
I. INTRODUCTION

Play is a recreational original and flexible mental or physical activity that a child does on their own initiative, sometimes for the sake of play and other times just for enjoyment. Young children's play has been described as an impulsive, self-initiated, self-regulated activity that is generally risk-free and not always goal-oriented. Children use play as a means of bridging the gap between their real and imaginative worlds and express their freedom through play (Kocer, 2021). Yavuz (2016) believes that play facilitates social connection, role-playing, problem-solving, and the release of excess energy. It is the most crucial activity a child can do to make life secure, fulfilling, and enjoyable as they develop in both natural and structured settings. In simple terms, play is a complex behaviour of children that is dynamic, ever-changing, and contains a variety of behavioural patterns (Kocer, 2021; Tugrul, 2016). In fact, play serves as the language and most efficient means of expression, where children may construct and explore the world they can master, helping them acquire new skills that boost their confidence and give them the resilience they need to overcome obstacles in the future (Filliozat, 2020). Children deprived of play opportunities face detriments in the present and long-term (Veiga et al., 2016). Therefore, providing adequate play spaces, diverse play materials, and supportive adult guidance gives children the optimal conditions to develop into healthy, content, and productive members of society. It also serves as a coping mechanism that can alleviate anxiety, stress, and irritability in children, ultimately enhancing their happiness and self-esteem (Raval 2023).

The phase of cognitive and social maturity is a critical stage in a child's development and is greatly influenced by their early play experiences (Fadda et al., 2017). While social development includes behaviours, social skills, and relationships, cognitive development includes intellectual dexterity and problem-solving ability (Kaizar & Alordiah 2023). Play serves as a multifaceted tool for young children's development, offering valuable learning opportunities that foster their tactile, sensory, motor, cognitive, social, emotional and verbal abilities, enabling them to better understand their surroundings. Through these experiences, children learn how to build relationships and engage with others, which helps them develop their social communication skills, problem-solving ability, creativity, and imagination (Baradaran et al. 2018, Suminar et. al. 2016, Jafari, 2014). So, children engage in interactions that fosters their social communication skills, enabling them to express themselves and connect effectively with peers and adults. Children who consistently engage with their peers

grow more outgoing and skilled at forming friendships (Yavuz, 2016). By participating in play, children learn to initiate relationships, actively engage in ongoing activities, maintain relationships, overcome rejection, pay close attention to others in the play area, understand other people's behaviours, overcome shyness and introversion, and show how to resolve conflicts (Kocer, 2021; Ates, 2016). This interactive process is crucial for the acquisition and refinement of social skills, which are essential for sustaining positive relationships with others. Moreover, the creative aspects of play enhance children's cognitive development by encouraging their creative problem-solving and imaginative thinking. By connecting their experiences and the knowledge they acquire via play, play is the most natural way for children to practise drawing logical conclusions. This builds their capacity to use that knowledge to solve issues in the future (Burgaz-Uskan & Bozkus, 2019; Tugrul, 2016). Convergent thinking skills in children are developed by the play structure's complexity and richness. According to Piaget's theory, children should be allowed to follow their own desires and preferences while they play since this kind of self-directed play and object exploration fosters cognitive development (Kaya, 2021). Gazali highlighted the significance of play in children's education, arguing that it serves to relax the child, rejuvenate their memory, and enhance their learning capacity. Similarly, Locke characterized play as an innate activity and advocated its incorporation in childhood to render lessons more engaging (Kocer, 2021; Adak-Ozdemir & Kocyigit, 2019; Bardak & Topac, 2019). Consequently, play is not merely a leisure pursuit, but a critical component integral to the holistic development of the child, encompassing both social and cognitive development.

1.1 EARLY CHILDHOOD AND IMPORTANCE OF PLAY

Early childhood development is the term used to describe a child's cognitive, physical, linguistic, temperamental, socioemotional, and motor development from the time of conception to age eight characterised as a period of rapid and remarkable development (WHO, UNICEF, 2018). According to Hurlock (2006), early childhood spans from 2 to 6 years, a critical period for skill development, during which children eagerly repeat activities until they master them. Their adventurous and curious nature drives them to quickly learn by exploring their environment, including both people and inanimate objects, seeking to understand how things work, how they feel, and how they can engage with them. According to Joshi, & Shukla (2019), during the first eight years of life, early childhood development is a critical time for learning and growth, during which time significant improvements are made

in the social-emotional, cognitive, language, and physical domains. The foundations laid during this phase have a lasting impact on the learning and development of the children. Contrary to common perception, play in early childhood is not a waste of time; rather, it is a powerful tool that children predominantly use to learn and develop physically, cognitively, emotionally, and socially (Ngat, 2022; Danniels & Pyle, 2016; Thomas et al., 2011). According to Solter (2020), play is the most fundamental early childhood learning technique. Children in this stage actively engage in play, using it as a means to comprehend and make sense of their experiences and the world around them (Aksoy & Dere-Cifti, 2020). By engaging in play, parents and teachers can recognize and address any developmental or health-related issues that children may exhibit. When children participate in complex socio-dramatic play, they gain opportunities to cultivate their language and social skills, empathy, imagination, self-esteem, self-control, and higher-order thinking. Researchers such as Froebel and Vygotsky have emphasized the role of play as a developmental tool in early childhood, highlighting its capacity to effectively foster creativity as an essential skill for life. Play is characterized as the children's own work and a means for them to explore and understand the world (Alharbi & Alzahrani 2020; Aljarrah, 2017). Vygotsky (2004) posits that play-based learning is crucial in early childhood to acquire new ideas and experiences about the world, and that rich experiences are necessary to adequately inform and develop children's imagination.

Every stage of life places a varied importance on play, but the early years are particularly significant. It is often known that children in this period love to actively engage in play and turn any situation into an opportunity for play. The use of play materials or tools by children to understand and make sense of their lives, however, sets play apart from other stages (Aksoy & Dere-Ciftci, 2020). Children have a unique chance to use play to discover and understand the world and themselves (Kocer, 2021, Kurt & Tortamıs-Ozkaya, 2015). Engaging with children through play allows adults to get insight into how children perceive and comprehend the world. Play is the simplest and most direct form of expression for children and acts as a child's language and most effective form of expression and depict children's inner lives as they actually are (Kocyigit et al., 2007). According to Crehan (2016), child's future reading proficiency remains unchanged by beginning formal education when they are a little older. Children rely on learning through play because they require the chance to progressively expand their foundational information through engaging activities.

Encouraging children to acquire pre-reading and pre-math skills through play is a dependable and successful method of helping them build their cognitive abilities and become ready for a new kind of learning. Children must learn to comprehend their own abilities and build their personal confidence, which they cannot do without playing with their peers and experimenting with different materials.

