed about the purpose of the study,the use of audio recording, and their right to withdraw at any point or skip questions without providing an explanation.

Confidentiality and anonymity were ensured by using pseudonyms or code numbers instead of real names. All collected data, including audio recordings and transcripts, were securely stored and used solely for academic research purposes.

Limitations of the Study

This study faced several practical limitations. The study relied on mothers' self-reported perceptions, which may introduce response bias. In addition, mothers were

separating the term music and movement. the research did not include direct observation of mother-child interactions, limiting insight into how music and movement activities are actually practiced in everyday settings.

Finally, the findings are limited for a specific cultural context, middle income urban mothers from Dhaka city which means they may not be directly generalizable to families from different socio economic status, cultural backgrounds, regions, or parenting styles. These limitations should be considered when understanding the findings and their broader applicability.

Chapter IV: Findings and Discussion

Findings

This section presents key findings from 6 in-depth interviews and 1 focus group discussion with 8 mothers from urban Dhaka. These address the research questions on mothers' perceptions and practices of music and movement for fostering cognitive development and implementation barriers and supports. Main patterns emerged across 5 themes.

Theme A: Mothers' Perceived Cognitive Benefits of Music and Movement

Mothers understood cognitive development primarily as thinking, memory, attention, focus, and understanding the world around them. All emphasized memory and following instructions: "He memorizes completely, what comes after what" (IDI #01, 15-01-2026). Nearly all highlighted thinking and concentration: "How a child understands, remembers, how their brain works" (IDI #04, 20.01.2026). Many included problem-solving: "Thinks, focuses, can solve a

problem" (IDI #02, 14-01-2026). Some added language skills; few mentioned self-regulation: " expressing emotions, understands things around them" (FGD #01, 22.01.2026)

They believed that music and movement support their children's cognitive development, especially memory, attention, following instructions and language. Many described how children could remember long sequences of lyrics,tune, numbers, and routines when these were presented through songs and actions rather than plain speech. For example, one mother stated that, "He likes to listen to counting songs now he can count I never taught him to count" (FGD #01, 22.01.2026).

They believed music and movement together, influenced learning. Children grasped concepts faster with actions and music. One mother said, "On 'Wheels on the Bus,' song he does open/shut, up/down following the video, he learned what 'open' means by moving his hands" (IDI #06, 24.01.2026). Some mothers agreed with her that, music and movements helped their child to learn faster.

Language and vocabulary development were also central to mothers' perceptions of cognitive benefit. They reported that children picked up new words, including English and Arabic vocabulary, through repeated exposure to songs and rhymes. One mother described how her child learned different languages "Arabic words through music and movement videos from YouTube" without formal teaching (IDI#05, 22.01.2026). Others highlighted that songs

improved pronunciation, expressive language, and the ability to connect words to meanings in daily life.

At the same time, When talking about activities for cognitive development, most mothers first named more “academic” or traditional activities rather than music and movement. One mother said,” Reading books, practicing letters and numbers, solving puzzles, and playing board games or memory games helps in cognitive development” and most mothers agreed with her (FGD #01, 22.01.2026). These were frequently described as primary tools for brain development. Several mothers emphasized early book reading and storytelling as crucial for vocabulary and thinking, and some viewed puzzles and board games as slightly superior to music in terms of direct cognitive impact.

At the same time, many mothers saw music and movement as an important complementary activity rather than as unimportant. Some argued that for young children, learning through play and physical activity should come before formal book learning, and that songs and movements made learning faster and more enjoyable.(IDI #6, 24.01.2026) Others described music and cultural activities as especially valuable for personality development saying that, “ my son is more confident now, can sing and dance in front of guests” (FGD #01, 22.01.2026). even if they felt puzzles and reading were more directly linked to cognitive skills. Very few mothers viewed music and movement as “irreplaceable” for certain learning aspects, such as rhythm, tune, and early patterns embedded in songs and movement. “He understands tune, automatically moves with the beats which I never taught him” (IDI #04, 20.01.2026)

Theme B: Integration of Music and Movement into Everyday Home Routines

Music and movement were embedded in everyday routines. Most mothers reported using these activities for about one to two hours per day. Evenings and bedtime is the most common and convenient times, particularly after school and naps when children were more relaxed and available. Some mothers also described using songs during morning routines, car rides, meal times, and bath times to keep children calm and engaged.(FGD #01, 22.01.2026)

Some parents integrated music and movement into daily caregiving tasks for both educational and practical reasons. Songs and movement were used to support transitions such as feeding, bathing, going to sleep. Mothers felt that these routines went more smoothly when paired with singing, clapping, or dancing. One mother said, " While I feed him, I play a song on YouTube or I sing, he smiles and sometimes tells me to move or clap" (IDI #01, 15.01.2026) Initially, mothers typically initiated the activities, either by playing a song or starting a rhyme themselves. Over time, however, many children began to initiate, for example, by bringing the remote or phone, or verbally asking parents to sing or play a specific song. Fathers and siblings sometimes joined in, especially in families where music was already valued as part of family life. One mother said, "His father is a singer, so he plays guitar sometimes and my child joins with him by singing and dancing " (IDI #03, 18.01.2026)

Children also showed strong, consistent engagement with music and movement and developed clear preferences and habits. They shifted towards specific songs and wanted repetition. One mother said " My son really likes "Heads, Shoulder, knees and Toes, Twinkle Twinkle, and Wheels on the Bus. He makes his own movements or dance steps sometimes" (IDI #4, 15.01.2026). Some also liked Arabic songs, Bangla songs including the national anthem and patriotic songs, and a few were drawn to trendy adult or K-pop songs.

Imitation was a central part of engagement. One mother stated that,"He copies movements from videos, such as animal actions, hand gestures, or dance steps, and sometimes even guessed what would happen next on screen" (IDI #01, 15.01.2026). Mothers described these activities as making children excited, creative and energetically expressive, with music often triggering immediate movement like jumping, clapping, or moving head.

