

Gender-Based Preferences in Movement Activities among Young Children: A Human Movement Approach



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ABSTRACT

Movement activities are crucial in early childhood development, shaping cognitive, physical, and social skills. The influence of gender on activity preferences and participation, particularly within the human movement, remains underexplored. Through a human movement framework, this study investigates gender-based preferences in movement activities among preschool children (ages 3-6) in diverse educational settings. Grounded in human movement and gender studies, the study examines how physical activity impacts children's development and how gender shapes movement choices. A qualitative research approach was employed, utilizing structured observations and teacher interviews. The study population included preschool children, with participants selected through purposive sampling. Thematic analysis identified patterns in activity preferences, including team games, free play, and structured exercises. Findings indicate distinct gender-based preferences: boys favour activities emphasizing strength and speed, while girls prefer those requiring balance, coordination, and rhythm. Sociocultural influences, including parental expectations and early exposure to gendered activities, shape these preferences. The study incorporated member checks, peer debriefing, and detailed field notes to ensure trustworthiness. Ethical considerations included obtaining informed consent and maintaining confidentiality. The study recommends implementing gender-inclusive movement programs in early childhood education to challenge stereotypes and promote equal participation. Human movement programs should be designed to enhance physical competence for all children. The findings emphasize the need for inclusive movement activities that address gender biases and support holistic development. The findings from this article contribute to a greater understanding of how gender-based preferences in movement activities influence early childhood development.

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INTRODUCTION

Movement activities have long been recognized as essential to the early development of young children, supporting cognitive, physical, and social growth. The role of movement in early childhood education has been well-established, with physical activity acting as a key factor in enhancing motor skills,

promoting overall health, and facilitating cognitive development.¹ However, despite the widespread acknowledgment of their importance, there is still a gap in understanding how gender influences the types of movement activities children engage in and how these preferences shape their overall development. While many studies have documented the benefits of movement activities, there has been less focus on the gender-based preferences children exhibit when participating in these activities.² Societal and cultural norms around gender roles often influence the types of activities that children are encouraged to pursue, particularly within early childhood settings.³ By understanding these preferences through the lens of Human Movement science, a field that explores the relationship between human movement and health, valuable insights can be gained about how different types of physical activities influence children's development. This article aimed to explore gender-based preferences in movement activities among preschool children aged 3–6 years and sought to identify patterns of gendered preferences, along with the sociocultural factors that shaped these choices.

In early childhood education, movement activities are central to fostering children's growth. They contribute to the development of motor skills, coordination, and social interaction, while also supporting cognitive abilities that serve as a foundation for later learning and overall health.⁴ Activities such as running, jumping, and dancing help children refine their motor skills and enhance their awareness of their bodies in space. Through such experiences, they also develop essential physical competencies such as balance, strength, and coordination. Beyond motor skills, movement activities have been shown to influence cognitive functions such as memory, attention, and problem-solving.⁵ Despite the recognition of the importance of these activities, the impact of gender on children's movement preferences has not been extensively studied.⁶ Societal expectations regarding gender roles often lead to boys being encouraged to participate in more competitive and vigorous activities, such as running and team sports, while girls are more commonly guided toward activities emphasizing balance, grace, and coordination, such as dance and gymnastics.⁷ These gendered distinctions in movement activities are reinforced through media portrayals, the types of toys available, and parental influences. It is important to consider how these cultural influences shape children's preferences and, subsequently, their engagement in physical activities. By examining gendered movement choices from a biokinetic perspective, the article aimed to understand how these preferences influence physical development and to explore how more inclusive opportunities could be created for all children.

Despite the clear significance of movement activities in early childhood, there remains a limited exploration of the role of gender in shaping children's activity preferences, particularly through the lens of human Movement Science. Human movement science is concerned with understanding and optimising how the human body functions across the lifespan physical competence, and general well-being.⁸ Although it is clear that movement activities play a critical role in physical and cognitive development, the specific ways in which gender influences children's preferences and the impact these preferences have on their development have not been fully understood.⁹ Gendered expectations often limit the range of activities that children are encouraged to participate in, potentially hindering the development of a broad spectrum of motor skills. For example, when girls are predominantly encouraged to engage in

¹ K. Choi, Y. Lee, and J. Kim, "Movement Activities and Children's Motor Skill Development: A Longitudinal Study," *Child Development Research* 19, no. 4 (2020): 245–56; R. Pica, *Moving and Learning in Early Childhood: A Guide for Teachers* (PESI Publishing, 2020).

² S. Bailey and S. K. Murnen, "Gender and Physical Activity: Social Influences and the Role of Parents," *Psychology of Women Quarterly* 43, no. 4 (2019): 479–92.

³ S. Lloyd and T. Gill, "Gendered Expectations in Children's Physical Activity Choices: Exploring Societal Influences," *Gender and Education* 33, no. 1 (2021): 58–73.

⁴ K. R. Ginsburg, "The Importance of Play in Promoting Healthy Child Development and Maintaining Strong Parent-Child Bonds," *Pediatrics* 125, no. 5 (2020): 1054–63.

