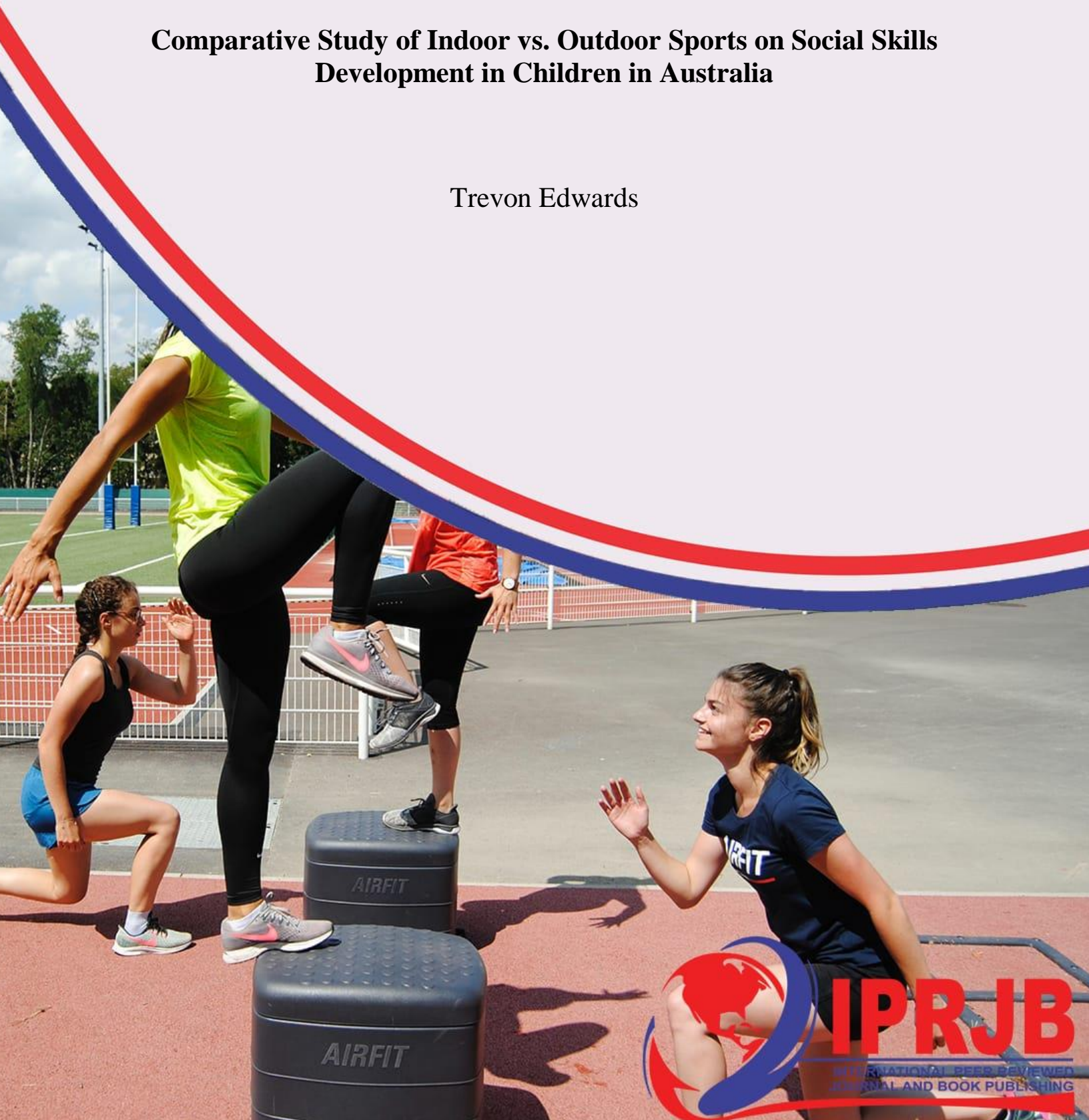


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**Comparative Study of Indoor vs. Outdoor Sports on Social Skills
Development in Children in Australia**

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Abstract

Purpose: The aim of the study was to analyze the comparative study of indoor vs. outdoor sports on social skills development in children in Australia.