Theme C: Pros and Cons of Using Digital Media for Music and Movement Activities

Digital media, especially YouTube, played a central role in how mothers implemented music and movement at home. Almost all mothers mentioned specific channels such as Cocomelon, ChuChu TV, Super Simple Songs, Miss Rachel and Ms. Moon as primary sources of songs, rhymes, and action videos. They appreciated that these videos were colorful, engaging, and educational, helping children learn letters, numbers, daily routines, and even manners through songs and demonstrations. Some mothers contrasted this with their own limited

range of songs, one mother stated that, "YouTube made learning easier compared to traditional notebook-and-pen methods" (IDI #02, 14.01.2026) . Few mothers also reported practicing these activities with their children by using speakers or instrument, and only lyric videos but they also used mostly Youtube. One mother said, " I try to avoid screens so I use speaker but not always" (FGD #01, 22.01.2026).

At the same time, mothers felt trapped in a paradox, the same digital platforms that made high quality content accessible also created screen dependency. Many reported that their children demanded more screen time and when devices were removed. One mother said, "He asks for more or sometimes gets cranky" Several mothers described complete reliance on YouTube because of their own lack of time, energy, or song ideas. One mother said that, " We always don't have a lot of ideas and the energy to do this by ourselves"(FGD #01, 22.01.2026). Content quality and appropriateness were additional concerns, especially around viral or adult songs, random reels shown by family members , and the lack of good Bangla educational songs compared to English content. One mother said, " Due to lack of good Bengali content on YouTube we are forced to follow the English content always" (FGD #01, 22.01.2026). Another mother said, " his father shows him reels or shorts randomly" (IDI #04, 20.01.2026). This created a strong tension: mothers wanted the learning benefits of digital music and movement, but struggled to balance those against screen dependency and content risk.

Theme D: Family, Cultural, and Household Challenges

Despite recognizing the benefits of music and movement, mothers described multiple practical barriers to practicing these activities regularly. Time and energy were the most commonly mentioned challenges, particularly for working mothers balancing jobs, household tasks, and childcare. Even housewives reported feeling tired, low in mood, or overwhelmed by domestic responsibilities and multiple children, which limited their capacity to engage in active, playful sessions. One mother stated, " I take care of 2 children and do a lot of chores, I feel really exhausted" (IDI #01, 15.01.2026) and this also led some mothers to choose YouTube as the easiest solution but screen dependency was another challenge to overcome.

Activities were harder when the child is tired, hungry or sick. Several mothers agreed when one mother said "When he is sick it's tough to do these activities" (FGD #01, 22.01.2026)

Family attitudes and participation shaped how easily mothers could use music and movement at home. In many nuclear families, husbands and grandparents were described as supportive, joining in singing and dancing or at least encouraging the child's interest. One mother said, " When I'm not at home, his grandparents sings him folksongs as they move round and round holding hands" (IDI #05, 22.01.2026) .Some mothers highlighted how fathers played instruments or sang with the child, and how this modelled confidence and enjoyment. Such support reduced the pressure on mothers to be the only ones

responsible for these activities and created a more positive atmosphere around music and movement.

However, several mothers,especially those living with in-laws experienced somthing different. In these families, older generations sometimes saw music and dance as distractions from academic study. One mother said, “My in-laws said that, they will only learn dancing and singing, then won’t study.” (FGD #01, 22.01.2026). This discouraged some mothers , even though they personally valued them.

Another issue was inconsistent device use: fathers and other relatives gave children phones or tablets with little content filtering, exposing them to random reels or non-age-appropriate material. One mother, reported that ,“ Her preschool teachers were also careless about giving screentime to children” (FGD #01, 22.01.2026) , Mothers felt their concerns were not always taken seriously, and they wished for more shared responsibility and alignment within the family around what children should learn.

Environmental constraints were another barrier. Some families lived in apartments where noise travelled easily, causing mothers to worry about disturbing neighbors when children jumped or danced at odd hours. One mother said, “ In winter, my son sometimes does these activities at odd hours, so noise becomes an issue” (IDI #05, 22.01.2026)

Theme E: Support and Resource Needs

Across interviews and the focus group, mothers expressed clear ideas about what support they needed to use music and movement more effectively at home. The most repeated request was for high-quality, age-appropriate Bangla music and movement content with strong educational value. Mothers felt that English content was visually and musically attractive and taught clear concepts, whereas many existing Bangla rhymes lacked meaningful learning objectives or engaging production. One mother said, "I was forced to use English content even when I would prefer my children to learn in Bangla sometimes" (FGD #01, 22.01.2026)

Mothers also wanted better community and family support structures. They suggested community rooms, rooftops, or playground where children could gather for group songs and activities, especially on weekends. One mother stated, "If we could gather the children of our community and practice music and movement-based activities , it would be very helpful" (IDI #06, 24.01.2026)

Most mothers agreed when one mother said "it takes a village to raise a child" (FGD #01, 22.01.2026) calling for shared responsibility among fathers, grandparents, and other caregivers. In addition, some mothers felt the need for more awareness and guidance across all the family members, Preschool teachers, and an urgent need for ideas and appropriate contents. Together, these needs point to gaps not only in digital resources but also in social and structural support for using music and movement as a developmental tool.

Discussion

This study explored how Bangladeshi mothers perceive music and movement activities for supporting their children's cognitive development. The research involved in 6 in depth interviews with 6 mothers and 1 focus group discussion with 8 mothers, total of 14 participants from Dhaka. After analysis, 5 interconnected themes emerged, perceptions, daily integration, pros and cons of digital media use, family, cultural, household challenges, support needs.The findings provide valuable insights into how urban mothers navigate early childhood learning within the context of limited time, energy, strong academic expectations, family mindset and increasing digital exposure.

Understanding Cognitive Benefits While Prioritizing Academic Learning

The mothers in this study had solid understanding of what cognitive development means. They described it in terms of memory, attention, thinking abilities, problem-solving, and language development. These understandings align closely with established frameworks in child development literature (Malik & Marwaha, 2023). Music was described as helpful through songs, rhythm, repetition that support memory, attention,focus and language development, and movement activities were understood to strengthen attention and understanding by linking physical actions with ideas. Children could copy and learn the dance steps faster with music and movement. This understanding reflects what Juntunen (2024) have described , cognition is grounded in physical experience, and when children move with music, the experience becomes more memorable. Many mothers observed that their children picked up new vocabulary, numbers, concepts and song lyrics much faster through music and movement activities.