Formal schooling in India normally begins at the age of six according to National Education Policy, 2020 (Banerji, 2024). Children go through a significant developmental transformation during this period, which is marked by structured learning in basic subjects like science, maths, and reading. They need to engage with peers more frequently, acquire cognitive abilities like critical thinking, and are exposed to new ideas and cultural norms. Children's social and cognitive abilities rapidly advance throughout the critical developmental period between the ages of 6 and 8, when they are enrolled in the first, second, and third standard of schooling. This period marks a transition from the egocentric thinking of early childhood to a deeper awareness of the self and the outside world. One of the most significant phases of social development during these years is the shift from solitary to cooperative play. Early group activities or play enable children to improve skills such as sharing, taking turns, and collaborating to achieve common goals. Cooperative play is essential for the development of children's social competencies, as they learn to negotiate positions, appreciate teamwork, and exercise leadership when participating in group activities and games with peers. Through these social encounters, children also learn to manage challenging situations and form lasting friendships, laying the groundwork for future social competence. Children in this age range begin to grasp and value the concept of fairness and they start to understand moral reasoning, the distinction between right and wrong, and the significance of treating others equitably in social settings. This moral development is often reflected in children's play, as they may express concerns about justice when conflicts arise, indicating a growing sense of responsibility. During the 6–8-year-old developmental stage, children cultivate the ability to manage their own emotional responses through play and understand the emotions of their peers. They become skilled at recognizing and interpreting emotional signals from others, a crucial component for developing empathy. For instance, when children witness a peer experiencing distress, they may attempt to provide comfort or identify solutions. This growing capacity for empathy enhances their overall emotional intelligence, fostering supportive social environments and strengthening interpersonal relationships. Research has demonstrated that children's social-emotional competencies are

pivotal determinants of their academic performance. Specifically, those who exhibit proficient social skills, such as cooperation, assertion, and self-control, tend to excel academically. These individuals are more inclined to engage actively in the learning process, cooperate constructively with teachers and peers, and effectively regulate their behavior (Maleki et al., 2019; Jones et al., 2015).

Between the ages of 6 and 8, children exhibit substantial cognitive development across various domains, marking a transition to concrete operational thought processes where they begin to think logically and rationally. At this stage, children improve their problem-solving skills, moving beyond mere memorization to incorporate critical thinking and logical reasoning. They start to grasp concepts like cause and effect, time, and number relationships. Significant advancements in children's language skills are also observed, as they learn to construct longer, more complex sentences and expand their vocabulary, enhancing communication and concept expression. This period further signals the formation of children's consciousness, as they begin to reflect on their cognitive processes, enabling them to analyze and modify their learning techniques. Children become more proficient at planning, following their progress, and identifying their strengths and weaknesses. Social interactions are essential for this cognitive development, as they foster moral reasoning, negotiation, and perspective-taking through cooperative play and group activities. As children familiarize themselves with academic challenges and the complexities of interpersonal interactions and moral issues, the cognitive improvements during these years lay the foundation for future learning. Since social connections and cognitive development are central to this transition, it is crucial that parents, teachers, and other caregivers provide supportive environments to encourage children's development. Play creates a safe space for children to explore, experiment, and take risks without fear of failure or rejection, as it is driven by their unique interests, preferences, and developmental needs. Extensive research has documented the benefits of play for children's well-being, including enhanced social skills and cognitive abilities (Sando et al., 2021; Zhao et al., 2019). Children who engage in enriching play experiences build a strong foundation for learning, develop greater self-awareness, and gain the ability to navigate social situations more effectively as they grow older (Fyffe et al., 2022; Zhao et al., 2019). However, it remains critical for teachers or parents to understand how to most appropriately prepare the environment for children's quality play experiences. Kemple et al., (2015) emphasize the importance of using appropriate teaching strategies through play to meet children's learning and development

needs in their early years. Children can engage in play in various settings, such as school, home, and community environments. However, some children may face limitations in effectively accessing these play settings, such as over-structured curricula activities, lack of complex materials, and sparse peer interactions (Alharbi & Alzahrani, 2020). Nothing can compare to the holistic, authentic, and risk-free experience of learning through play. By fostering both social and cognitive growth, parents and educators lay the groundwork for children to flourish as capable, compassionate, and involved adults in their communities and beyond. Recognizing and supporting children during this life-changing time can have a beneficial impact that lasts a lifetime, underscoring the importance of purposeful and accurate involvement in their development (Wang et al., 2016).

1.2 TRADITIONAL GAMES ON SOCIAL DEVELOPMENT

Traditional games are recreational activities without standardized rules, yet reflective of cultural and social values, evolve over time and are subsequently passed down through generations (Febrianto et al., 2022). This type of game can typically be played by individuals of all ages, yet it is predominantly engaged in by children (Mulyani, 2016). Because of its cultural values and beliefs, traditional games play a pivotal role in equipping children with the necessary skills for life (Baradaran et al., 2018). These games can be readily incorporated into a wide range of settings without the need for advanced or costly equipment (Gheiji et al., 2014; Andam et al., 2015). Melianasari and Suparno (2018) state that traditional games have evolved and developed since ancient times, with each region having its own traditional game. All forms of play or games for children positively contribute to their development. Games that are deeply rooted in cultural traditions offer numerous benefits for child development, including the cultivation social skills. (Oznur & Ejdan, 2019; Puspitasari et al., 2021; Febrianto et al., 2022). According to Putra & Hasanah (2018), traditional games encompass values such as democracy, education, courage, health, unity, and morality. Groll et al., (2015) & Puspitasari et al., (2021) identify cultural values within traditional games, including fun or excitement, freedom, friendship, democracy, leadership, responsibility, togetherness and mutual assistance, obedience, proficiency in counting, and honesty and sportsmanship.

The process of acquiring the abilities, dispositions, and behaviour required to communicate with people and contribute to society is known as social development. Social development encompasses critical facets of human interaction, as it enables individuals to cultivate meaningful social relations and strengthen interpersonal bonds (Dewi & Mayar, 2022). This is crucial for children as they learn to conform to the standards, values, and

customs of their group. Social development provides opportunities for personal growth, skill development, and contributing to one's family and community. It focusses on enhancing the well-being of individuals and establishing conditions that allow them to achieve their greatest potential (Raval, 2023). According to the APA Dictionary of Psychology, social development is the gradual acquisition of the abilities, dispositions, interactions, and behaviours that enable a person to engage with others and contribute to society. Through play, children learn to establish relationships, participate in ongoing activities, maintain relationships, overcome rejection, observe others, understand behaviour, reduce shyness and introversion, and develop reconciliation skills (Ates, 2016). Through play, children can identify diverse views, gain empathy and acceptance, and learn from each other's experiences and viewpoints. Peer interactions also help children recognise their own and other individual strengths and shortcomings (Tugrul, 2016).