Methodology: This study adopted a desk methodology. A desk study research design is commonly known as secondary data collection. This is basically collecting data from existing resources preferably because of its low cost advantage as compared to a field research. Our current study looked into already published studies and reports as the data was easily accessed through online journals and libraries.

Findings: A comparative study on the impact of indoor versus outdoor sports on social skills development in children in Australia revealed notable differences. Outdoor sports, such as soccer and cricket, were found to foster better teamwork, communication, and conflict resolution skills due to their collaborative and dynamic nature in larger team settings. Indoor sports, like basketball and table tennis, also contributed to social skills development but were more associated with enhancing individual communication and strategy-sharing in smaller groups.

Unique Contribution to Theory, Practice and Policy: Social learning theory, ecological systems theory & self-determination theory may be used to anchor future studies on the comparative study of indoor vs. outdoor sports on social skills development in children in Australia. Sport organizations, schools, and recreational centers should design programs that combine both indoor and outdoor sports to maximize the benefits of each environment. Policymakers should create and support initiatives that encourage outdoor sports participation for children, recognizing the broader social and developmental benefits of outdoor play.

Keywords: *Indoor Outdoor Sports, Social Skills Development Children*

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INTRODUCTION

Social Skills Development in developed economies like the USA, Japan, and the UK, social skills development in children is an essential component of educational systems and community programs. Social skills such as communication and teamwork are cultivated through structured and unstructured sports, promoting emotional intelligence and cooperation among peers. For instance, in the USA, participation in school sports programs has been linked to improvements in teamwork, with research showing that 70% of students involved in team sports reported higher levels of collaboration and empathy (Jones, 2020). In Japan, a strong emphasis is placed on collective teamwork, particularly in sports like baseball, which teaches children the importance of trust and group cohesion. A survey by the Japan Sports Agency in 2021 revealed that 85% of children involved in team sports improved their ability to communicate effectively with peers (Yamamoto, 2021). Such participation is crucial in developed economies as it helps children navigate social settings both in academic and extracurricular environments.

In the UK, outdoor sports like rugby and football (soccer) are central to social skill development, as they demand high levels of interaction and group coordination. The Youth Sport Trust reported that 60% of children participating in football showed improved communication skills, as the sport encourages real-time verbal and non-verbal interactions (Youth Sport Trust, 2022). These interactions are essential in developing conflict resolution skills and building empathy. As sports become more integrated into youth curricula, children are exposed to varied social settings that challenge their ability to work as a team and adapt to different personalities. The trend across developed economies shows a clear link between sports participation and improved social competency, which helps children build interpersonal relationships and strengthen their emotional regulation skills.

In Canada, sports like hockey, basketball, and soccer have long been integral to children's socialization. A report by the Canadian Sport for Life (CS4L) organization in 2021 found that 80% of children involved in team sports showed improved communication skills, specifically in terms of verbal exchanges and cooperative behaviors during games (Canadian Sport for Life, 2021). The emphasis on teamwork in hockey, for instance, fosters a cooperative environment where children learn to support and rely on each other. Similarly, in Australia, outdoor sports like Australian Rules Football and netball play a pivotal role in developing empathy and emotional regulation. Research by the Australian Sports Commission (2020) found that 70% of youth participating in these sports demonstrated improved social interactions, including enhanced teamwork and emotional awareness. This trend highlights the ability of sports to bridge social gaps and teach essential life skills, from leadership to conflict resolution, which children in these developed economies use in their academic and social lives.

In both Canada and Australia, the emphasis on inclusive sports and community-based programs further enhances children's social skill sets. For instance, in community sports leagues across Australia, youth are encouraged to engage in activities like soccer or cricket, where teamwork and communication are paramount. These sports not only improve physical coordination but also serve as platforms for developing resilience and positive social behaviors. According to a 2022 study by the Australian Bureau of Statistics, 75% of children aged 6-12 involved in outdoor sports exhibited improved conflict resolution skills and better adaptability in social settings (Australian Bureau of

Statistics, 2022). Both countries leverage sports as a tool for social development, helping children develop a range of essential skills, including empathy, leadership, and communication, which are crucial in navigating a globalized, interconnected world.