This observation match findings from multiple studies, showing that music and movement activities enhance memory, language skills, executive functions, and early literacy development (Irvine, 2024; Lukács et al., 2024; Walton, 2014). The mothers could clearly see these benefits happening in their own homes .

Despite recognizing these positive effects, most mothers still ranked music and movement as secondary and "academic" activities as primary for cognitive development in children. Reading, writing letters and numbers, and solving puzzles were ranked first in priority. This was also evident in the literatures. Research has shown that families in Dhaka often prioritizes memorization and formal academic tasks because they think academic success is important for their children's future security (Akter, 2022; Panday, 2023). The study reveals that even when mothers appreciate music and movement for cognitive growth, they still see these activities as supplementary rather than foundational. This shows deeply rooted cultural beliefs about what counts as ‘real learning" in early childhood.

But surprisingly, some mothers did express that music and movement offer something unique that cannot be replaced by books or puzzles. They mentioned areas like understanding tune and rhythm, beats , pattern recognition, confidence building, and personality development. This shows that, there is growing recognition among some mothers that music and movement based learning contributes in ways that traditional academic methods cannot. This finding builds on Konal's (2021) observation that Bangladeshi parents use music informally at home but rarely make connections to developmental outcomes. The

current study shows that some mothers do make these connections, though they remain hesitant and secondary to academic priorities.

How Family Dynamics Shape Implementation of Music and Movement Activities

Family attitudes played a key role in supporting or neglecting music and movement activities. In some families, mothers felt encouraged when husbands and grandparents joined in. They sang traditional folk songs, played simple instruments, or danced along with the children. This created a sense of shared responsibility for learning. Such support fits Vygotsky's view of social interaction helping development (McLeod, 2025). It turned these activities into family events rather than just a mother's task.

In contrast, mothers in larger extended families often faced restriction. Older relatives saw dancing and singing as time away from "proper study." They worried children would focus only on music and forget schoolwork. This difference in views about learning mirrors findings where families favor academic tasks over play (Garvis et al., 2021).

This shows a cultural factor that studies often miss. Programs to promote music and movement cannot focus only on mothers. They must consider whole family views across generations. Mothers called for shared effort from fathers, grandparents, relatives , and teachers. They understood that real change needs everyone working together, not just one person trying alone.

Additionally**,** Children's engagement with music and movement activities showed a clear developmental progression. Mothers described how their children

started by passively watching videos, then moved to anticipating what would come next, imitating movements, actively initiating activities on their own, directing parents on what to do or how to move , rejecting parental interference when they wanted to do things their way, inventing their own dance step or song, and even wanting to record their performances. This progression aligns well with Piaget's description of the preoperational stage, where children move from simple imitation to more complex symbolic play and representational thinking (Malik & Marwaha, 2023).

Children had strong preferences for specific songs repeatedly such as, Head, shoulder, knees and toes, Wheels on the Bus, Twinkle Twinkle Little Star, patriotic songs, and sometimes even adult or K-pop songs, also highlight the importance of familiarity and repetition in early learning. Research suggests that young children's cognitive development may actually benefit more from deep, repeated engagement with a smaller set of materials (Neuman & Wright, 2014).

Practical Challenges on Music and Movement Implementation

Despite recognizing cognitive benefits, mothers faced significant practical barriers to regular music and movement activities. These included limited time, physical and emotional exhaustion, inadequate space, noise concerns, insufficient song ideas, and children's states such as illness or irritability.

Working mothers balancing employment and household duties, along with homemakers managing multiple children, frequently reported fatigue that

disturbed active engagement. This corresponds with findings that maternal workloads restrict play-based interactions (Perry-Jenkins et al., 2019)

In the study few mothers mentioned that, urban Dhaka apartments posed environmental challenges, as children's movements at odd times generated noise which disturbed neighbors .These structural issues affected their motivation.

Most of the mothers stated children refused to actively participate in music-movement activities when hungry, tired, or sick. This aligns with research showing physiological states (hunger, sleep deprivation) reduce play engagement and increase behavioral challenges in preschoolers (Chen et al., 2024; McDonald et al., 2024).

Mothers consistently talked about lack of new ideas. Accessible resources such as, song lists, movement based songs, and brief guides, would be helpful for them. Mothers suggested Community sessions at rooftops or playgrounds could facilitate idea-sharing and collective support, normalizing these activities for development

Digital Platforms as Both Resource and Concern

One of the strongest findings from this study was how much mothers rely on YouTube for music and movement activities and at the same time feeling uneasy about this dependence. Almost every mother mentioned channels such as Cocomelon, ChuChu TV, Nursery Rhymes, Super Simple Songs, Miss Rachel, and local content like Ms. Moon as their main sources for songs, rhymes, and action-based videos. They valued these platforms for their colourful visuals, clear structure, and convenience. Many mothers felt that these videos were more

attractive and organized, Educational than the songs they personally knew. This growing dependence on digital media for young children's learning is also seen globally (Marsh, 2017).

Alongside these benefits, mothers spoke about strong worries regarding screen addiction, inappropriate content, and losing control over what their children watched. Children frequently insisted on more screen time.In some homes, children also ended up watching content that mothers felt was not suitable for their age, such as viral adult songs, or random reels shared by family members .Mothers appreciate the educational value and practical help that YouTube provides, but at the same time they fear the negative effects of too much screen exposure.

This is especially relevant in Bangladesh, where young children's screen use has increased quickly. Abdulla et al. (2023) found that screen time among Bangladeshi preschoolers is rising and often replaces active, physical play. Mothers in this study did not see digital platforms as simply good or bad. Rather, they treated them as a necessary compromise. Limited time, tiredness, lack of new song ideas, and many household and job responsibilities pushed them toward YouTube as the easiest solution, even when they would have preferred more offline options.

A few mothers tried to reduce their children's dependence on screens. They sometimes played songs on speakers while keeping the screen away, or fathers played instruments or they sang along with their children instead of letting them watch continuously. However, these strategies were difficult to

maintain in daily life. This points to an important gap. Mothers need high-quality, age-appropriate, and clearly educational songs in Bangla that can compete with the attraction and production quality of English-language channels. They also wanted musical contents that match their culture and allow children to learn in their mother tongue without losing interest.