Traditional games constitute a learning resource that facilitates the holistic development of children, encompassing their social, and other essential developmental domains (Gul, 2023; Melianasari & Suparno, 2018). These games impart knowledge, foster personality growth, and stimulate social skills in children of early childhood serving as educational instruments, instructing children in a variety of competencies (Ali & Samad 2020; Andriana & Evans, 2020). They enable the acquisition of skills such as learning to manage success and failure, cultivating sensory capacities, practicing numerical operations, enhancing motor abilities, identifying colors, and improving hand-eye coordination, all within an enjoyable learning context. Compared to modern games, traditional games offer greater value, including environmental sustainability, the opportunity to learn about culture and history, and age-appropriateness that encourages intergenerational interaction (Gulia & Dhauta, 2019). Recreational activities such as traditional games can serve as a counterbalance to the routinized nature of student learning, offering opportunities for enjoyment and potentially mitigating boredom among pupils (Febrianto et al., 2022). Handayani (2017), explains, traditional games can enhance children's social skills within their environment, significantly influencing their growth and development and offer valuable opportunities for children to gain knowledge and appreciation of the natural environment. These activities can foster children's understanding and respect for the natural world, which can be highly beneficial for their development. In fact, children frequently mimic and pick up knowledge from their surroundings, including peer pressure, which helps them develop holistically. Similarly, traditional games represent a crucial learning strategy for children and equip

children with the skills to confront and resolve problems, familiarize them with their surroundings, enhance their self-awareness, and distinguish between reality and fantasy (Jafari, 2014; Baradaran et al. 2018). Therefore, the educational values inherent in traditional games are inseparable from their benefits (Erlangga, 2022).

Children learn vital social skills through traditional games that enable children to build healthy connections with others, acquire self-control, collaborate with others, and respect others' rights as much as they respect their own. Traditional games also allow children to internalize the social values of their community. Additionally, these activities give children the chance to practise sharing, following rules, and understanding competition and also helps gaining emotional self-control and the ability to follow instructions (Raval, 2023). Children that play such games are better able to adjust to their social surroundings and enhance social development in areas such as teamwork, collaboration and can even strengthen community bonds through shared experiences (Khaton et al., 2024; Tripathi, 2022). Research indicates that traditional games can positively influence the development of self-regulation abilities and peer interactions. The interactive elements of these games encourage children to collaborate, cultivating teamwork and communication skills. According to studies, traditional games exhibit significant improvements in social competencies, underscoring the efficacy of these activities in fostering cooperation and responsibility (Khaton et al., 2024). Through these games, children learn to have positive self-talk which instill positive values, including honesty, cooperation, sportsmanship, helpfulness, responsibility, and discipline among children (Puspitasari et al., 2021).

Engaging in traditional games can cultivate a strong sense of self-esteem in children, influencing their decision-making, social interactions, emotional health, and total quality of life. The optimistic outlook gained from success in these games motivates children to tackle new challenges. Confidence is a crucial skill that proves valuable across various aspects of life. Children's development and behavior are positively impacted by confidence. Play provides opportunities for learning, problem-solving, enjoyment, and enhanced self-confidence. It can also help children feel less stressed, anxious, and irritable, while boosting their happiness and self-esteem and have a high sense of self-worth are content with their achievements and are more confident in their ability to succeed in the future (Raval, 2023). Additionally, they feel more accepted by both themselves and their peers. Traditional games continue to shape children's social development, even as they are overshadowed by modern digital games. Children can learn a variety of social and interpersonal skills through these

games, such as learning rules and structures, solving problems, combining ideas from past experiences in new ways, becoming adaptable and empathetic towards others, and improving their cooperative skills (Tripathi, 2022).

In early childhood, games not only provide enjoyment but also facilitates social adjustment (Yilmaz & Griffiths, 2023). Research has identified seven key social skill aspects developed through traditional game activities: cooperation, adaptation, interaction, self-control, empathy, rule-following, and respect for others' perspectives Nugraha et al. (2018). Additionally, navigating challenges and negative emotions on the playground helps children learn to manage frustration and depression effectively. Traditional outdoor games foster a variety of abilities, including communication, self-reliance, curiosity, balance, coordination, and the ability to deal with challenging circumstances. Studies have shown that children's generosity towards friends, rather than strangers, highlights the influential role of social interactions on their behavior (Scharpf et al. 2017). Social skills are essential for successful socialization in everyday life, enabling individuals to express their feelings and problems with courage, while finding adaptive solutions and avoiding potential harms to themselves and others (Ali et al., 2021). Children gain valuable social and ethical skills more readily when they enjoy their peers' company and learn how to work together and get along with others, as well as the fundamentals of social interactions (Tugrul, 2016). Furthermore, children internalize social norms such as respecting others, safeguarding rights, fulfilling responsibilities, and developing decision-making and implementation abilities. When children engage in playful activities, they acquire fundamental abilities that help them grow up to be socially proficient and well-adjusted adults (Majumdar, 2020).

Children learn social skills through imitation and habituation within their closest environment, namely their family. These skills do not magically appear overnight, early childhood education is primarily conducted in the home setting (Ali et al., 2021). Families must collaborate to facilitate physical activities which can be provided through traditional games, preventing boredom and increasing children's activity levels. Traditional games, aside from being age-appropriate and safe, are cultural assets that offer various advantages and moral lessons. To promote traditional games and children's social development, such games can be introduced to young children in a family context. Children can play within the home environment to cultivate their social skills, as they are highly accustomed to playing in their daily lives. Previous research by Garaigordobil et al. (2022), has shown that playing cooperative games with children helps them interact with peers and exhibit better self-control

in social situations. Moreover, teaching traditional games to early childhood children during primary school period has demonstrated a significant bond between the classes outside the classroom, evident in the increased frequency and quality of socialization (Kovacevic & Opic, 2014). Children's growth and development are heavily dependent on their ability to interact with others. Those struggling with social skills may find it challenging to make friends and may become socially isolated, as they interact less with their surroundings (Kovacevic & Opic, 2014). Children's age 6 to 8 represent a critical period for children's social skill development, both within the home and school settings. During this time, children demonstrate more awareness of their social setting and the perspectives of others. Additionally, they exhibit increased capacities for cooperation, negotiation, and conflict resolution. Furthermore, children in this age range tend to establish more robust peer relationships. Children with strong social skills will be better equipped to interact and socialize with their environment, leading to the development of a positive self-concept (Krishnaveni & Shahin 2022; Tsangaridou et al., 2014). Traditional game-based learning may be a way for parents and educators to make character development easier for children. Traditional games promote virtues including integrity, accountability, fairness, regard for others, perseverance in achieving goals, friendship, teamwork, survival, self-control, and tolerance. These attitudes can be applied to character development in elementary school physical education classes that are based on traditional games (Masyhuri & Suherman, 2020). These abilities are crucial for cultivating robust interpersonal connections, achieving academic success, and navigating the intricate social landscape. Enabling children's engagement with traditional games represents an effective and pleasurable avenue to foster the development of these critical competencies.