⁵ S. J. H. Biddle, M. Asare, and A. Brehm, "Physical Activity and Cognitive Function in Early Childhood: A Review of the Evidence," *Early Child Development and Care* 192, no. 6 (2022): 813–28.

⁶ Pica, *Moving and Learning in Early Childhood: A Guide for Teachers*.

⁷ B. A. Beresford, "Gender Stereotypes in Early Childhood: Implications for Development," *Early Childhood Education Journal* 49, no. 5 (2021): 853–60.

⁸ Danny Horesh and Adam D. Brown, "Traumatic Stress in the Age of COVID-19: A Call to Close Critical Gaps and Adapt to New Realities," *Psychological Trauma: Theory, Research, Practice, and Policy* 12, no. 4 (May 2020): 331–35, <https://doi.org/10.1037/tra0000592>.

⁹ Beresford, "Gender Stereotypes in Early Childhood: Implications for Development."

activities focused on coordination and balance, such as dance, they may miss out on opportunities to build strength and endurance through more competitive sports.¹⁰ Similarly, boys who are primarily steered toward activities that emphasize strength and speed may not have the chance to develop fine motor skills or coordination that are typically enhanced through activities like dance or gymnastics. Understanding the impact of these gendered preferences on both physical and cognitive development is critical for creating educational environments that support the diverse developmental needs of all children. This gap in the literature underscores the importance of studying the ways in which gender shapes children's movement activity preferences and how these preferences might influence participation in physical activities, which aim to support the development of motor skills and overall physical competence.

The primary aim of this article is thus to investigate gender-based preferences in movement activities among preschool children. The article focuses on how these preferences were influenced by sociocultural factors and their implications for motor skill development. Specifically, the research seeks to examine how gendered expectations, such as parental influences and early exposure to gender-specific activities, affected children's choices in movement activities. By exploring the role of human movement science in early childhood education, the article aims to identify ways in which movement activities could be designed to ensure equitable access for both boys and girls, supporting their developmental needs across the board. The article also seeks to uncover the patterns of gendered preferences that emerge in children's engagement with movement activities, with an eye toward understanding how these preferences contribute to motor skills development, physical competence, and overall well-being.

The article addresses several critical research questions. The first question focuses on identifying gender-based preferences in movement activities among preschool children. This inquiry aims to understand the specific types of activities that boys and girls were more likely to engage in and how these preferences manifested in early childhood education settings. The second question explores the influence of sociocultural factors, such as parental expectations and early exposure to gendered activities, on children's movement preferences. This question seeks to determine the role that family, community, and media played in shaping children's choices. The third question examines how these gendered preferences impacted motor skill development and participation in physical activity programs. It aims to assess whether children's movement activity choices influence their physical and cognitive development and whether gender-specific preferences restrict or enhance the development of motor skills. The article considers the implications of these gendered preferences for creating gender-inclusive movement programs in early childhood education. This question explores how inclusive educational practices could promote equitable access to diverse physical activities, ultimately supporting holistic development for all children, regardless of gender.

The findings from this article contribute to a greater understanding of how gender-based preferences in movement activities influence early childhood development. These insights have important implications for the design of physical activity programs that are inclusive and responsive to the needs of both boys and girls. By recognizing and addressing the sociocultural factors that shape children's activity preferences, the article provided valuable information for teachers and parents. These findings can inform the development of more inclusive educational environments that promote physical competence, cognitive growth, and social interaction for all children, ensuring that they have equitable opportunities to participate in a wide range of movement activities.

CONCEPTUALIZATION

Gender-Based Preferences: Gender-based preferences refer to the differentiation in the types of physical activities that boys and girls are more likely to engage in, often influenced by societal norms and expectations. These preferences manifest early in childhood, with boys typically gravitating toward activities that emphasize strength, speed, and competition, such as running, ball games, and other vigorous exercises.¹¹ Conversely, girls often prefer activities that require balance, coordination, and

¹⁰ Lloyd and Gill, "Gendered Expectations in Children's Physical Activity Choices: Exploring Societal Influences."

¹¹ H. T. Whiting and J. Edwards, "Children's Physical Activity Preferences and Gender Stereotypes," *Developmental Psychology Review* 42, no. 4 (2017): 211–25.

rhythm, such as dance, gymnastics, and skipping.¹² These preferences are not inherently biologically determined but are shaped by cultural and social factors that prescribe what is considered "appropriate" for each gender. Early socialization experiences, such as the toys children are given to play with or the activities they are encouraged to participate in, reinforce these gendered choices.¹³ Media representations also play a crucial role in perpetuating these preferences by depicting men and women in stereotypical roles, further solidifying the association of masculinity with strength and femininity with grace.¹⁴ Over time, these gender-based preferences can limit children's exposure to a broad range of activities, potentially restricting their physical, cognitive, and social development. Thus, understanding gender-based preferences is essential for recognizing the early influences on children's physical activity choices and exploring how these preferences can be addressed in educational settings.