The issue of digital dependency is also closely linked to family dynamics. Some mothers reported that fathers and other relatives often gave children free access to phones and tablets, letting them watch and listen to adult music videos without checking whether they were age appropriate. This lack of shared understanding about children's digital use increased mothers stress and made them feel solely responsible for monitoring content. Some mothers further noted that preschool teachers were also relaxed about screen use in the classroom. This suggests that concerns about digital media are not only a private family matter but part of a wider gap in awareness about appropriate screen use for young children in Bangladesh.

Conclusion

This study shows that Bangladeshi mothers do acknowledge that music and movement plays an important role in their children's cognitive development. Many mothers understand the benefits and want to use these activities at home. But limited time and energy, noise concern, and lack of proper resources and ideas make regular practices difficult, even when motivation is strong.

A key finding of the study is the digital dependency of the mothers. YouTube and similar platforms have become an easy and practical option for music and movement activities. For many mothers, these platforms make such activities possible. But at the same time, mothers worry about screen overuse, inappropriate content, and growing dependency on digital media. Family support plays huge role here . When family members value these activities, mothers feel encouraged. When they do not, mothers often feel left feeling demotivated.

Addressing these challenges requires support beyond individual mothers. There is a need for high-quality age-appropriate music and movement content in bengali that is culturally appropriate. Families and communities also need greater awareness about the value of music and movement in early learning. Policies and guidelines must reflect the real lives of Bangladeshi families. When mothers' everyday realities are acknowledged, music and movement can become meaningful and accessible tools for supporting children's cognitive development.

Recommendations

- Families should be encouraged to view music and movement not just as entertainment, but as meaningful learning tools that can be naturally integrated into daily routines without requiring extra resources.
- Following World Health Organization screen time guidelines, families can use songs in more active ways, such as listening through speakers or limiting visual exposure, to support learning while reducing screen dependency.

- Engaging fathers, siblings, and grandparents can make music and movement practices more consistent, reduce reliance on screens, and create a more supportive learning environment for children.
- Preschools and playgroups should include these activities in daily routines, supported by teacher training and simple, practical guides that can be also shared with families.
- Government bodies, NGOs, and content creators should produce high-quality, age-appropriate Bangla content and raise awareness among families. At the same time, urban planning and digital literacy initiatives should support child development by creating safe community play spaces and providing practical guidance on balanced screen use at home.

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Appendices

Appendix A: In-Depth Interview (IDI) Guideline

Title

Mothers' Perception regarding Music and Movement for Fostering Cognitive Development in Children Aged 3–5 Years in Bangladesh

Section A – Demographic Information

Item	Response
Interview Date:	
Start Time:	
End Time:	
Name of Respondent:	
Age:	
Education Level:	
Occupation:	
Number of Children:	
Child's Age:	
Family Type (Nuclear/Extended):	
Area of Residence (Urban):	

Section B – Mothers' Understanding of Music and Movement

1. What comes to your mind when you hear the words *music and movement*?
2. How do you think these activities influence your child's learning or development?

3. Can you describe a situation when your child was involved in singing, dancing, or movement activities? (Probe: How did your child react? What did you notice?)

Section C – Practices at Home

4. What kinds of musical or movement activities does your child enjoy most at home?
5. How often do you and your child take part in these activities?
6. Who usually initiates these activities – you, your child, or someone else?
7. Are there particular rhymes, songs, or movement activities your child prefers? (Probe: When and for how long do these activities usually take place?)

Section D - Cognitive Development and Its Connection with Music and Movement

8. What does the term cognitive development mean to you? (Prompt: thinking, understanding, attention, memory, language, problem-solving, or learning new things)
9. In your experience, how do music and movement activities support your child's thinking or learning? (Prompt: focusing, following instructions, remembering, expressing ideas, or understanding concepts)
10. Have you noticed any changes in your child's behavior or thinking when these activities are used regularly? (Prompt: curiosity, creativity, confidence, attention span, or flexibility in thinking)

Section E - Challenges, Barriers, and Support Needs

11. What difficulties do you face in using music and movement activities at home? (Prompt: time, space, noise concerns, family attitudes, lack of ideas, or confidence)

12. Are there particular times or situations when it becomes easier or harder to include these activities? (Prompt: mornings, evenings, weekends, when the child is tired, hungry, or energetic)
13. How do people around you, such as your husband, in-laws, or neighbors, respond when you sing or do movement activities with your child?
14. When you think about helping your child's mental or cognitive development, what activities usually come to your mind first? (Prompt: storytelling, reading, drawing, puzzles, memorizing, or others)
15. Why do you think those activities are helpful for your child's learning or thinking?
16. How do you see music and movement compared to these activities – do they support learning in a similar way or in a different way?
17. What kinds of support or changes at home or in your surroundings would make it easier for you to use music and movement more often with your child? (Prompt: more time, ideas, space, encouragement, or community awareness)

Appendix B: Focus Group Discussion (FGD) Guideline

Title:

Mothers' Perception regarding Music and Movement for Fostering Cognitive Development in Children Aged 3–5 Years in Bangladesh

Demographic Information

Item	**Response**
Date:	

Start Time:	
End Time:	
Number of Participants:	
Medium (Online / Physical):	
Area:	
Age Range:	
Moderator Name:	
Note-taker Name:	

Section A – Introductory Questions

a. How are you all today?

b. How are things going at home with your children these days?

c. Please share your child's favorite rhyme, song, or movement game.

Section B – Mothers' Understanding of Music and Movement

1. When you hear the words music and movement, what comes to your mind?
2. How do you think these activities influence children's learning or development?
3. Can anyone share an example of a time when your child was singing, dancing, or moving? (Probe: What did you notice about your child's reaction or behavior?)

Section C – Practices at Home

4. What kinds of musical or movement activities do your children enjoy at home?
5. How often do these activities usually happen in your households?
6. Who usually initiates these activities – you, your child, or someone else?
7. Are there specific rhymes, songs, or movement activities your children prefer? (Probe: When and for how long do these activities usually take place?)