1.3 TRADITIONAL GAMES ON COGNITIVE DEVELOPMENT

Cognitive development is the progress of a child's thinking, understanding, and information processing skills during the course of their early years. It involves the acquisition and enhancement of mental faculties, including perception, memory, learning, problem-solving, and language skills. This process is impacted by environmental and biological factors, with the cultural context playing a significant role. (Gauvain et al., 2011). According to Piaget's theory, intellectual development is a qualitative transformation, not merely a quantitative change. Cognitive development is facilitated by maturation and environmental engagement, as individuals progress through distinct developmental stages, each with unique characteristics and capabilities (Rabindran & Madanagopal, 2020). The cultural approach

highlights how a person's cognitive abilities are shaped by their social and cultural environment. As defined by the APA Dictionary of Psychology, it involves the growth and maturation of thinking processes of all kinds, including perceiving, remembering, concept formation, problem solving, imagining, and reasoning. It is crucial to evaluate, measure, and monitor cognitive function throughout an individual's life. Long-term health and improving one's general quality of life are significantly influenced by cognition. It encompasses the cognitive capacities to learn and understand via experience, cognition, and the senses. Understanding events and objects in the environment, storing and retrieving knowledge, making decisions, and responding appropriately are all made easier by cognitive development. Cognitive processes are vital for interpreting the world and interacting with our environment in a secure way.

Traditional games often involve using natural materials like sticks, leaves, fruit, seeds, and shells, providing endless opportunities for play. Engaging with these natural elements helps children develop an appreciation for the environment, as they observe the delicate shades, textures, and contours of the materials. Traditional games expose children to valuable life lessons and foster fond childhood memories, which are essential for holistic development (Tripathi, 2022; Puspitasari et al., 2021). Based on Piaget's cognitive development theory, traditional games involving physical activity and social interaction can stimulate all aspects of children's development (Pratama et al., 2020). These games typically require children to actively participate, move their bodies, and engage with others, which not only enhances their physical fitness but also encourages the acquisition of critical cognitive abilities like decision-making, problem-solving, and spatial awareness (Kohl et al., 2013). Research has shown that regular physical activity is associated with improved cognitive function and intelligence levels (Boat et al., 2022; Westfall et al., 2018; Erickson et al., 2015). Additionally, the World Health Organisation (2020) & Fonds Gesundes Osterreich (2020) advise children to be physically active for at least an hour each day. Additionally, research has shown that children who engage in physical activity surpass their inactive peers in executive functions like inhibition and planning. Additionally, playing physically demanding games impacts the right anterior prefrontal cortex, which is linked to cognitive control (Bidzan-Bluma & Lipowska, 2018). Accordingly, the intricacy of the physical exercise environment seems to play a crucial role in how children develop their cognitive abilities, and playing traditional games can support their cognitive development (Formenti et al., 2021).

Traditional games, deeply rooted in the cultural heritage of societies worldwide, have demonstrated a remarkable capacity to nurture cognitive development in children (Febrianto et al., 2022; Puspitasari et al., 2021; Masyhuri & Suherman, 2020; Oznur & Ejdan, 2019). Children can practise essential skills and abilities in an entertaining and relaxed environment by playing games. These games, often enjoyed in group settings or with peers, present children with a rich array of experiential learning opportunities that stimulate their mental faculties and encourage the development of abilities like critical thinking and problem-solving (Febrianto et al., 2022; Puspitasari et al., 2021). According to Piaget, cognitive structures need constant practice, and games provide the perfect setting for this kind of training. Children's engagement in traditional games enables them to transform their initial, often conflicting ideas into more sophisticated and well-developed concepts. Through their daily problem-solving experiences within these games, children cultivate and display their innate abilities to address various challenges (Iswinarti, & Suminar, 2019). Traditional games challenge children to concentrate, make decisions, formulate strategies, and progress through increasingly complex tasks. Furthermore, as they accumulate more experience, any dilemmas they face are more likely to be resolved efficiently (Sriwidayati et al., 2020; Oznur & Ejdan, 2019). Researcher McDonald (2017) have recognized the value of these problem-solving games in enhancing individuals' critical thinking skills and providing valuable insights to navigate daily life situations. Thus, the repetitive and incremental experiences inherent in traditional games powerfully nurture and refine children's cognitive abilities.

Participation in traditional games plays a pivotal role in enhancing memory development in children. These games engage children in activities that stimulate various cognitive processes. The games require children to recall and apply complex rules, sequence actions, and remember positions and strategies, which directly strengthens their working memory (Kolovelonis et al., 2022). The social interactions involved in these games foster memory as children recall shared experiences and strategies and need for sustained attention, rapid decision-making which further enhances cognitive flexibility, improving not only memory but also executive functions. The combination of physical movement, cognitive challenges, and social dynamics facilitates the development of strong memory that are foundational for learning and adaptive behavior. Thus, engagement in traditional games has been associated with improved cognitive skills, including memory, concentration, and strategic planning (Pradhana et al. 2024). Additionally, traditional outdoor games promote creativity and imagination, which are crucial for cognitive development. Research suggests

that creativity is the lived experience of expressing and actualizing one's unique identity in an integrated manner within relationships with the self, nature, and others (Munandar, 2012). In fostering early childhood creativity, traditional games are highly influential, as the world of children is fundamentally the world of play. The use of traditional games cultivates creativity in children when they are able to express themselves and create within the game context, rendering them creative (Khalidah, 2022; Mutmainna, 2018). Children bring their individual dispositions and realities to imaginative play, thereby bringing concepts to life that have a strong sense of imagination are more inclined to explore possibilities and express their emotions. Imagination is a basic and essential part of logical thinking, as Vygotsky noted (Fleer, 2011). Traditional games foster imagination, which is essential to the whole learning process since they link the mind and body to promote the growth of higher-order reasoning and critical thinking (Astarina et al., 2023). Subsequently, traditional games foster positive learning attitudes and opportunities for children to explore and learn through play, thereby enhancing their overall cognitive development (Raval, 2023; Matura et al., 2024). However, the increasing prominence of modern games has led to a decline in attention paid to traditional games. Playing games with children that are suitable for their social, emotional, and environmental needs helps improve their social and cognitive abilities (Aghajani et al., 2014; Baradaran et al., 2018).

1.4 MODERN GAMES ON SOCIAL DEVELOPMENT

Modern games are recreational activities conducted within a structured environment involving the utilization of play materials, toys, and electronic devices, governed by established rules and strategies (Azgara & Sutapa 2019). These games are purposefully structured to promote cognitive engagement and the acquisition of specific academic subjects or skills, enabling children to expand their conceptual knowledge and reinforce their overall developmental progress through the medium of play. Modern games frequently require the employment of particular play materials and components in order to enable and support the game experience. Play materials encompass a diverse range of objects, from basic elements like blocks and balls to more sophisticated toys and technology-driven tools. In modern games, play materials function as instrumental tools that enable children to engage in exploration, experimentation, and the development of essential skills. They offer a tangible medium through which children can interact with their environment, express their creativity, and cultivate their potential development. The selection of play materials significantly shapes the nature and type of play and learning experiences that unfold and selecting developmentally

appropriate play materials is crucial for optimizing their benefits. The chosen materials should prioritize safety, engagement, and alignment with the child's age and developmental stage. Open-ended play materials that offer versatile applications are particularly valuable, as they foster creativity and exploration among children.