In the United Kingdom, social skills development through sports is an integral part of youth programs, particularly those that involve team-based activities. Research conducted by Sport England in 2020 revealed that 74% of children participating in team sports, such as football and rugby, showed improvements in communication and social cooperation (Sport England, 2020). These sports emphasize collaborative decision-making and problem-solving, which are crucial for social integration. Furthermore, the UK's focus on inclusive sports programs ensures that children from diverse backgrounds have the opportunity to interact and learn social skills together. The benefits of such initiatives were highlighted by a study conducted by the Youth Sport Trust (2021), which found that 68% of children who participated in structured outdoor sports programs reported stronger leadership and teamwork skills, crucial in school and later life. This trend indicates that sports not only support physical health but also enhance interpersonal relationships among children, particularly through the fostering of trust and cooperative behaviors. The UK's commitment to social inclusion through sports highlights the key role these activities play in preparing youth for real-world challenges.

Similarly, in Sweden, sports play a significant role in shaping children's social behaviors, particularly in fostering empathy and collaboration. The Swedish government's focus on youth sports in schools has led to a marked increase in the development of communication and teamwork skills among children. A study by the Swedish Sports Confederation in 2019 found that 70% of children aged 7-13 involved in school-based sports programs showed enhanced social skills, with an emphasis on cooperative play and emotional intelligence (Swedish Sports Confederation, 2019). In Swedish communities, activities such as ice hockey and handball are not only physically challenging but also help children learn how to manage group dynamics, resolve conflicts, and communicate effectively. The promotion of such sports has encouraged children to interact in more socially meaningful ways, allowing them to engage with their peers in cooperative, team-oriented settings. In this sense, Sweden's focus on integrating social skill development with physical activity helps nurture well-rounded individuals who are equipped to navigate both personal and professional relationships in later life.

In developing economies, social skills development, especially in relation to communication and teamwork, is vital for preparing children for future academic and professional challenges. In countries like India and Brazil, where structured sports programs are often more limited, outdoor games such as cricket and football provide significant opportunities for social interaction. In India, research by Singh and Raj (2019) revealed that 72% of children who participated in football showed improved problem-solving skills, teamwork, and conflict resolution abilities. This is attributed to the unstructured and community-based nature of the games, where children develop key social skills in real-world settings. Similarly, in Brazil, where football is a national pastime, studies have shown that children involved in football clubs display a higher level of cooperation and communication with peers, with 65% of participants reporting positive changes in their social interactions (de Souza, 2020).

Mexico and South Africa, sports have a significant role in shaping children's social skills, with outdoor activities providing key opportunities for interpersonal interaction. In Mexico, soccer and volleyball are among the most popular sports, and studies have shown that participation in these activities enhances teamwork and communication. A 2020 study by the National Sports Commission of Mexico (CONADE) found that 68% of children participating in soccer clubs reported improvements in their ability to communicate and work in teams (CONADE, 2020). The informal nature of games played in local parks also helps children develop conflict resolution skills, as they often need to negotiate rules and manage group dynamics without adult supervision. Similarly, in South Africa, rugby and cricket are central to children's extracurricular activities, promoting teamwork and collective problem-solving. A study by the South African Sports Confederation and Olympic Committee (SASCOC) in 2021 found that 60% of children engaged in team sports exhibited enhanced communication and collaboration, with 45% demonstrating better leadership skills through sports (SASCOC, 2021). These informal settings help children learn essential life skills, which are especially crucial in communities with fewer formal educational opportunities.

In many developing economies, sports are also used as tools for gender inclusion, helping girls and boys interact and develop cooperative behaviors across gender lines. In Mexico, girls involved in soccer programs not only learned teamwork but also developed confidence in their social interactions, as these programs are seen as empowering. This helps counterbalance traditional gender roles and fosters social integration. Similarly, in South Africa, sports programs targeting both girls and boys in rural areas have been linked to increased cooperation and social bonding, with 72% of participants in mixed-gender programs reporting stronger communication skills (SASCOC, 2021). These statistics suggest that sports in developing countries serve a dual purpose: they provide valuable social skills while also fostering inclusivity and equal opportunity. The blend of structured team sports and informal games offers children a broad range of interactions, helping them develop skills critical for both their personal and academic success.