Section D – Cognitive Development and Its Connection with Music and Movement

8. What does cognitive development mean to you when you think about your child? (Prompt: attention, thinking, understanding, memory, language, or problem-solving)
9. In your experience, how do music and movement activities support children's learning? (Prompt: focusing, remembering, following instructions, expressing ideas)
10. Have you noticed any changes in your child's thinking, behavior, or learning due to these activities? (Prompt: confidence, creativity, curiosity, or attention span)

Section E – Challenges, Barriers, and Support Needs

11. What challenges do you face in using music and movement activities at home?
12. Are there situations when it becomes easier or harder to include these activities?
13. How do family members or people around you respond when you use music and movement with your child?
14. When supporting your child's mental or cognitive development, what activities do you usually prioritize at home?
15. Why do you feel those activities are helpful for your child's learning?
16. How do you see music and movement compared to these activities?
17. What support or changes would help you use music and movement more regularly with your child?

Appendix C: Consent Form for In-Depth Interview (IDI)

Title of Study:

Mothers' Perception Regarding Music and Movement for Fostering Cognitive Development in Children Aged 3–5 Years in Bangladesh

Researcher Name: Lubaba Rahman

Institution: BRAC Institute of Educational Development (BRAC University)

Purpose of the Study

This study explores mothers' perception and everyday practices related to music and movement in supporting children's cognitive development.

Participation

You are invited to take part in a one-to-one interview lasting about 60 minutes. Your participation is completely voluntary. You may skip any question or stop the interview at any time without giving a reason.

Process

If you agree, I will ask you a few open questions about how you use or think about music and movement with your child. The interview may be audio-recorded with your permission so that no details are missed.

Confidentiality

Your name and personal details will not appear in any report or publication. All information will be stored safely and used only for academic purposes.

Risks and Benefits

There are no known risks. You may find the discussion interesting and useful for reflecting on your child's learning experiences.

Consent

☐ I have read or listened to the explanation of the study and understand its purpose.

☐ I agree to participate voluntarily.

☐ I allow the interview to be audio-recorded.

Participant's Name: _____

Signature / Thumbprint: _____ Date: _____

Researcher's Signature: _____

Appendix D: Consent Form for Focus Group Discussion (FGD)

Title of Study:

Mothers' Perception Regarding Music and Movement for Fostering Cognitive Development in Children Aged 3–5 Years in Bangladesh

Researcher Name: Lubaba Rahman

Institution: BRAC Institute of Educational Development (BRAC University)

Purpose of the Study

This study explores mothers' perceptions and experiences about using music and movement to support children's cognitive development.

Participation

You are invited to join a group discussion with about eight mothers. The session will last around 60–90 minutes. Your participation is voluntary, and you may choose not to answer any question or to leave the discussion at any time.

Process

During the discussion, we will talk about everyday activities that help children learn, including music and movement. With your permission, the session may be audio-recorded.

Confidentiality

Your name will not appear in any report. However, because this is a group discussion, other participants will hear what you share. We request everyone to respect one another's privacy and not discuss personal stories outside the group. All data will be used only for research purposes.

Risks and Benefits

There are no known risks. The discussion may help mothers share ideas and learn from each other.

Consent

☐ I have read or listened to the explanation of the study and understand its purpose.

☐ I agree to take part in the group discussion voluntarily.

☐ I allow the discussion to be audio-recorded.

Participant's Name: _____

Signature / Thumbprint: _____ Date: _____

Researcher's Signature: _____

Number of Participants: **8**

Appendix E : ইন-ডেপথ ইন্টারভিউ (IDI) গাইডলাইন – In Bengali

শিরোনাম

৩–৫ বছর বয়সী শিশুদের জ্ঞানীয় বিকাশ (বুদ্ধিবৃত্তিক বিকাশ) উন্নয়নে সংগীত ও নড়াচড়া সম্পর্কে মায়েদের ধারণা

Section A – সাধারণ তথ্য

বিষয়	**উত্তর**
ইন্টারভিউর তারিখ:	
শুরুর সময়:	
শেষের সময়:	
অংশগ্রহণকারীর নাম:	
বয়স:	
শিক্ষাগত যোগ্যতা:	
পেশা:	
সন্তানের সংখ্যা:	
সন্তানের বয়স:	
পরিবারের ধরন (একক/যৌথ):	
বাসস্থান (শহর):	

Section B – সংগীত ও নড়াচড়া সম্পর্কে মায়েদের ধারণা

1. আপনি যখন "সংগীত ও নড়াচড়া" শব্দটি শুনেন, তখন আপনার মাথায় কী আসে?
2. আপনার মতে, এসব কার্যকলাপ আপনার সন্তানের শেখা বা বিকাশে কীভাবে সাহায্য করে?
3. এমন কোনো পরিস্থিতির কথা বলবেন, যখন আপনার সন্তান গান গাইছিল, নাচছিল বা শরীর নড়াচড়া করছিল?

(প্রম্পট: তখন আপনার সন্তানের প্রতিক্রিয়া কেমন ছিল? আপনি কী লক্ষ্য করেছিলেন?)

Section C – বাড়িতে চর্চা

4. আপনার সন্তান বাড়িতে কী ধরনের গান, ছড়া বা নড়াচড়ার কার্যকলাপ সবচেয়ে বেশি উপভোগ করে?
5. আপনি এবং আপনার সন্তান কত ঘন ঘন এসব কার্যকলাপে অংশ নেন?
6. সাধারণত কে এই কার্যকলাপ শুরু করে – আপনি, আপনার সন্তান, নাকি অন্য কেউ?
7. আপনার সন্তানের কি কোনো নির্দিষ্ট ছড়া, গান বা নড়াচড়ার কার্যকলাপ বেশি পছন্দ?

   (প্রম্পট: কখন এবং কতক্ষণ এই কার্যকলাপগুলো হয়?)

Section D – জ্ঞানীয় বিকাশ (বুদ্ধিবৃত্তিক বিকাশ) ও সংগীত–নড়াচড়ার সম্পর্ক

8. আপনার কাছে "জ্ঞানীয় বিকাশ (বুদ্ধিবৃত্তিক বিকাশ)" বলতে কী বোঝায়?

   (প্রম্পট: চিন্তা করা, বোঝা, মনোযোগ, মনে রাখা, ভাষা ব্যবহার, সমস্যা সমাধান, নতুন কিছু শেখা)
9. আপনার অভিজ্ঞতায়, সংগীত ও নড়াচড়ার কার্যকলাপ আপনার সন্তানের শেখা বা চিন্তাভাবনায় কীভাবে সাহায্য করে?