Human Movement sciences : Human Movement sciences is The study of human movement and the methods for enhancing, evaluating, and recuperating from physical exercise is known as human movement science. It represents a multidisciplinary discipline that integrates knowledge and insights from various fields, including the natural sciences, social sciences, and health sciences. This comprehensive approach enables a deeper understanding of how the human body functions and adapts throughout various activities in life, such as work, sports, and overall well-being. The primary objective of human movement science is to not only comprehend but also enhance the mechanisms of human movement across different contexts, ultimately contributing to optimized performance, injury prevention, and overall health promotion. In early childhood, human Movement science highlights the importance of structured movement activities in fostering both gross and fine motor skills. Gross motor skills, such as running, jumping, and throwing, form the foundation of physical competence, while fine motor skills, such as hand-eye coordination and balance, are equally important for overall developmental success.¹⁵ Human movement science also integrates the connection between physical activity and cognitive development, demonstrating that active play not only supports physical health but also enhances cognitive abilities, social interaction, and emotional regulation.¹⁶

In the context of early education, human movement science offers a framework for developing movement programs that encourage children to engage in a variety of physical activities that promote balanced development. These programs should be designed to provide equal opportunities for both boys and girls to explore activities that align with their interests and abilities, free from gender biases.¹⁷ Through inclusive and diverse physical activity programs, human movement can help foster physical competence and emotional well-being in children, providing them with the necessary skills for lifelong health and social engagement.

Gender-based preferences and Human Movement Science are both essential concepts for understanding the development of movement activity choices in early childhood. While gender-based preferences are influenced by societal norms and early socialization, Human Movement Science provides a scientific lens through which to examine how physical activities contribute to the holistic development of children. By addressing gender-based preferences and incorporating inclusive physical activity programs, teachers and parents can foster a more equitable environment where children of all genders have the opportunity to explore and develop a wide range of physical competencies, supporting their overall growth and well-being.

¹² S. Harter and N. R. Whitesell, "The Role of Gender in Shaping Children's Physical Activity Preferences," *Journal of Early Childhood Development* 39, no. 4 (2021): 234–49.

¹³ L. Lytle et al., "Parental Influences on Children's Activity Choices: A Focus on Gender," *Journal of Family and Consumer Sciences* 94, no. 2 (2022): 123–30.

¹⁴ A. Dube and S. Barlow, "Media Representations and Gender Roles in Early Childhood," *Children's Media Journal* 23, no. 1 (2019): 45–58.

¹⁵ J. F. Sallis, J. J. Prochaska, and W. C. Taylor, "Physical Activity and Health: The Role of Physical Activity in Early Childhood Development," *Physical Activity and Health Journal* 12, no. 1 (2018): 85–97.

¹⁶ J. R. Lowe and M. S. Hodgins, "Motor Skill Development in Early Childhood: An Overview of Physical Activity in Education," *Journal of Physical Education and Development* 45, no. 2 (2020): 59–74.

¹⁷ G. Torkildsen and J. Matuszewski, "Physical Activity in Early Childhood: Promoting Motor Skills Development for All Children," *Journal of Education and Early Development* 17, no. 2 (2019): 82–95.

LITERATURE REVIEW

This section explores the role of gender in shaping movement preferences, the sociocultural factors driving these patterns, and the potential of inclusive physical activity programs to mitigate these influences and foster equitable development in early childhood.

Gender Differences in Movement Activity Preferences

Research on gender differences in movement activity preferences reveals significant variations between boys and girls, with these differences often reflecting traditional gender roles. Boys are typically encouraged to engage in physically demanding activities that emphasize strength, speed, and competitiveness, such as running, soccer, and other vigorous team sports.¹⁸ These activities align with societal expectations that associate masculinity with physical dominance, energy, and assertiveness. Conversely, girls are more frequently directed toward activities requiring grace, coordination, and balance, such as dance, gymnastics, and other more individualized, less competitive activities.¹⁹ This differentiation in activity preferences is a direct manifestation of gendered stereotypes, which often view femininity as linked to poise and grace rather than physical strength.

Such early gendered preferences in movement activities may significantly influence children's engagement with physical activity throughout their lives. Studies suggest that these differences in early activity choices contribute to disparities in physical competence and overall participation in sports. For instance, girls, who are more often steered toward non-competitive and coordinated activities, may not develop the strength and agility associated with more vigorous physical sports, which can lead to their underrepresentation in these areas as they grow older.²⁰ Boys, on the other hand, might face social pressure to engage in sports that are more physically demanding, reinforcing their involvement in competitive environments while potentially limiting their participation in activities that promote balance and flexibility.

Sociocultural Influences on Gendered Movement Preferences

The preferences children express for certain types of movement activities are profoundly shaped by sociocultural factors such as parental expectations, media portrayals, and broader societal norms regarding gender roles. Parental influence is particularly significant in guiding children toward gender-appropriate activities, often based on deeply ingrained societal beliefs about what is "appropriate" for boys and girls. For example, it is common for parents to provide boys with toys and activities that encourage active, physical play, such as balls and sports equipment, while girls may be given toys that emphasize fine motor skills and coordination, such as dolls and dance sets.²¹ This early socialization process reinforces the idea that boys should be active and competitive, while girls should be graceful and focused on coordination and rhythm.