Children's modern game exhibits a multifaceted nature, encompassing diverse forms and utilizing a variety of materials, each of which contributes to various aspects of development. For instance, construction and building blocks games involve the manipulation of materials to construct structures, objects, and designs. Common play materials utilized include blocks, construction sets (Zhang et al., 2020). Manipulative games like jigsaw puzzles consist of numerous interlocking pieces, often made of cardboard, that children utilize to analyze the shapes, colors, and patterns on the pieces and then assemble them to form a complete picture (Doherty et al., 2020). In addition, maze games can be played using printed maze books, where children can trace the path through the maze using pencils or crayons. Besides, children can engage with wooden, plastic, or magnetic maze toys. Children also participate in memory games, which present them with a deck of cards featuring pairs of matching images or symbols. By turning over two cards at a time and attempting to locate the corresponding pairs, they engage in a play-based learning activity that promotes both enjoyment and effectiveness (Sivakumar, 2022). Moreover, children also play matching game with cards that requires players to turn over pairs of cards to find matches. Seriation games often feature a range of wooden components, such as boards or tiles, that vary in size, length, or thickness. These game pieces can be arranged in sequential order, from smallest to largest, shortest to longest, or thinnest to thickest, encouraging children to develop their skills (Kidd et al., 2012). The checkers game features a board with a grid pattern and holes where the playing pieces are placed with the objective of moving one's pieces across the board and into the opposite side, allowing children to develop their potential skills and engage in enjoyable gameplay (Yisi et al., 2020). To play a crossword game, children use a board or scrabble-like game, placing letter tiles on a grid to create words that connect horizontally and vertically. Alternatively, they can use printed books to fill in the words in the blanks based on the theme, forming a crossword puzzle. Children need to take into consideration the meanings of the words when playing crosswords (Garaigordobil et al., 2022). In addition, children can play strategic board game Ludo where players compete to race their tokens from the starting position to the finish line, with the outcome determined by the roll of a single die. Thus, these diverse modern games encourage children to explore and learn effectively through trial and

error, actively engaging them and making the learning process more enjoyable and interactive (Abdul Razak et al., 2012).

Social development involves learning behaviors related to group participation and meeting social demands appropriate to one's developmental level (Agusniatih & Nirmala, 2020). The progression of social development in children involves the acquisition of skills and understanding that enable effective interpersonal interaction, relationship building, and successful navigation of social contexts. This multifaceted process encompasses the cultivation of empathy and perspective-taking, the learning to interpret and appropriately respond to social cues such as facial expressions and body language, as well as the development of effective communication abilities. Children learn to share, take turns, compromise, and resolve issues through cooperation and collaboration, which are also essential elements. Furthermore, social development encompasses self-regulation, involving the management of emotions and impulses, and moral development, wherein children establish a sense of right and wrong. Researcher emphasizes the importance of understanding how social competence unfolds across developmental stages, considering the interplay of underlying skills, changing social contexts, and the potential for both positive and negative outcomes (Junge et al., 2020).

The early social experiences lay a fundamental foundation for future academic success, emotional well-being, and overall adjustment to school and life (Likhar et al., 2022). Consequently, the incorporation of modern game-based learning activities, involving a range of play materials and targeting specific developmental domains, can serve as a valuable tool in promoting children's holistic growth and preparing them for the academic and social demands. Through intentional selection of appropriate play materials and by fostering opportunities for children to engage in collaborative play experiences, parents and teachers can encourage the development of vital social abilities that are crucial for children's success. Many play activities require children to engage with other children if they want to participate. For example, children are frequently required to cooperate or compete when playing board games and building blocks which in turn facilitates their learning of valuable interpersonal abilities such as sharing, taking turns, cooperating, and resolving conflicts. Research suggested that cooperative modern games involving various play materials enable children to cultivate strategies for social interaction and acquire competencies in domains like social skills, group cohesion, and problem-solving (Garaigordobil et al., 2022). For instance, board games have been found to enhance children's critical thinking, communication, decision-making, and

teamwork, thereby contributing to their social development (Yang & Lee 2024). Play materials that allow children express themselves and be creative can boost their self-esteem and confidence. For instance, playing jigsaw puzzles can boost children's self-esteem and confidence in their skills. It encourages social interaction among peers, facilitating teamwork and communication skills as children often collaborate to solve puzzles thereby helps in social development (Iklima 2022). Furthermore, a variety of modern games reduce undesirable social behaviours like aggression while promoting the growth of positive ones like sharing, negotiating, helping, and cooperating. Engaging in Ludo game with peers fosters the development of crucial social competencies in children, including the ability to take turns, adhere to established guidelines, and manage emotions associated with both success and failure. Additionally, the Ludo game has been shown to enhance players' logical reasoning, interpersonal capacities, and decision-making skills in uncertain situations (Sarankirthik et al., 2022). These games also teach children moral values by aiding them self-control and the internalization of social norms. Modern games that enable group play can develop essential communication skills by encouraging social connections and interactions with others. For example, participating in maze games often demands collaboration, which supports peer interaction and also enhance concentration and discipline, further mastering social skills among children (Christopher et al. 2019). Additionally, collaborative engagement in solving crossword puzzle games with peers or family members facilitates social interaction, interpersonal bonding, and effective communication (Gonul & Clement 2024). In fact, the cognitive challenge of solving crossword clues together may enhance children's emotional regulation and stress management abilities as they work together to overcome challenges. Overall, modern games with play materials or toys that allow children to interact with each other in a group settings provide valuable opportunities for developing important social skills among children.

1.5 MODERN GAMES ON COGNITIVE DEVELOPMENT

Modern games represent a structured form of play involving electronic devices or other materials, played within an environment that may have defined rules of engagement. These games are goal-oriented rather than solely physical exercise. Children engage in activities with a specific goal, task, or learning objective in mind. This is often accomplished through games that require children to follow certain rules in order to play, such as solving puzzles. These games facilitate the acquisition of new skills, as they keep children highly engaged and excited during the learning process. These games follow the rules and have a

clear goal or learning objective, along with a beginning and an end point. Additionally, modern games involve playing with or constructing three-dimensional materials like blocks, as well as manipulating toy materials, where children can decide what to create and how to use these resources which benefit children by fostering skills in specific areas that influence their brain development.

Prominent child development theorists, such as Piaget, Vygotsky, and Bruner, have posited that play is an effective means for cultivating a child's cognitive abilities (Aprianti & Nafiqoh, 2020). Play holds a vital role in children's progress, particularly in cognitive development, as it enables them to think and explore (Yasmin & Mayar, 2022). Through engaging with peers in modern games using play materials, children can draw strength from their peers and teachers, allowing them to attempt novel movements or confront challenges they previously feared (Mundelsee & Jurkowski, 2021). According to research, children's play offers the most natural setting for them to draw logical conclusions as they establish connections between their play-based experiences and knowledge to tackle subsequent problems. The richness and complexity inherent in play bolster children's convergent thinking skills. Modern games with play materials offer children opportunities for exploration, problem-solving, and creative expression, fostering cognitive development through hands-on learning and experimentation. Sutton-Smith posits that children's plays cultivate their representational capacities, through exploration enhancing analytical thinking, trial-and-error developing guessing skills, and construction fostering structural thinking. Piaget's perspective emphasizes the importance of allowing children the freedom to pursue their own interests and preferences while playing, as this supports their cognitive development (Aprianti & Nafiqoh, 2020). Children learn executive function skills and higher-order cognitive abilities through play, which lays the groundwork for developing complex academic competences (Ozturk & Aksu, 2019). The executive function domain includes important cognitive processes such as working memory, self-regulation, inner speech or "self-talk," the capacity to switch between multitasking and other skills, coordination, focus, planning, strategising, prioritisation, and initiating and maintaining tasks. These cognitive abilities, which are essential for later academic success are cultivated through play in young children (Gibb et al., 2021).