   (প্রম্পট: মনোযোগ দেওয়া, নির্দেশনা মানা, মনে রাখা, গোনা, নিজের কথা প্রকাশ করা)
10. এসব কার্যকলাপ নিয়মিত করলে আপনার সন্তানের আচরণ বা চিন্তাভাবনায় কোনো পরিবর্তন বা উন্নতি লক্ষ্য করেছেন কি?

    (প্রম্পট: কৌতূহল, সৃজনশীলতা, আত্মবিশ্বাস, মনোযোগ ধরে রাখা)

Section E – চ্যালেঞ্জ, প্রতিবন্ধকতা ও সহায়তা

11. বাড়িতে সংগীত ও নড়াচড়ার কার্যকলাপ করতে গিয়ে আপনি কী ধরনের সমস্যার মুখোমুখি হন?

    (প্রম্পট: সময়ের অভাব, জায়গার সমস্যা, শব্দ নিয়ে আপত্তি, পরিবারের মনোভাব, আইডিয়ার অভাব, আত্মবিশ্বাসের অভাব)

12. এমন কোনো সময় বা পরিস্থিতি আছে কি, যখন এসব কার্যকলাপ করা সহজ বা কঠিন হয়ে যায়?

    (প্রম্পট: সকাল, সন্ধ্যা, ছুটির দিন, সন্তান ক্লান্ত/ক্ষুধার্ত/খুব চঞ্চল হলে)

13. আপনি যখন সন্তানের সঙ্গে গান করেন বা নড়াচড়ার কার্যকলাপ করেন, তখন আপনার আশপাশের মানুষ (স্বামী, শ্বশুরবাড়ির সদস্য, প্রতিবেশী) কীভাবে প্রতিক্রিয়া জানায়?

14. সন্তানের জ্ঞানীয় বিকাশ (বুদ্ধিবৃত্তিক বিকাশ) উন্নয়নের কথা ভাবলে, প্রথমে আপনার মাথায় কী ধরনের কার্যকলাপ আসে?

    (প্রম্পট: গল্প বলা, বই পড়া, আঁকা, পাজল, মুখস্থ করা ইত্যাদি)

15. আপনি কেন মনে করেন এসব কার্যকলাপ আপনার সন্তানের শেখা বা চিন্তাভাবনার জন্য উপকারী?

16. এসব কার্যকলাপের সঙ্গে সংগীত ও নড়াচড়াকে আপনি কীভাবে তুলনা করেন? একইভাবে সাহায্য করে, নাকি ভিন্নভাবে?

17. বাড়িতে বা আশপাশে কী ধরনের সহায়তা বা পরিবর্তন হলে আপনি সংগীত ও নড়াচড়ার কার্যকলাপ আরও নিয়মিত করতে পারতেন?

    (প্রম্পট: সময়, আইডিয়া, জায়গা, পরিবারের উৎসাহ, কমিউনিটির সচেতনতা)

Appendix F : ফোকাস গ্রুপ ডিসকাশন (FGD) গাইডলাইন – In Bengali

শিরোনাম

৩–৫ বছর বয়সী শিশুদের জ্ঞানীয় বিকাশ (বুদ্ধিবৃত্তিক বিকাশ) উন্নয়নে সংগীত ও নড়াচড়া সম্পর্কে মায়েদের ধারণা

সাধারণ তথ্য

বিষয়	**উত্তর**
তারিখ	
শুরুর সময়:	
শেষের সময়:	
অংশগ্রহণকারীর সংখ্যা:	
মাধ্যম (অনলাইন/সরাসরি):	
এলাকা:	
বয়সসীমা:	
মডারেটরের নাম:	
নোট-টেকারের নাম:	

Section A – পরিচিতিমূলক প্রশ্ন

a. সবাই কেমন আছেন?

b. এই সময়ে বাসায় সন্তানদের নিয়ে দিনকাল কেমন কাটছে?

c. আপনার সন্তানের প্রিয় কোনো ছড়া, গান বা নড়াচড়ার খেলা কী?

Section B – সংগীত ও নড়াচড়া সম্পর্কে ধারণা

1. আপনি যখন "সংগীত ও নড়াচড়া" কথাটা শুনেন, তখন কী মনে আসে?
2. আপনার মতে, এসব কার্যকলাপ শিশুদের শেখা বা বিকাশে কীভাবে সাহায্য করে?

3. কেউ কি এমন কোনো অভিজ্ঞতা শেয়ার করবেন, যখন আপনার সন্তান গান গাইছিল, নাচছিল বা নড়াচড়া করছিল?

   (প্রম্পট: তখন সন্তানের আচরণ বা প্রতিক্রিয়া কেমন ছিল?)

Section C – বাড়ির চর্চা

4. বাড়িতে আপনার সন্তানেরা কী ধরনের সংগীত বা নড়াচড়ার কার্যকলাপ উপভোগ করে?
5. এসব কার্যকলাপ সাধারণত কত ঘন ঘন হয়?
6. কে সাধারণত শুরু করে – আপনি, সন্তান, নাকি অন্য কেউ?
7. কোনো নির্দিষ্ট ছড়া, গান বা নড়াচড়ার কার্যকলাপ কি আপনার সন্তানের বেশি পছন্দ?

   (প্রম্পট: কখন এবং কতক্ষণ হয়?)

Section D – জ্ঞানীয় বিকাশ ও সংগীত–নড়াচড়া

8. আপনারা "জ্ঞানীয় বিকাশ (বুদ্ধিবৃত্তিক বিকাশ)" বলতে কী বোঝেন?
9. আপনাদের অভিজ্ঞতায়, সংগীত ও নড়াচড়া শিশুদের শেখায় কীভাবে সাহায্য করে?
10. এসব কার্যকলাপের কারণে সন্তানের আচরণ, চিন্তাভাবনা বা শেখায় কোনো পরিবর্তন লক্ষ্য করেছেন কি?