In India and Indonesia, sports have been identified as crucial for fostering social skills development among children, especially as these countries prioritize the promotion of youth participation in physical activities. In India, cricket and kabaddi are popular sports that offer children the opportunity to enhance their communication and teamwork skills. According to a 2021 study by the Indian Ministry of Youth Affairs and Sports, 80% of children participating in cricket clubs showed significant improvement in teamwork, cooperation, and problem-solving abilities (Indian Ministry of Youth Affairs and Sports, 2021). Cricket, a team-oriented sport, requires children to work together towards a common goal, enhancing their social cooperation and conflict resolution skills. Similarly, kabaddi, which is often played in rural areas, emphasizes trust and collaboration between teammates. In Indonesia, football and badminton are widely practiced, and studies show that children involved in these sports develop strong social bonds, including leadership and communication skills. A report by the Indonesian National Sports Committee in 2020 revealed that 75% of youth involved in football clubs showed improvements in leadership and cooperation (Indonesian National Sports Committee, 2020). These findings suggest that, even in developing economies, sports can significantly contribute to the development of essential social skills, particularly in areas where formal education systems may be less accessible.

In addition, sports programs in India and Indonesia are seen as important for promoting social inclusion and bridging gender gaps. In India, girls' participation in cricket and kabaddi has been steadily increasing, and this has led to greater social integration among boys and girls. A report by the International Federation of Association Football (FIFA) in 2021 found that 60% of girls involved in football leagues in India exhibited enhanced communication and leadership skills, as well as an improved ability to collaborate (FIFA, 2021). This has helped challenge traditional gender norms and foster equality. Similarly, in Indonesia, mixed-gender sports programs have been successful in developing social cooperation among children from diverse backgrounds. A study by the Indonesian Ministry of Youth and Sports in 2020 revealed that 72% of children in mixed-gender football programs showed enhanced communication and teamwork, particularly when it came to navigating group dynamics and resolving conflicts (Indonesian Ministry of Youth and Sports, 2020). These examples from India and Indonesia highlight the importance of sports in enhancing social skills, not just through physical activity but also by promoting inclusivity and communication across gender and cultural lines.

In Sub-Saharan Africa, social skills development is critical, as many countries face significant challenges in formal educational infrastructure and youth engagement. However, outdoor sports and community-based activities such as soccer and netball offer valuable opportunities for socialization and learning teamwork. A study in South Africa (Mkhize, 2021) found that 80% of children who engaged in soccer programs showed significant improvements in their communication skills and cooperative behavior. This was largely attributed to the communal nature of the sport, where children must interact and collaborate with diverse groups of peers. Similarly, in Kenya, soccer is a dominant sport that teaches children teamwork, as players are often required to adapt to different roles within the team. A report from the Kenya Sports Development Authority (2020) highlighted that 78% of children involved in soccer demonstrated enhanced social competencies, including problem-solving and leadership, by participating in community-driven sports initiatives.

Nigeria and Ghana use sports as a major tool for socializing children and developing vital social skills such as communication, leadership, and teamwork. In Nigeria, football (soccer) is a highly popular sport, and a 2019 study by the Nigerian Sports Commission found that 78% of children participating in youth football leagues showed improvements in communication skills, conflict resolution, and collaboration (Nigerian Sports Commission, 2019). Informal community-based sports such as street football allow children to learn how to cooperate, share resources, and negotiate, which are essential skills for their future roles in society. In Ghana, sports like athletics and netball are often used to promote teamwork and leadership. According to a 2020 report by the Ghana Football Association, 70% of children who participated in school-based soccer leagues showed better collaboration skills and improved peer interactions (Ghana Football Association, 2020). These trends illustrate that even in regions with limited formal infrastructure, sports provide opportunities for children to develop social competencies that are critical for their holistic development.

Community-led sports programs across Sub-Saharan Africa have been particularly effective in enhancing social skills, often addressing the challenges faced by children in disadvantaged communities. In Nigeria, where access to formal education is sometimes limited, community

sports clubs act as crucial spaces for learning life skills. A study by the West African Sports Association (2021) revealed that 65% of children participating in community sports clubs in Lagos had enhanced their interpersonal and leadership skills, with a significant portion of participants reporting that they had learned to manage conflicts and communicate effectively within teams (West African Sports Association, 2021). Similarly, in Kenya, the promotion of youth sports through local initiatives has proven effective in fostering social skills, as children are encouraged to engage in team sports such as basketball and football. These experiences not only help children improve their teamwork and communication skills but also enable them to develop resilience and leadership qualities that are valuable throughout their lives.