Engaging in modern games serves as an effective and enjoyable means of cultivating children's cognitive abilities. Children's thinking and problem-solving abilities are improved by these games, which also provide them the chance to try new things and learn by making mistakes. By engaging children in enjoyable activities, these games function as educational

resources and are a great way to engage children's minds and enhance their cognitive skills. Many games help children develop their problem-solving and decision-making abilities by including logical reasoning and thinking. For instance, puzzle games enhance cognitive skills by promoting logical thinking and concentration. Research indicates that children's engagement with puzzles demonstrates improved problem-solving abilities and cognitive flexibility (Fathi & Mohammad 2024). Children learn to be patient and cooperate with other players as they practise these cognitive skills. Research also indicates that puzzle games positively impact language development in children and supporting their cognitive abilities (Zusanty et al., 2022). In addition to providing educational opportunities, modern games also present developmental opportunities where memory and attention spans can be doubled. Similarly, Maze games stimulate cognitive skills by encouraging children to navigate challenges, thereby enhancing their problem-solving abilities and understanding of spatial relationships (Faizah et al. 2023; Lige et al. 2022). Studies show that children who engage with maze educational tools demonstrate improved recognition of numbers and letters, indicating a direct link between maze play and cognitive growth (Lige et al. 2022). Collaboration is a common aspect of maze activities, which aids in the development of social skills like cooperation and communication in children. Crossword puzzles also significantly improve children's cognitive development. Engaging in these games fosters critical cognitive skills such as memory, problem-solving, and logical thinking (Nata et al., 2021; Aisyah, 2021). Specifically, they enhance working memory and overall cognitive function, which are crucial for effective learning and development. As children deduce answers from clues, they not only improve their problem-solving abilities but also develop strategic thinking skills (Ruiz-Garcia et al. 2024). Moreover, crossword puzzles encourage critical thinking by prompting children to make connections between words and concepts, which is essential for exploring relationships and challenging existing ideas. Furthermore, Ludo game aids in developing number concepts, spatial awareness, and basic mathematical understanding in young children (Kore et al., 2020). Thus, modern games hold immense potential as educational tools and developmental aids, as they collectively cultivate and strengthen the cognitive development of children.

1.6 THEORETICAL FRAMEWORK

1.6 (a) Piaget's Cognitive Development Theory

Piaget's theory focusses on how children actively use cognitive processes to develop their understanding of the world. The theory is based on the idea that children develop via the

following stages: sensorimotor, preoperational, concrete operational, and formal operational (Babakr et al., 2019). Each phase signifies a significant shift in thinking and is characterized by distinct cognitive capabilities. For children aged 6-8, this typically corresponds to the concrete operational stage, a period marked by significant advancements in logical thinking. During this stage, children develop the capacity for operations, which are mental actions that are reversible and organized into systems. This allows them to perform mental manipulations, such as classifying, seriating, and conserving, which were previously impossible during the preoperational stage (Yongjin et al., 2021; Aspiranti, 2011). A key characteristic of the concrete operational stage is the decline of egocentrism. This shift is crucial for social interaction and cooperative play. Jean Piaget's hypothesis states that play is a mental activity in which children actively combine their experiences and knowledge to construct their understanding of the world. Piaget highlights the importance of the child's internal knowledge-organization process, arguing that learning must be accomplished through the child's interactions with their surroundings and mental processes rather than being merely imparted from the outside (Adak-Ozdemir & Kocyigit, 2019; Tugrul, 2016). According to Piaget, children's interactions with their social and physical environments are crucial for promoting cognitive development. The approach emphasises the value of children actively exploring and interacting with their surroundings (Rubtsov, 2020). Children gain a greater capacity to coordinate different points of view during the concrete operational stage, which enables more intricate and dynamic play scenarios, even though some egocentric inclinations may still exist. According to the cognitive viewpoint, play is a cognitive activity that fosters the growth of children's imagination, creativity, and problem-solving skills (Weber et al., 2019). Traditional and modern games require children to negotiate, cooperate, and resolve conflicts. They learn to take turns, follow instructions, and accept winning or losing gracefully. These social interactions provide valuable experiences that promote social competence. Piaget's theory highlights how active participation of children can experiment with their developing cognitive skills in a natural and entertaining setting through play, which actively helps them build their knowledge and comprehension of the world and promotes improved cognitive and developmental outcomes.

1.6 (b) Bruner's Theory of Cognitive Development

Bruner's theory of cognitive development stands apart from other stage-based theories, as it recognizes that even young children can master complex concepts with appropriate instructional support. The importance of active learner involvement and

interaction with the learning environment is emphasised by this well-known framework in child pedagogy. According to psychologist Jerome Bruner's concept, teachers should scaffold children's learning processes so that they might progressively be prepared to handle increasingly complex concepts (Jinzhi & Xuejun, 2024). Bruner's theory emphasises the significance of arranging data into meaningful patterns, or "schemata," and the part language plays in influencing cognitive development. Three modes of representation—enactive, iconic, and symbolic—were put forth by Bruner to explain how children engage with and represent the world at various developmental stages (Yilmaz, 2011). For children aged 6-8, the transition from iconic to symbolic representation is particularly relevant. Crucially, Bruner stresses that children's play develops their imagination, inventive behaviour, and adaptability. As children develop new behavioral combinations through play, they can apply these in real-life problem-solving, cementing these useful patterns in their memory. Thus, play grants children the flexibility to explore a range of behavioral options. According to Bruner's idea, educators and carers should so carefully choose games and play activities that are appropriate for the child's current stage of cognitive development. Bruner posits that children progress through a sequence, initially engaging in motor-based performance, then transitioning to constructing mental images, and finally developing the use of symbolic language. Consequently, learning strategies that start with motor-based exercises are probably going to be more successful in promoting young children's development. To illustrate, children in Iconic Representation (6-7 years) stage rely heavily on mental images and visual representations to understand concepts. Traditional games and modern games with play materials that involve visual elements can be particularly effective in supporting their learning. For instance, in a traditional Assamese game 'kutkut', the numbered squares provide visual cues, enhancing spatial reasoning as children navigate the course. Hopping and jumping movements improve gross motor skills and body awareness. Following the sequence of numbers strengthens numerical recognition and counting skills. Social interaction during group play promotes turn-taking and rule-following. Moreover, 'kutkut' fosters mental imagery as children visualize the course and plan their moves, contributing to their overall cognitive and social development. Moreover, modern games like building blocks provide a concrete way for children to manipulate and represent their ideas. They can build structures, create patterns, and experiment with spatial relationships, fostering their understanding of geometry and problem-solving skills. As children progress through Symbolic Representation stage (7-8 years and beyond), they begin to use symbols, such as language and numbers, to represent and manipulate information.