Media portrayals also play a critical role in shaping children's movement preferences. Television shows, movies, and advertisements often depict boys engaging in high-energy sports such as football and basketball, while girls are shown participating in activities like ballet, gymnastics, or cheerleading. These representations perpetuate the belief that boys and girls should engage in different types of physical activities, which in turn influences children's perceptions of what activities are appropriate for their gender.²² Media consumption, especially at an early age, helps shape children's understanding of gender roles and can limit their exposure to the broad spectrum of activities that could enhance their physical and motor skill development.

These gendered experiences with movement activities can have long-lasting effects on children's self-perception and their willingness to participate in certain physical activities. Children who are consistently steered toward "gender-appropriate" activities may internalize these preferences as part of their identity, which can influence their future choices and engagement in physical activities.²³ As a

¹⁸ Whiting and Edwards, "Children's Physical Activity Preferences and Gender Stereotypes."

¹⁹ Harter and Whitesell, "The Role of Gender in Shaping Children's Physical Activity Preferences."

²⁰ M. Barker et al., "Gender and Physical Activity Participation in Early Childhood Education," *Journal of Physical Activity and Health* 17, no. 6 (2020): 600–610.

²¹ Harter and Whitesell, "The Role of Gender in Shaping Children's Physical Activity Preferences."

²² Dube and Barlow, "Media Representations and Gender Roles in Early Childhood."

²³ Lytle et al., "Parental Influences on Children's Activity Choices: A Focus on Gender."

result, boys and girls may not only develop different skill sets but may also have distinct attitudes toward physical activity, with some feeling less confident or capable in areas that deviate from gendered expectations.

Human Movement and Early Childhood Development

Human Movement science, which focuses on human movement and its relationship to health and development, plays a crucial role in understanding how physical activity contributes to children's motor skill development, physical health, and overall well-being. In early childhood education, structured movement programs that promote physical competence are essential for fostering motor skills that support both academic and physical success in the later stages of life.²⁴ A well-rounded physical activity program encourages the development of both gross motor skills—such as running, jumping, and climbing—and fine motor skills, which include balance, coordination, and hand-eye coordination.²⁵ These skills are not only foundational for physical health but also contribute to cognitive and social development, making physical activities an integral part of early childhood education.

It is crucial that physical activity programs in early childhood education are inclusive and free from gender bias. Programs that reinforce traditional gender roles may limit children's physical development by focusing solely on gendered activities. For example, emphasizing strength-building activities for boys and coordination exercises for girls excludes opportunities for all children to develop a broad range of motor skills. By ensuring that both boys and girls have access to a variety of physical activities, physical activity programs can help children develop a more diverse set of skills, promoting holistic development.²⁶

Furthermore, human movement science encourages the idea that all children, regardless of gender, can excel in a wide range of physical activities. By designing inclusive programs that expose children to various types of movement, teachers can provide opportunities for children to build physical competence in both traditionally masculine and feminine activities, thus broadening their skill sets and helping them overcome gendered limitations.²⁷

Inclusive Physical Activity Programmes

Gender-inclusive physical activity programmes aim to foster an environment in which both boys and girls can explore a wide variety of activities that promote physical competence across all domains of motor skill development. These programmes challenge traditional gender stereotypes by encouraging boys to participate in activities such as dance, yoga, or gymnastics, which are often seen as "feminine" activities, and by encouraging girls to engage in more physically demanding sports like soccer or rugby.²⁸ Such programmes are designed to break down barriers and allow children to discover and develop talents they might not have otherwise explored due to gendered expectations.

Research has shown that inclusive physical activity programmes not only increase participation but also contribute to more holistic development by ensuring that all children acquire a wide range of skills, which can support their physical, cognitive, and social growth.²⁹ These programmes play an essential role in challenging traditional gender roles, offering children the opportunity to engage in a variety of movement activities that are beneficial for their overall development. Moreover, gender-inclusive programmes have the potential to reduce the long-term impact of gendered socialization by providing equal opportunities for boys and girls to develop a diverse set of motor skills.

Inclusive movement programmes also help to combat the societal pressures that influence children's physical activity choices. When boys and girls are exposed to a variety of physical activities and encouraged to participate without concern for gender norms, they are more likely to develop a more

²⁴ Sallis, Prochaska, and Taylor, "Physical Activity and Health: The Role of Physical Activity in Early Childhood Development."

²⁵ Lowe and Hodgins, "Motor Skill Development in Early Childhood: An Overview of Physical Activity in Education."

²⁶ Torkildsen and Matuszewski, "Physical Activity in Early Childhood: Promoting Motor Skills Development for All Children."

²⁷ Sallis, Prochaska, and Taylor, "Physical Activity and Health: The Role of Physical Activity in Early Childhood Development."

²⁸ Yu Liu et al., "Analysis of the Causes of Inferiority Feelings Based on Social Media Data with Word2Vec," *Scientific Reports* 12, no. 1 (March 25, 2022): 5218, <https://doi.org/10.1038/s41598-022-09075-2>.

²⁹ B O B Green, David Kavanagh, and Ross Young, "Being Stoned: A Review of Self-reported Cannabis Effects," *Drug and Alcohol Review* 22, no. 4 (2003): 453–60.

positive and balanced relationship with physical activity, which can benefit them throughout their lives.³⁰ (Lowe & Hodgins, 2020). These types of programmes not only increase physical activity levels but also help to reduce the impact of gender-based stereotypes that limit children's participation in certain types of movement activities.