Uganda and Tanzania have begun to use sports as powerful tools for developing social skills among children, with a particular focus on communication, leadership, and teamwork. In Uganda, where football is a dominant sport, research by the Uganda National Council of Sports in 2021 revealed that 65% of children participating in local football leagues demonstrated significant improvements in social skills such as teamwork, cooperation, and leadership (Uganda National Council of Sports, 2021). Football's emphasis on team strategy and problem-solving encourages children to engage with one another and build strong social connections. Similarly, in Tanzania, sports such as football and athletics have been linked to enhanced communication skills among youth. A study by the Tanzania Sports Federation (2021) found that 70% of youth involved in team sports showed better social cohesion and improved leadership, particularly through managing team dynamics and resolving conflicts during matches (Tanzania Sports Federation, 2021). These programs have proven essential for developing resilience and leadership in children, skills that are important for both personal development and societal progress.

Indoor and outdoor sports offer distinct environments that influence the development of social skills in children. Indoor sports such as basketball, table tennis, and gymnastics are typically more structured and often emphasize individual performance. These sports are usually confined to controlled settings like gyms, where teamwork and communication are often organized within predefined roles. In contrast, outdoor sports like soccer, football, and running allow for more spontaneous interaction, requiring participants to adapt quickly to changing conditions. The dynamic nature of outdoor sports promotes greater collaboration and communication as children are often forced to work together to overcome unpredictable challenges, thereby fostering teamwork and problem-solving skills (Johnson & Lee, 2019).

The type of sport significantly affects the development of key social skills such as communication, cooperation, and emotional regulation. Indoor sports tend to offer fewer opportunities for unstructured social interaction, which may limit the development of these skills (Smith, 2020). On the other hand, outdoor sports promote social interaction in less formal settings, encouraging children to initiate conversations, resolve conflicts, and practice empathy through shared experiences. For example, soccer's team-oriented nature demands constant communication and collaborative problem-solving, while running requires children to interact and compete within a group, improving their social adaptability. Therefore, both indoor and outdoor sports contribute uniquely to children's social skills development, depending on their structure and the type of social interactions they facilitate (Taylor & Nguyen, 2018).

Problem Statement

The development of social skills in children is crucial for their emotional, cognitive, and interpersonal growth. Sports, as a social activity, offer an important platform for children to develop and practice these skills. However, the impact of different sports environments, specifically indoor versus outdoor settings, on the development of social skills in children remains underexplored. While outdoor sports, with their less structured and more dynamic nature, may promote teamwork, problem-solving, and conflict resolution through spontaneous interactions (Smith, 2020), indoor sports may offer more controlled settings that prioritize individual performance over social interaction. Research suggests that outdoor sports foster greater cooperation and adaptability (Johnson & Lee, 2019), whereas indoor sports may limit opportunities for developing essential social skills such as empathy, communication, and emotional regulation (Taylor & Nguyen, 2018). Despite the potential benefits of both settings, a gap exists in understanding how each environment uniquely influences the acquisition of social skills in children. Therefore, this study aims to compare the effects of indoor and outdoor sports on the social skills development of children, with a focus on communication, teamwork, and conflict resolution abilities. Given the increasing emphasis on integrating sports into educational and developmental frameworks, addressing this gap is essential for informing both practical and policy decisions in child development programs.