Traditional games and modern games with play materials that incorporate symbolic elements can support this transition. Traditional games require interaction with peers as those games are played in group promoting rule-following, strategic thinking, and social interaction and conflict resolution. These games encourage children to use language to express their ideas and participate, further developing their symbolic thinking and communication skills. Additionally, modern games such as checkers, ludo, zigsaw puzzle etc. often involve rules, strategy, and symbolic representation of information. These games require children to think critically and plan ahead, developing their logical reasoning and problem-solving skills. These activities encourage children to use language to express their ideas and create narratives, further developing their symbolic thinking and communication skills. Thus, by understanding Bruner's theory and its implications for play, parents and educators can create enriching play experiences that support children's cognitive and social development.

1.6 (c) Vygotsky's Sociocultural Theory

Vygotsky's sociocultural framework elucidates how learning and development are embedded within a broader sociocultural context (Daneshfar & Moharami, 2018). This viewpoint emphasises how language, cultural artefacts, and social interactions all have a significant impact on cognitive processes. Vygotsky's Zone of Proximal Development theory highlights that learning happens when adults with greater experience offer children support and scaffolding to help them attain higher understanding levels (Esteban-Guitart, 2018). The sociocultural approach highlights the pivotal functions of social connections, language, and cultural tools in shaping thinking and behavior of children and fostering cognitive and social development (Alkhudiry, 2022). Early childhood play helps children form social bonds, learn how to communicate, and absorb cultural norms and values (Kaizar & Alordiah, 2022). It can encourage collaboration, empathy, and compromise, which advances the development of social skills and intercultural comprehension (Parker et al., 2022). For children ages 6 to 8, culture is essential because it offers a framework for learning and comprehending the world. They learn in the zone of proximal development through interactions with adults and peers in their culture. Culture provides a sense of belonging and identity, influencing their self-esteem and social interactions. Therefore, a culturally rich environment is essential for optimal development during this age. Traditional games, passed down through generations, embody cultural knowledge and practices, providing a social context for learning. As children interact with peers and more knowledgeable individuals during these traditional games, they internalize cultural rules and strategies, fostering higher mental functions. For example, social

negotiation is a component of complex Assamese games like "ganga rani" and "rumal sur," which are consistent with Vygotsky's focus on the zone of proximal development and the social roots of learning.

Similarly, the collaborative nature of many traditional games promotes communication, cooperation, and shared understanding. Vygotsky's sociocultural theory is crucial for children aged 6-8 as they engage with play materials because it emphasizes the social and cultural contexts of learning. During this period, children's cognitive development significantly benefits from interactions with peers and more knowledgeable individuals, such as parents or teachers. Play materials act as mediators, facilitating the internalization of cultural knowledge and skills. Collaborative modern games with materials within the zone of proximal development allows children to learn from each other and receive guidance, fostering language development, problem-solving abilities, and symbolic thinking (Hennig & Kirova, 2012). These play materials serve as cultural tools, mediating learning and Collaborative activities, such as solving jigsaw puzzles or crosswords, foster communication and shared understanding, with the guidance of more knowledgeable others within the zone of proximal development helping children master new skills and concepts. Thus, play, whether with traditional or modern games becomes a social and cultural activity, driving social and cognitive change in accordance with Vygotsky's theory.

1.6 (d) Erikson's Psychosocial Theory

The study of psychological theory looks at how people relate to one another and the mental processes that underlie these connections. Children develop psychosocially when they connect with people, build relationships, and learn to recognise and control their emotions. Erikson proposed that personality develops through a predetermined sequence of eight psychosocial stages from infancy to adulthood. In this theory, children aged 6-8 years are in the "Industry vs. Inferiority" stage, where they begin to develop a sense of competence and mastery. At this stage, children are actively engaged in learning and accomplishing tasks, particularly in school and social settings. They desire recognition for their achievements, which contribute to a sense of industry. Encouragement and praise for their accomplishments are essential, as success reinforces their belief in their ability to achieve goals. But persistent failure or a lack of support can cause inferiority complexes that impact their self-worth and have a lasting effect on their personality. Positive reinforcement, skill-building, and a supportive environment are therefore critical to fostering their psychosocial development. In

order to help children move from one stage to the next in a healthier way, Erikson argues that play helps them meet their needs by enacting scenarios from the past, present, and future and dramatising their fears, anxieties, and desires (Bardak & Topac, 2019). Traditional games offer children aged 6-8 years structured opportunities to develop skills and experience accomplishment, fostering a sense of industry. Successfully navigating game rules, collaborating with peers, and achieving game objectives reinforces their competence and self-efficacy. Moreover, modern games encourage exploration, problem-solving, and skill development, further strengthening their self-belief and sense of accomplishment. This positive reinforcement helps them navigate the "Industry vs. Inferiority" stage and develop a strong sense of self-efficacy. Therefore, Erikson advised that teachers and parents must nurture the industrious tendencies in their children by providing ample opportunities and encouragement to experience the pleasure of their work.

1.6 (e) Parten's Theory of Play

Parten's theory posits that children's play progresses through specific stages related to their age and social development. These stages follow a hierarchical pattern, with the emergence of each new stage building upon the previous one. However, behaviors from earlier stages may persist even in the later stages. Parten categorized play into six basic types, with two being non-social and four being social play behaviors (Bardak & Topac, 2019; Tugrul, 2016). In the cooperative play stage, children work together in a group towards a shared purpose and create a product. This stage involves more rule-based play and increased communication and social skills, potentially leading to a division of labor and responsibilities among the children. As the influence of egocentrism decreases, children become better able to understand and follow rules, recognizing that others have a say as well. The plays in this stage resemble adult activities, preparing children for the future (Bardak & Topaç, 2019). A popular paradigm for comprehending young children's social interaction behaviours is Parten's theory of social play. Children can connect with others and develop social skills through social play, which also offers a setting for concurrent learning of several skills like literacy, impulse control, and problem-solving (Lee et.al 2022). Parten's theory highlights the importance of play for social development in early childhood (6-8 years). Children progress through stages, from solitary to cooperative play. Cooperative play, prevalent in this age group, involves shared goals, rules, and roles within a group. This type of play fosters crucial social skills like communication, collaboration, and problem-solving (Thomson & Victoria, 2017). It helps children understand perspectives beyond their own, manage conflicts, and

develop a sense of belonging. Traditional games, which frequently involve cooperative play, have a major positive impact on children's social and cognitive development. As children engage in cooperative play, they negotiate roles, rules, and shared goals. This process enhances communication, collaboration, and conflict-resolution skills, fostering social competence. Simultaneously, these games often require strategic thinking, problem-solving, and memory, stimulating cognitive development. Furthermore, modern games involving play materials can encourage cooperative play, fostering both social and cognitive development in children. Manipulating shared materials necessitates negotiation, communication, and turn-taking, enhancing social skills. Jointly constructing or engaging with games like puzzle, maze, board games promote collaboration and shared goal-setting, further developing social competence. These games often involve problem-solving, symbolic representation, and creative expression, stimulating cognitive development. While Parten's stages aren't strictly linear, the shared focus inherent in these games provides a rich context for holistic development. Nevertheless, certain children might not adhere to Parten's hierarchical model of social play, with parallel play and other lower levels of social play not always diminishing with age (Xu, 2010). In addition to developmental factors, the cultural, environmental, and social changes that followed Parten's seminal work might have contributed to changes in how children display social play behaviours and how academics understand play in various historical periods (Ethridge et al., 2022; Bertrand et al., 2008).