The existing literature highlights the significant influence of gendered preferences on children's movement activities and motor skill development. These preferences are deeply shaped by sociocultural factors such as parental expectations, media portrayals, and societal norms regarding gender. Understanding the role of physical activity in early childhood development is essential for promoting physical competence and a broad range of motor skills that support children's overall growth. However, to ensure that all children have equal opportunities to develop their physical potential, it is crucial to design gender-inclusive movement programmes that challenge traditional gender roles and encourage participation in a variety of activities. By promoting inclusive physical activity programmes, we can foster a more equitable and holistic approach to early childhood physical development.

THEORETICAL FRAMEWORK

This article drew upon two central theoretical frameworks: Social Cognitive Theory (SCT) and Gender Schema Theory. These frameworks offer complementary perspectives on how gendered preferences in movement activities emerge and how early childhood development can be influenced by both individual and societal factors.

Social Cognitive Theory, developed by Albert Bandura, emphasizes the role of observational learning, imitation, and modeling in shaping behavior. According to SCT, children acquire behaviors by observing the actions of others and the subsequent reinforcement or punishment these actions receive. In the context of movement activity preferences, children observe gender-specific behaviors in parents, peers, and media, internalizing these as appropriate for their gender. For instance, boys may observe male athletes participating in competitive sports and, through this modeling, come to associate physical activities like running or ball games with masculinity. Similarly, girls may see women engaging in dance or gymnastics, reinforcing the idea that such activities are suitable for them. This process of learning through observation plays a critical role in developing children's preferences for certain types of activities, reinforcing gender roles from an early age. Additionally, Social Cognitive Theory introduces the concept of self-efficacy, which refers to an individual's belief in their ability to succeed in specific tasks. Children who are encouraged to engage in activities aligned with their gender may develop higher self-efficacy in those areas, leading to more frequent participation and the further development of gendered skills. This theory thus provides a lens through which to examine how gendered movement preferences are socially constructed and how they can affect children's engagement with physical activity.

Gender Schema Theory, proposed by Sandra Bem, offers a cognitive framework for understanding how children form and adhere to gendered behavior patterns. This theory suggests that children develop internalized gender schemas that organize their understanding of what behaviors are considered appropriate for their gender. These schemas influence not only how children perceive themselves but also how they interpret and engage with the world around them. As children are socialized into their gender roles, they are encouraged to adopt behaviors that align with these schemas, including preferences for movement activities. For example, boys may be steered toward activities that emphasize strength and competitiveness, while girls may be guided toward activities that focus on balance, coordination, and grace. These gendered preferences, shaped by societal expectations, influence children's choices in physical activities and their sense of competence in these areas. Gender Schema Theory also allows for the possibility of change, as children's exposure to alternative activities or role models can challenge and reshape these gendered schemas. By encouraging children to engage in activities that do not align with traditional gender expectations, such as encouraging girls to participate in team sports or boys to engage in dance, gender schemas can be broadened, promoting a more inclusive approach to physical activity.

³⁰ Lowe and Hodgins, "Motor Skill Development in Early Childhood: An Overview of Physical Activity in Education."

Together, these two frameworks provided a robust theoretical foundation for understanding how gendered preferences in movement activities develop in early childhood. Social Cognitive Theory highlighted the role of social modeling and self-efficacy in shaping children's preferences, while Gender Schema Theory offered insight into the cognitive structures that guide children's gendered behaviors. Both theories underscored the importance of socialization in the formation of gendered movement preferences and suggest that interventions, such as inclusive physical activity programmes, can help challenge traditional gender roles and foster a more balanced and equitable approach to physical activity. By integrating these frameworks, the article explored how gendered movement activity preferences emerge, how they are reinforced through social interactions, and how they can be reshaped through targeted educational interventions.

METHODOLOGY

This article employed a qualitative research paradigm to investigate gender-based preferences in movement activities among preschool children, focusing on the sociocultural factors that influence these preferences. The qualitative approach is particularly suited for exploring complex social phenomena, such as the impact of gender roles and societal expectations on children's physical activity choices. This paradigm allows for an in-depth understanding of how children interact with different types of movement activities and the factors shaping these behaviours. By adopting this approach, the article aimed to gain rich, detailed insights into the ways in which gender influences children's participation in physical activities and the developmental implications of these preferences.

The research design is descriptive and exploratory, which enabled a comprehensive examination of children's movement preferences in relation to gender. The descriptive aspect allowed for a clear account of the patterns of activity preferences among boys and girls, while the exploratory component seeks to uncover the underlying sociocultural influences that shape these preferences. Through this design, the article aimed to provide a nuanced understanding of the factors that contribute to the development of gendered movement choices in early childhood. This approach also allowed the researcher to explore potential gaps in the existing literature on gender and physical activity preferences in preschool settings, making it a valuable contribution to the field.