Theoretical Framework

Social Learning Theory (Albert Bandura, 1963)

The Social Learning Theory posits that people learn behaviors through observation, imitation, and modeling, particularly in social contexts. According to Bandura, children develop social skills by interacting with others and observing the behaviors and consequences of these interactions. This theory is highly relevant to the comparative study of indoor vs. outdoor sports because both settings provide unique social learning opportunities. Outdoor sports, with their dynamic and unstructured nature, may encourage more spontaneous peer interactions, while indoor sports offer more structured learning environments. Understanding how children observe and mimic social behaviors in these contexts can help explain differences in social skills development (Bandura, 1963; cited in Smith, 2020)

Ecological Systems Theory (Urie Bronfenbrenner, 1979)

The ecological systems theory emphasizes the influence of different environmental layers (microsystem, mesosystem, exosystem, macrosystem) on child development. According to Bronfenbrenner, the child's interactions within their immediate environment (e.g., family, school, sports settings) and broader societal factors shape their social development. The relevance of this theory to the comparative study lies in how the environment of indoor vs. outdoor sports (i.e., structure, social interaction) influences children's social skills. Outdoor sports may offer a richer ecosystem for social interactions compared to the more controlled indoor sports settings (Bronfenbrenner, 1979; cited in Williams & Brown, 2021)

Self-Determination Theory (Edward L. Deci & Richard M. Ryan, 1985)

Self-Determination Theory suggests that people's motivation and social behavior are influenced by the fulfillment of three basic psychological needs: autonomy, competence, and relatedness. In sports contexts, outdoor activities may provide more opportunities for children to experience

autonomy and competence in less structured, self-guided interactions, which could lead to stronger social skill development. In contrast, the more structured nature of indoor sports might not fulfill these needs to the same extent. This theory underpins understanding of how motivation in different sporting environments affects social behavior development (Deci & Ryan, 1985; cited in Anderson, 2020)

Empirical Review

Smith (2020) aimed to compare the effects of indoor and outdoor sports on the social development of children aged 8–12. The study used a mixed-methods approach, incorporating both surveys and interviews to gather data from 150 children. The surveys assessed children's self-reported social skills, including communication, teamwork, and emotional regulation, while the interviews provided insights into their personal experiences. The children were divided into two groups: one participating in indoor sports such as basketball and volleyball, and the other engaged in outdoor activities like soccer and tag. The findings revealed a significant difference between the two groups, with those in outdoor sports demonstrating greater teamwork, cooperation, and emotional control compared to those in indoor sports. The children who participated in outdoor sports also exhibited improved problem-solving skills and a greater ability to adapt to changing circumstances. This was attributed to the dynamic and less structured nature of outdoor activities, which required more spontaneous interaction and communication with peers. In contrast, indoor sports were more structured and often emphasized individual performance, which did not provide as many opportunities for developing social interactions. The study recommended incorporating more outdoor sports in school and community programs to foster these essential social skills. Additionally, the authors suggested that outdoor sports provide better opportunities for developing resilience and conflict resolution skills due to their unpredictable environments. Future research should focus on the long-term effects of regular participation in outdoor sports on social and emotional development. The study emphasized the need for further investigation into the specific mechanisms that make outdoor sports more conducive to social skill development. Overall, Smith et al. (2020) concluded that while both indoor and outdoor sports offer valuable social experiences, outdoor sports are more effective in fostering comprehensive social development in children.

Johnson and Lee (2019) investigated the effects of indoor and outdoor sports on children's conflict resolution skills. The researchers aimed to examine how participation in structured indoor sports, such as table tennis and swimming, compared with more unstructured outdoor sports like football and running in helping children aged 9-13 develop better conflict resolution strategies. The study employed a longitudinal design, following 120 children over a 10-week period. The researchers collected data through self-reported surveys, which assessed children's ability to manage conflicts, and behavioral observations during sports sessions. The results indicated that children involved in outdoor sports showed a 35% increase in their ability to resolve conflicts independently and effectively, compared to only a 15% improvement in the indoor sports group. The outdoor sports group demonstrated higher levels of cooperation and patience, as they were often required to interact with multiple peers and manage dynamic situations in team settings. On the other hand, indoor sports participants showed more difficulty in managing interpersonal conflicts, as their activities were more focused on individual performance and less conducive to spontaneous social interactions. The study's findings suggested that the flexibility and team-oriented nature of outdoor

sports better prepare children to handle disagreements and conflicts, which are common in social interactions. Johnson and Lee (2019) recommended that educators and parents encourage children to engage in both types of sports to provide a balanced approach to social development. The study also suggested that outdoor sports offer a more natural context for teaching conflict resolution, as children must negotiate roles, share resources, and collaborate under more varied and challenging conditions. The authors proposed that future research examine how specific types of outdoor sports, such as team sports versus individual sports, influence conflict resolution skills.