Section E – চ্যালেঞ্জ ও সহায়তা

11. বাড়িতে এসব কার্যকলাপ করতে গিয়ে কী কী সমস্যা হয়?
12. কখন এসব করা সহজ বা কঠিন হয়?
13. পরিবারের অন্য সদস্যরা কীভাবে প্রতিক্রিয়া জানায়?
14. সন্তানের শেখার জন্য আপনারা সাধারণত কোন কার্যকলাপগুলো বেশি গুরুত্ব দেন?
15. কেন মনে করেন সেগুলো উপকারী?
16. সংগীত ও নড়াচড়াকে এসব কার্যকলাপের সঙ্গে কীভাবে তুলনা করবেন?
17. কী ধরনের সহায়তা পেলে আপনি এগুলো আরও নিয়মিত করতে পারতেন?

Appendix G : ইন ডেপ্‌থ ইন্টারভিউ (IDI) - **এর সম্মতি ফর্ম - In Bengali**

শিরোনাম:

৩ - ৫ বছর বয়সী শিশুদের জ্ঞানীয় বিকাশ (বুদ্ধিবৃত্তিক বিকাশ) উন্নয়নে সংগীত ও নড়াচড়া সম্পর্কে মায়েদের ধারণা

গবেষকের নাম: লুবাবা রহমান

প্রতিষ্ঠান: BRAC Institute of Educational Development (BRAC University)

গবেষণার উদ্দেশ্য

এই গবেষণার উদ্দেশ্য হলো মায়েরা কীভাবে সংগীত ও নড়াচড়াকে শিশুদের জ্ঞানীয় বিকাশে ব্যবহার করেন বা বুঝেন, তা জানা।

অংশগ্রহণ

এই ইন্টারভিউ নিতে প্রায় ৬০ মিনিট সময় লাগবে। অংশগ্রহণ সম্পূর্ণ স্বেচ্ছামূলক। আপনি চাইলে যেকোনো প্রশ্ন এড়িয়ে যেতে পারেন বা যেকোনো সময় অংশগ্রহণ বন্ধ করতে পারেন।

প্রক্রিয়া

আপনার অনুমতি থাকলে, ইন্টারভিউটি অডিও রেকর্ড করা হবে যেন কোনো তথ্য বাদ না যায়।

গোপনীয়তা

আপনার নাম বা পরিচয় কোথাও প্রকাশ করা হবে না। সব তথ্য শুধু গবেষণার কাজে ব্যবহৃত হবে।

সম্মতি

□ আমি গবেষণার উদ্দেশ্য বুঝেছি

□ আমি স্বেচ্ছায় অংশগ্রহণে সম্মত

□ অডিও রেকর্ড করতে সম্মতি দিচ্ছি

অংশগ্রহণকারীর নাম: _____

স্বাক্ষর: _____ তারিখ: ___

Appendix H : ফোকাস গ্রুপ আলোচনা (FGD) - **এর সম্মতি ফর্ম – In Bengali**

গবেষণার শিরোনাম

৩ - ৫ বছর বয়সী শিশুদের জ্ঞানীয় বিকাশ (বুদ্ধিবৃত্তিক বিকাশ) উন্নয়নে সংগীত ও নড়াচড়া সম্পর্কে মায়েদের ধারণা

গবেষকের নাম: লুবাবা রহমান

প্রতিষ্ঠান: BRAC Institute of Educational Development (BRAC University)

গবেষণার উদ্দেশ্য

এই গবেষণার উদ্দেশ্য হলো মায়েরা কীভাবে সংগীত ও নড়াচড়ার কার্যকলাপ ব্যবহার করেন এবং এসব কার্যকলাপ শিশুদের জ্ঞানীয় বিকাশ (বুদ্ধিবৃত্তিক বিকাশ)-এ কীভাবে সহায়তা করে - সে সম্পর্কে তাদের অভিজ্ঞতা ও মতামত জানা।

অংশগ্রহণ

আপনাকে প্রায় ৮ জন মায়ের সঙ্গে একটি দলগত আলোচনায় অংশ নিতে আমন্ত্রণ জানানো হচ্ছে। এই আলোচনা প্রায় ৬০-৯০ মিনিট ধরে চলবে।

আপনার অংশগ্রহণ সম্পূর্ণ স্বেচ্ছামূলক। আপনি চাইলে কোনো প্রশ্নের উত্তর না দিতে পারেন বা যেকোনো সময় আলোচনা থেকে সরে যেতে পারেন - এর জন্য কোনো ব্যাখ্যা দিতে হবে না।

আলোচনা প্রক্রিয়া

আলোচনার সময় আমরা শিশুদের শেখায় সহায়ক দৈনন্দিন কার্যকলাপ নিয়ে কথা বলব, যেমন সংগীত ও নড়াচড়া।

আপনার অনুমতি থাকলে, আলোচনা চলাকালীন অডিও রেকর্ড করা হতে পারে, যাতে কোনো গুরুত্বপূর্ণ তথ্য বাদ না যায়।

গোপনীয়তা

এই গবেষণার কোনো রিপোর্ট বা লেখায় আপনার নাম বা পরিচয় প্রকাশ করা হবে না।

তবে যেহেতু এটি একটি দলগত আলোচনা, তাই অন্য অংশগ্রহণকারীরা আপনার কথা শুনতে পারবেন। আমরা সবাইকে অনুরোধ করব যেন আলোচনার বাইরে কারো ব্যক্তিগত কথা শেয়ার না করা হয়।

সব তথ্য শুধুমাত্র গবেষণার কাজে ব্যবহার করা হবে।

ঝুঁকি ও উপকারিতা

এই আলোচনায় অংশগ্রহণের কোনো পরিচিত ঝুঁকি নেই।

আলোচনাটি মায়েদের জন্য উপকারী হতে পারে, কারণ এতে তারা একে অপরের অভিজ্ঞতা শেয়ার করতে এবং নতুন ধারণা জানতে পারবেন।

সম্মতি

□ আমি গবেষণার উদ্দেশ্য সম্পর্কে ব্যাখ্যা শুনেছি / পড়েছি এবং বুঝেছি।

□ আমি স্বেচ্ছায় এই ফোকাস গ্রুপ আলোচনায় অংশগ্রহণ করতে সম্মত।

□ আমি আলোচনাটি অডিও রেকর্ড করার অনুমতি দিচ্ছি।

অংশগ্রহণকারীর নাম: _____

স্বাক্ষর / আঙুলের ছাপ: _____

তারিখ: _____

গবেষকের স্বাক্ষর: _____

অংশগ্রহণকারীর সংখ্যা: ৮ জন

Appendix I : In Depth Interview Transcript (2 pages)

Interviewer: Today is 14 January, 4:38 PM, and we are about to start the interview.So, the first question is: when you hear the term "music and movement," what comes to your mind?