Data collection was carried out using structured observations and interviews. Observations were conducted during movement activities, where children's participation in a range of physical tasks was noted, including running, jumping, dancing, and balance exercises. This provided detailed insights into the types of activities that boys and girls gravitate towards. In addition, interviews with teachers served to gain a deeper understanding of the teachers' perceptions of gender-based preferences, as well as the influences that might be shaping children's choices, such as parental expectations, media representations, and cultural norms. The combination of these two methods allowed for a well-rounded collection of data that captured both the children's behaviours and the perspectives of teachers who interact with them on a daily basis.

The population for this article consisted of preschool children aged 3-6 years from both public and private educational settings. These age groups were chosen because preschool years are a critical period for motor skill development, making them an ideal time to examine early patterns in movement activity preferences. The article used purposive sampling to select a sample that reflects a variety of gender and socioeconomic backgrounds. By selecting participants from both public and private institutions, the article aimed to capture a diverse range of experiences and influences, ensuring that the findings are applicable to a broad spectrum of preschool settings. The sample consisted of 60 children (30 boys and 30 girls), along with their teachers, drawn from four different preschools.

Data analysis was conducted thematically to identify patterns in children's movement activity preferences and to explore how these preferences are influenced by sociocultural factors. Thematic analysis is well-suited for identifying recurring themes and patterns within qualitative data, allowing the researcher to draw meaningful conclusions about the impact of gender and sociocultural influences on children's physical activity choices. The process involved coding the data from both observations and interviews, organizing it into key themes, and analysing the relationships between these themes to uncover the underlying factors influencing children's movement preferences.

The article ensured the trustworthiness of its findings through several methods. Member checking was used to confirm the accuracy of the interpretations and findings with participants, ensuring that their perspectives were accurately represented. Peer debriefing involved discussions with colleagues or experts in the field to provide feedback on the research process and findings. The Triangulation process involved comparing data from different sources, such as observations and interviews, to increase the validity and reliability of the findings. These strategies helped ensure that the article's results were credible and reflected the true nature of children's movement activity preferences.

Ethical considerations for the study included obtaining informed consent from both parents and teachers and ensuring that all participants were fully aware of the article's purpose and procedures. Confidentiality was maintained throughout the article by anonymizing all data, and care was taken to ensure that participants' identities remained protected. These ethical measures are essential for ensuring that the article is conducted in a manner that respects the rights and privacy of all participants.

Delimitation of the study included a focus on preschool children aged 3-6 years in specific educational settings. This means that the findings may not be applicable to older children or children in different educational contexts, limiting the scope of the article to early childhood education. Despite these limitations, the article aimed to provide valuable insights into gender-based movement preferences in the preschool years, contributing to a deeper understanding of how sociocultural factors influence children's early development.

PRESENTATIONS OF FINDINGS AND DISCUSSION

This section explores key themes that emerged from the research, providing insights into how gender differences influence movement activity preferences in early childhood. It examines the sociocultural factors shaping these preferences and their impact on motor skill development and participation. The discussion highlights the potential of inclusive physical activity programmes to address disparities and promote equitable physical development.

1. Gender-Specific Preferences in Movement Activities

This theme delved into the gender-specific preferences observed in children's movement activities, highlighting how societal norms and cultural expectations shape these choices. Teachers' responses revealed distinct patterns, with boys gravitating toward high-energy, competitive activities like soccer and racing, while girls often prefer activities emphasizing grace, rhythm, and coordination, such as dance and gymnastics. These findings underscored the influence of gendered socialization on activity preferences and its alignment with broader research trends.

Teacher 3 (Age 36, Female): *"I have noticed that the boys in the class always prefer playing soccer or racing each other during free time. They are always energetic and want to compete. They seem to enjoy anything that involves running or kicking a ball."*

Teacher 8 (Age 43, Male): *"The girls are usually drawn to activities like dance or gymnastics. They seem to enjoy activities that require them to move gracefully or work on balance. It's almost as if they prefer the rhythm and coordination aspects rather than the competitive ones the boys enjoy."*

The responses from the teachers provided a clear example of gender-specific preferences in movement activities. Boys are often seen gravitating toward activities that emphasize strength, speed, and competition, such as soccer or racing. These types of activities demand physical exertion and the ability to outpace or outperform others, reflecting a cultural association with masculinity that celebrates physical dominance and competition. Conversely, girls are more likely to engage in activities that prioritize grace, coordination, and rhythm, such as dance or gymnastics. These activities require finesse and control over one's body, traits traditionally linked with femininity in many cultures.

These observations align with broader trends noted in research on gendered activity preferences. Studies have shown that boys tend to be encouraged to participate in activities that are more physically demanding and competitive, while girls are often steered toward activities that emphasize coordination

and social interaction. This is not to suggest that all children strictly adhere to these gendered activity preferences, but rather to recognize the patterns that emerge from societal norms and expectations.

The influence of gendered preferences in early childhood activities can have long-term implications. The activities that children are encouraged to pursue shape not only their physical abilities but also their self-concept and how they perceive their place in the world. In this context, boys may grow up associating their worth with physical prowess and competition, while girls may view their physical abilities through a lens of grace and social interaction. These early experiences can influence the kinds of physical challenges children are willing to take on and the types of movement activities they find engaging or comfortable throughout their lives.