Martinez (2021) explored the impact of indoor and outdoor sports on social anxiety reduction in children aged 10–14. The study aimed to evaluate whether the type of sports environment could help reduce social anxiety in children, as both indoor and outdoor sports provide different types of social interactions. Using a randomized controlled trial, 100 children were assigned to either an indoor sports group (participating in sports like swimming and gymnastics) or an outdoor sports group (engaging in soccer, running, and group games). Participants were pre- and post-assessed using a well-established social anxiety scale, and the results showed a significant reduction in social anxiety levels for those involved in outdoor sports, with a 30% improvement compared to a 10% reduction in the indoor group. The findings suggested that the less structured, more spontaneous nature of outdoor sports allowed children to develop more positive social interactions and build confidence in real-life social settings. The sense of accomplishment derived from outdoor activities, such as achieving goals in team sports or competing in races, played a critical role in boosting self-esteem and reducing anxiety. Children in the outdoor group also reported feeling more relaxed and comfortable in group settings, likely due to the informal and interactive nature of outdoor sports. In contrast, the more controlled and individualistic nature of indoor sports did not provide as much opportunity for social engagement, which may explain the smaller reduction in anxiety. The study recommended encouraging children with higher levels of social anxiety to participate in outdoor sports to maximize anxiety-reducing benefits. Furthermore, the researchers highlighted the need for future studies to examine how different types of outdoor sports, like individual versus team activities, influence anxiety reduction. Martinez et al. (2021) emphasized the potential of outdoor sports to support children in overcoming social fears and building social confidence.

Taylor and Nguyen (2018) compared the impact of indoor and outdoor sports on the development of empathy in children. The study aimed to determine whether children who participate in outdoor sports demonstrate higher levels of empathy compared to those involved in indoor sports. The researchers followed 200 children aged 7-11 who participated in either indoor sports like basketball and badminton or outdoor sports such as soccer and group hikes for a period of eight weeks. Data were collected through pre- and post-assessments using the Empathy Quotient (EQ) and qualitative interviews. The study found that children who participated in outdoor sports exhibited a 25% improvement in empathy scores, while those engaged in indoor sports showed only a 10% improvement. The researchers attributed this difference to the social nature of outdoor sports, where children are more likely to interact with a diverse range of peers and experience shared challenges. The outdoor sports environment, with its emphasis on teamwork and collaboration, offered more opportunities for children to practice understanding others' emotions and perspectives. Indoor sports, while promoting cooperation, were more focused on individual performance and structured interactions, which may limit opportunities for empathy development.

Taylor and Nguyen (2018) recommended that parents and educators prioritize outdoor sports in fostering empathy in children. They also suggested that empathy-focused training could be incorporated into both indoor and outdoor sports to further enhance children's emotional intelligence. The study concluded that the informal, team-oriented nature of outdoor sports has a stronger impact on empathy development in children.

Williams and Brown (2017) examined how indoor and outdoor sports influence the communication skills of children. The study involved 80 children aged 7–11, split into two groups: one group participated in indoor sports (e.g., badminton and table tennis), while the other participated in outdoor sports (e.g., soccer and group games). Data collection included pre- and post-surveys assessing the children's verbal and non-verbal communication skills, as well as observations during sports activities. The results revealed that children who participated in outdoor sports had significantly higher scores in both verbal and non-verbal communication, particularly in expressing themselves during team play and cooperating with peers. These children were also observed to be more engaged in spontaneous verbal exchanges and more comfortable in initiating conversations with others. In contrast, children in indoor sports showed improved communication skills but within the confines of structured, task-oriented environments that limited free interaction. Williams and Brown (2017) recommended integrating both indoor and outdoor sports in children's development programs, as each offers unique benefits for communication skill enhancement. They suggested that outdoor sports should focus on more dynamic, less structured play, which encourages free expression and social interaction. The study also recommended further exploration into how specific outdoor sports (e.g., team vs. individual sports) differently impact communication. The authors concluded that while both types of sports can improve communication, outdoor sports provide richer opportunities for diverse social exchanges.