1.7 NEED OF THE STUDY

Technology has gradually exerted its influence across numerous aspects of our lives, encompassing entertainment, work, and leisure. The current generation has been extensively shaped by technological advancements, with children demonstrating proficiency in computer skills at increasingly younger ages. Today's children are accustomed to a wide array of digital devices, such as smartphones, tablets, and laptops, owing to these technological developments. Concerningly, the duration of screen time among children worldwide is on the rise (Paldiwal et al., 2024; Saunders et al., 2014). The growing demand for mobile devices has also fueled interest in mobile applications and games (Goksu et al., 2020). Studies have revealed that children's engagement with online video viewing and digital gaming has become widespread in recent years (Calhan & Goksu 2024; Isikoglu et al., 2025). Excessive screen time can have detrimental effects on children, including inattention, irritability, tantrums, and poor academic performance. The hormone melatonin, which promotes sleep,

may also be suppressed, delaying the onset of sleep and shortening its duration. Prolonged digital gaming can expose children to short wavelengths and high-energy blue light, potentially causing sleep disturbances, eye strain, redness, headaches, dryness, and musculoskeletal problems (Pandey & Vaishnav 2023; Yang et al., 2023; NVISION, 2024). Early children exposure to excessive screen time has been linked to a number of negative consequences, such as increased sedentary behavior, unfavorable body composition, higher cardiometabolic risk, lower physical fitness, obesity, poor sleeping habits, unfavorable behavioral conduct, lower self-esteem, developmental abnormalities, and increased risk of non-communicable diseases later in life (Paldiwal et al., 2024; Shah et al., 2019; Tremblay et al., 2011; Davey & Davey 2014). Furthermore, excessive screen time, particularly from digital gaming, can lead to various psychological problems, such as poor concentration, memory loss, increased stress, and depression. Consequently, children may neglect social interactions and academic responsibilities, leading to diminished social skills and academic performance.

Compared to modern electronic games, traditional games have been found to be better in improving a range of life skills, including social interaction, communication abilities, emotional regulation, and conflict resolution skills (AshShiddiqi et al., 2020). Furthermore, the lack of exposure to traditional games may prevent children from opportunities to cultivate friendships and develop relationships through shared play experiences and as a unifying factor, their absence may result in a decrease in community involvement and companionship (Ali et al., 2024). These games also provide children with unique experiences while playing with peers, fostering creativity, enhancing concentration, problem-solving, and decision-making abilities. Additionally, they engage children on cooperation and teamwork, which enhances their social and cognitive abilities in the long run (Puspitasari et al., 2021).

Conversely, modern games like puzzles, board games, mazes, memory games and building block games can be a great approach to teach children new skills because they keep them really interested and motivated while they're learning. These games boost cognitive abilities including problem-solving, strategic thinking, and decision-making while also stimulating the parts of the brain involved in memory creation and complex reasoning processes (Sianipar et al., 2022). Moreover, these games can create opportunities for mathematical learning, computational thinking, and teamwork among children, helping to develop critical thinking, communication, empathy, and computational thinking skills through collaborative play, which can contribute to both social and cognitive development

(Rosa et al., 2021; Jesus & Silveira, 2019, Bayeck, 2020). This implies that although some digital interactions may have benefits, an excessive dependence on gaming and digital media can detract from crucial social and cognitive experiences, as well as emotional well-being, ultimately impacting the developmental outcomes of children in a detrimental way. Therefore, it is crucial to balance digital engagement with other enriching activities, such as traditional and modern games, to support more positive and inducing developmental outcomes for children.

According to Erikson, child's psychosocial development the "Industry vs. Inferiority" stage, which happens around the age of six. Erikson exposed a strong link between self-esteem and children's academic success and cognitive development. Children gain a sense of competence throughout this phase by having positive experiences. Healthy self-esteem, fostered by encouragement and achievement, fuels their motivation to learn and explore. Confident children embrace challenges, persist through setbacks, and develop stronger problem-solving skills, contributing to cognitive development. Conversely, low self-esteem can lead to fear of failure, hindering academic performance and limiting cognitive exploration. A positive self-image becomes a foundation for intellectual curiosity and academic achievement. Conversely, a negative environment can lead to feelings of inadequacy and inferiority, potentially resulting in social withdrawal or struggles with peer relationships. Therefore, creating a positive environment during this stage by providing praise and encouragement for children's efforts can help them feel confident in their abilities and achieve their goals. Providing a positive environment during this stage is crucial, as it allows children to develop a sense of competence and self-esteem by encouraging their efforts, acknowledging their accomplishments, and supporting their learning, which is vital for their overall self-image and future success. Given the significance of this developmental stage and the potential impact of various game environments, the researchers decided to investigate the study entitled "Effectiveness of Traditional and Modern Games on Socio-Cognitive Development of children in Biswanath, Assam" with the following objectives-

1.8 OBJECTIVES

Primary Objectives:

1. To analyse the effectiveness of Traditional, Modern and Blended games on socio-cognitive development of children (6-8 years)

Secondary objectives:

1. To assess social and cognitive development of children and to identify its predictor variables.
2. To plan and prepare intervention package on Traditional, Modern and Blended games.
3. To administer prepared intervention package among selected children.
4. To find out the effectiveness of interventions on social and cognitive development among children in experimental groups.
5. To identify the most effective intervention for social and cognitive development of children.

1.9 NULL HYPOTHESES

Based on the objectives framed, certain null hypotheses are formulated as given below-

- H₀₁- There is no significant predictors of Social Development among children.
- H₀₂- There is no significant predictors of Cognitive Development among children.
- H₀₃- There is no significant difference on Social Development among children in control and experimental groups with respect to Traditional games.
- H₀₄- There is no significant difference on Social Development among children in control and experimental groups with respect to Modern games.
- H₀₅- There is no significant difference on Social Development among children in control and experimental groups with respect to Blended games.
- H₀₆- There is no significant difference on Cognitive Development among children in control and experimental groups with respect to Traditional games.
- H₀₇- There is no significant difference on Cognitive Development among children in control and experimental groups with respect to Modern games.
- H₀₈- There is no significant difference on Cognitive Development among children in Control and Experimental groups with respect to Blended games.
- H₀₉- There is no significant difference between the interventions of Traditional, Modern and Blended games on Social Development of children.
- H₀₁₀- There is no significant difference between the interventions of Traditional, modern and Blended games on Cognitive Development of children.