The development of motor skills is also affected by these gendered preferences. Children who are pushed into certain types of activities from a young age may excel in the specific skills those activities emphasise, but may miss out on developing a well-rounded set of motor skills. For example, boys may develop strength and speed but not necessarily coordination, while girls may develop balance and flexibility but not strength. These specialized skills may impact their overall physical development, particularly when they are expected to transition to other activities that require a broader set of motor abilities.

2. Influence of Sociocultural Factors on Gendered Movement Choices

This theme explored the influence of sociocultural factors, such as parental expectations and media portrayals, on gendered movement choices. Teachers' observations highlighted how parents often steer children toward activities they deem "appropriate" for their gender, such as ballet for girls and rugby for boys. Media representations reinforce these norms, shaping children's perceptions of acceptable behaviours and interests. These insights emphasized the powerful role of societal influences in limiting children's exposure to diverse activities and perpetuating traditional gender roles in physical development.

Teacher 10 (Age 29, Female): *"I think many parents tend to reinforce gendered activity choices. For example, I have a mother who always encourages her daughter to take ballet, but the son is pushed into sports like football and rugby. They often tell their kids what is 'appropriate' for boys and girls, which influences their interests."*

Teacher 7 (Age 50, Male): *"At home, it's clear that some children are more influenced by what their parents watch on TV. The boys see their fathers watching football and want to play it, while the girls often watch shows where the female characters are dancers, so they are more inclined toward dance or gymnastics."*

The responses provided by the teachers underscore the powerful role that sociocultural factors, particularly family expectations and media portrayals, play in shaping children's preferences for certain types of movement activities. It is clear from these observations that parents actively influence the activities children pursue. As the first agents of socialization, parents often convey their beliefs about what activities are "appropriate" for boys and girls. These preferences are deeply embedded in societal norms, which view certain activities as gendered. For instance, ballet and dance are frequently considered "feminine" activities, while football and rugby are often seen as masculine sports. This division not only limits children's exposure to diverse activities but also reinforces rigid gender roles that shape how children perceive their physical potential and interests.

Media portrayals are another significant influence on gendered movement preferences. Television shows, movies, and advertisements often reinforce stereotypical gender roles by depicting boys participating in competitive sports and girls engaging in activities that emphasize coordination and grace. Children are highly impressionable at a young age, and they often internalize these portrayals of gendered behaviours as what is expected or acceptable for their own lives. Boys may identify with male athletes they see on TV, while girls may gravitate toward characters who engage in dance or gymnastics. As the teachers observed, these media portrayals provide a framework through which children begin to understand what is "normal" for their gender, influencing their choices both in and out of the classroom.

The impact of these sociocultural factors on children's movement choices highlights the broader societal context in which gendered behaviours are learned and reinforced. While parents and media are important contributors, schools and teachers also play a crucial role in challenging or perpetuating these gender norms. Teachers who recognize the influence of these external factors can work to create inclusive environments that expose all children to a variety of activities, helping to dismantle restrictive gender norms and encourage a more diverse range of physical experiences for both boys and girls.

3. The Role of Physical Activity in Early Childhood Physical Development

This theme emphasized the vital role of physical activity in fostering holistic physical development during early childhood. The teachers' insights underscored how physical activity programmes can transcend traditionally gendered activity preferences by incorporating diverse activities that build strength, coordination, flexibility, and speed for all children. By promoting equal opportunities and addressing gaps in motor skill development, physical activity supports an inclusive approach to physical education that nurtures a well-rounded foundation for lifelong physical and cognitive growth.

Teacher 1 (Age 31, Female): *"In our physical activity programme, we try to include a variety of activities that promote both strength and coordination, like obstacle courses for the boys and balance games for the girls. The goal is to make sure that both genders get a chance to develop all aspects of motor skills, not just what they are naturally inclined to do."*

Teacher 5 (Age 38, Male): *"I believe physical activity can play a crucial role by encouraging children to engage in all types of physical activities. Instead of only focusing on strength for boys and balance for girls, these programmes should aim to give all children the opportunity to build strength, speed, coordination, and flexibility."*

The teachers' responses highlight the importance of physical activity in providing a holistic approach to physical development. Human movement science, which focuses on the science of movement and its impact on the human body, is particularly important in early childhood because it ensures that children develop a well-rounded set of motor skills. As the teachers suggested, the goal is not only to focus on strength or coordination but to ensure that children, regardless of gender, engage in activities that promote a wide range of physical abilities. By incorporating a variety of activities, such as obstacle courses for strength and balance games for coordination, physical activity programmes can help address the gaps created by gendered preferences.

The responses also indicated a growing recognition of the need to provide both boys and girls with equal opportunities to develop all aspects of their physical abilities. Traditionally, physical education programmes have been designed with gendered activity preferences in mind, often offering more competitive, strength-based activities for boys and more coordination-based activities for girls. By incorporating a more balanced and inclusive approach to movement, physical activity programmes can ensure that all children develop a comprehensive range of motor skills. This approach aligns with modern views on physical education, which emphasize the importance of diversity in motor skill development and the need to break down gendered expectations.³¹

Physical activity at an early age can have far-reaching effects on children's physical and cognitive development. It supports the development of not only strength and coordination but also cognitive skills such as problem-solving, spatial awareness, and body control. These skills lay the foundation for future success in both physical and academic pursuits. Moreover, by providing equal opportunities for all children to engage in various physical activities, physical activity programmes foster an environment that is supportive, inclusive, and conducive to holistic child development.