Mother: To me, music and movement make children excited – it creates a kind of excitement in them. When music starts, we see many children start dancing, clapping, jumping. My own child, for example, has a favourite song, "Baby Shark." As soon as that comes on, he gets up on his own and starts dancing. Honestly, I haven't thought very deeply about it before; I just saw it as part of play. But I think it also gets children moving – it makes them active and helps their fitness. Besides that, it helps both mentally and physically, so it is important in both ways.

Interviewer: And in your opinion, how do these activities help their learning or development?

Mother: As I said, physically, the child stays active. It is better than just sitting in a corner; instead, the child is jumping and running, so they stay fit. Mentally, it works like recreation.I have noticed in my child that through songs and rhymes, he has learned many new words. So yes, especially before even starting school, it helps a lot with language learning.

Interviewer: Can you describe a situation where your child is singing, dancing, or moving – very engaged in the activity – or a situation with a favourite song?

Mother: Yes. Mainly he really likes Cocomelon and super simple songs, nursery rhymes songs on YouTube . He enjoys the "Baby Shark" song a lot. Another favourite is "The

Wheels on the Bus Go Round and Round." He watches the videos and copies what he sees.

Interviewer: At home, what kinds of songs, rhymes, or movement activities does your child enjoy the most?

Mother: Often we see that instead of us parents telling or teaching something directly, children can pick it up more easily through these songs. They seem to grasp it more easily that way.His father also sings and plays guitar, and I sing as well. We both sing together, and sometimes he joins in with us, moves or sways while his father plays the guitar.

Interviewer: How often, or how frequently, do you and your child take part in these activities?

Mother: daily, I would say. Most of the time he is excited to learn from YouTube.

Interviewer: Who usually initiates these activities – you, your child, or other family members?

Mother: I used to start it and sometimes hid father, but now initiates It's like a play to him.

Interviewer: What does "cognitive development" or "intellectual development" mean to you?

Mother: For me, cognitive development means how much a child can grasp, how much they can understand, how much they can remember. How much they can put into words, whether they have curiosity about new things and follow instructions from the songs.

Interviewer: From your experience, how can music and movement activities help your child's thinking or learning?

Mother: I see that they help in many ways. Music and movement help his thinking and learning. Memory becomes much better,you remember new things longer if learned through songs or hand/leg movements rather than normally. Focus also improves. For example, when teaching rhymes, if play the song or I show with hand actions, he pays more attention and tries to copy the hand movements too. Counting songs helped him learn counting really well.

Interviewer: When these activities are done regularly, have you noticed any changes in your child's behaviour or thinking?

Mother: I think he has become more creative. He makes up his own little dances and hums songs by himself. That is definitely a positive impact. I have also seen that my child's confidence has improved. When he sees his father playing guitar and singing, and often sings or moves his body like swaying

Appendix J : Focus Group Discussion Transcript (2 pages)

Interviewer: Today is 22nd January, 2.30pm. As I have already explained everything to you. So, I am starting. Ok so, what comes to mind when you hear the term "music and movement," activities? Anyone can start,

Participant 1: ok to me, this means part of fun activities, actually, especially for pre-schoolers or those preparing for school – it seems like a fun activity for them, they enjoy it a lot, get joy, can focus. Even at home, when they do these kinds of activities with YouTube or TV, it's much more fun, their body movement happens. Because of this, they get a bit tired; it's easier to manage children, they get a bit tired due to body movement. Children get hungry – these are what come to mind.

Participant 2: Okay, when I hear "music and movement," the first thing that comes to mind is that the child is very extrovert, or a bit social and fun-loving, which actually is my child – he quite likes songs, movement, etc., and he is actually a social and extrovert type of baby.

Participant 3: Thank you for inviting me here and for discussing such an important topic with everyone. So, when I hear "music and movement" or "music and movement," what comes to mind – although my daughter is 3.5 years old, but in my case, maybe for many – this starts much earlier, even from pregnancy. But music and movement is very relevant to us – when we hear music or any rhythmic noise or sound, children's attention is grabbed very quickly. It's seen that this fun – which others shared – fun, with activities, and concentration. Concentration is grabbed very quickly from any kind of sound – if the sound is rhythmic, or music type, or instrumental – in that case, they can quickly direct attention there, take concentration there, and with relevant activities. If it's a song, older children will do dance-type movements; but if smaller, head-nodding, or clapping on the table with hands – I've seen these in children's cases.

Participant 4: Assalamu Alaikum, thank you so much for including me in such an important discussion, sister. Actually, when it comes to music and movement, the first thing that comes to my mind is YouTube, the word YouTube. Because my kids actually learn a lot from YouTube – educational songs, listening to these songs, at one stage it's seen that they dance in rhythm, with dancing exercise also happens, as a result they stay very active, and development happens. So I think this is very natural and very important.

Participant 5: Yes, the first thing that comes to my mind is – I play a game with my son, it's like freeze dancing. Rhymes or songs play, suddenly when it pauses, whatever

position we are dancing in, we freeze in that position. At a dawat, when playing this game, I noticed that my son really likes it. And what I realized right then – he can do balancing very well, grabbing it from there. So, since then I started doing it at home. So now when "music-movement" is said, freeze dancing comes to my mind first.

Participant 6: "Music" means my son sees YouTube – yes, YouTube, when listening to songs with his dad or with his sister, he dances with them, sings with them. Meaning if someone listens to songs with him or is with him, he dances out of joy; otherwise he is a quiet child.

Participant 7: After hearing this word, personally what comes to my mind is – I love to dance with my children. So if there's any... since I am a working mother, if I have a lot of frustration, if they have any complaint about it – even mentally if they feel mom doesn't give time – this is the best way to get connected with them. So then I play a nice song that connects with children. And now since they are Gen Alpha, for them some songs – like "APT" , K pop songs, this type of songs can connect. So to me, it's a communication way or connection towards my children in my personal life.

Participant 8: Generally, this is a form of entertainment. Music, movement – hearing this, first my two babies come to mind. Because they really like songs, dance, etc., they enjoy a lot.