4. Impact of Gendered Preferences on Motor Skill Development

This theme explored the impact of gendered preferences on the development of motor skills in early childhood. The teachers' responses highlight how these preferences can create imbalances in skill

³¹ Sallis, Prochaska, and Taylor, "Physical Activity and Health: The Role of Physical Activity in Early Childhood Development."

development, with boys focusing more on strength and speed, while girls emphasize coordination and balance. Such gendered activity choices may hinder the development of a full range of motor skills in both boys and girls, limiting their ability to engage in diverse physical activities. Addressing these disparities is essential to ensure that all children develop a well-rounded set of motor skills necessary for overall physical competence.

Teacher 2 (Age 44, Female): *"The problem with the gendered activity preferences I observe is that boys are not as focused on activities that develop coordination and fine motor skills, like balance or flexibility. This can result in them not developing these skills as fully as the girls, who focus more on those activities."*

Teacher 4 (Age 34, Male): *"I've noticed that girls might develop better coordination and balance because of their focus on dance and gymnastics, but they don't always get the chance to work on strength or agility as much as the boys do in sports. It is important that we balance the activities so both genders develop a full range of motor skills."*

The responses underscore the potential drawbacks of gendered activity preferences in early childhood. While boys may excel in activities that emphasize strength and speed, such as soccer, they may lack opportunities to develop coordination, balance, and flexibility. These skills are critical to a child's overall physical development, as they form the foundation for many other movements and activities. Girls, on the other hand, may become more adept at coordination and balance due to their engagement in activities like dance and gymnastics but may not develop strength and agility to the same degree as boys, who often participate in sports that demand physical power.

These gendered preferences, if left unchallenged, can limit children's physical development and prevent them from becoming well-rounded in their motor skills. A child who excels only in one area of movement may struggle in other contexts that require a different set of abilities. For example, a child who has not developed strength may find it difficult to engage in activities like climbing or lifting, while a child who lacks balance may struggle with tasks that require stability.

DISCUSSION SUMMARY

The study has revealed that gender-based preferences in movement activities are prevalent among preschool children, with distinct trends emerging in boys and girls. Boys typically gravitate toward activities that emphasize strength, speed, and physical exertion, such as running and team sports. In contrast, girls tend to favour activities that focus on balance, coordination, and rhythm, such as dance and gymnastics. These preferences are not innate but are significantly influenced by sociocultural factors, particularly parental expectations and early exposure to gendered activities. From an early age, children are often steered toward specific types of activities based on societal norms surrounding gender, reinforcing traditional roles that may limit their exposure to a broader range of physical activities.

The findings suggest that the impact of these gendered preferences is far-reaching, influencing not only children's immediate engagement in physical activities but also their long-term development of motor skills and physical competence. By limiting boys and girls to certain types of movement activities, there is a risk of hindering their development of a full spectrum of physical skills. For instance, girls may miss opportunities to build strength and endurance, while boys may not develop fine motor skills or coordination that are typically enhanced through activities like dance. This division may lead to missed developmental opportunities, affecting both physical and cognitive growth.

RECOMMENDATIONS

To address these disparities, the article advocates for the implementation of gender-inclusive movement programmes within early childhood education. Such programmes would provide opportunities for both boys and girls to engage in a variety of movement activities that promote holistic development, challenge traditional gender norms, and encourage equal participation. By integrating a wide range of physical activities, including those that emphasize strength, coordination, rhythm, and balance, teachers can ensure that all children, regardless of gender, develop a comprehensive set of motor skills that support their overall well-being.

Physical activity programmes, which focus on developing motor skills and physical competence, are particularly well-suited to fostering gender equity in movement activities. These programmes should be designed to promote equal opportunities for all children, regardless of gender, ensuring that both boys and girls can engage in physical activities that support their developmental needs. By addressing the sociocultural factors that shape children's preferences and providing opportunities for diverse physical activities, physical activity programmes can help ensure that children are not limited by gender-based expectations, ultimately contributing to a more inclusive and equitable educational environment.

CONCLUSION

The research has examined the gender-based preferences in movement activities of preschool children aged 3-6 years in diverse educational settings. The article found that gender-based preferences in movement activities exist among young children, with boys generally preferring activities that emphasize strength and speed, while girls tend to favour activities requiring balance, coordination, and rhythm. Thus, by integrating a wide range of physical activities, including those that emphasize strength, coordination, rhythm, and balance, teachers can ensure that all children, regardless of gender, develop a comprehensive set of motor skills that support their overall well-being. This article underscores the importance of considering gender when designing movement programmes for young children. By promoting inclusive, diverse, and non-gendered physical activities, teachers can foster an environment where all children can develop their full physical potential and contribute to breaking down traditional gender roles in early childhood education.

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