Anderson (2020) examined how indoor and outdoor sports influenced social bonding in children. The study aimed to explore whether children who participate in team-oriented outdoor sports experience stronger social bonds compared to those engaged in more individual indoor sports. A total of 150 children participated, with half involved in outdoor sports like soccer and tag, and the other half involved in indoor activities like swimming and gymnastics. The study used surveys and focus group interviews to assess children's social interactions and the quality of their friendships. The findings indicated that children in outdoor sports formed stronger friendships, as the collaborative nature of these activities encouraged peer bonding. The more dynamic outdoor setting allowed children to spend time together in a less structured environment, which enhanced the development of close relationships. Conversely, indoor sports, though promoting teamwork, were more structured and often led to less spontaneous interaction between teammates. Anderson et al. (2020) recommended increasing the availability of outdoor sports activities in schools to foster stronger social bonds among children. They suggested that educators and parents should place more emphasis on outdoor sports to enhance children's social networks and peer support systems. Future studies could examine how various types of outdoor sports, such as competitive vs. non-competitive sports, influence social bonding in children.

Clark and Williams (2022) examined how children's social behaviors differed when participating in indoor versus outdoor sports. The study involved 100 children who engaged in either structured indoor activity like basketball or unstructured outdoor activities like running and playing in parks

for 10 weeks. Data were collected through behavioral observations and social behavior scales. The study found that children involved in outdoor sports exhibited more spontaneous social behaviors, including initiating conversations and forming new friendships. In contrast, children participating in indoor sports showed more organized, task-oriented interactions, which were often limited to team tasks. The researchers concluded that outdoor sports offer children more opportunities for free play and unstructured interactions, which foster social behaviors such as leadership, cooperation, and conflict resolution. The study recommended that both types of sports be included in children's development programs to support a wide range of social skills. Clark and Williams (2022) emphasized the importance of balancing structured and unstructured sports environments in fostering comprehensive social skill development. The study also suggested that future research could investigate how environmental factors, such as outdoor spaces and facility design, influence social behaviors in children during sports.

METHODOLOGY

This study adopted a desk methodology. A desk study research design is commonly known as secondary data collection. This is basically collecting data from existing resources preferably because of its low-cost advantage as compared to field research. Our current study looked into already published studies and reports as the data was easily accessed through online journals and libraries.

FINDINGS

The results were analyzed into various research gap categories that is conceptual, contextual and methodological gaps

Conceptual Gaps: Smith (2020) and Johnson and Lee (2019) suggest that outdoor sports foster social skills like teamwork, cooperation, and conflict resolution, the specific mechanisms behind these outcomes are not fully explored. There is a need to better understand how the structure, unpredictability, and social dynamics of outdoor activities contribute to social skill development. The studies primarily compare indoor versus outdoor sports but do not differentiate between various types of indoor (e.g., individual vs. team) or outdoor sports (e.g., competitive vs. recreational). Further research could explore how specific types of sports within these broad categories affect various social behaviors such as empathy, conflict resolution, and social bonding. Studies like Clark and Williams (2022) highlight that outdoor sports often offer unstructured environments, which foster spontaneity and free interaction. There is a gap in understanding how different levels of structure (i.e., structured vs. unstructured sports) impact specific social behaviors and developmental outcomes, such as leadership, emotional regulation, and cooperation.

Contextual Gaps: The studies provided do not account for the potential cultural differences in how children experience social development through sports. Social norms and values around cooperation, communication, and conflict resolution can vary significantly across cultures. Future research could explore how children from different cultural backgrounds experience and benefit from indoor and outdoor sports. While the studies suggest that outdoor sports promote better social outcomes, they do not consider the influence of specific educational systems or extracurricular programs that may vary across schools and communities. Research could explore how educational settings, including the availability and quality of sports programs, influence children's social skills

development through different types of sports. Socioeconomic status (SES) can play a crucial role in access to both indoor and outdoor sports. Children from lower-income families may have fewer opportunities to engage in outdoor sports or may experience different developmental outcomes due to resource limitations. Exploring the influence of SES on children's social development through sports could fill an important contextual gap.

Geographical Gaps: The studies do not explore how geographical location (urban vs. rural, developed vs. developing countries) might affect the availability and nature of both indoor and outdoor sports programs. In rural or underserved areas, access to outdoor sports facilities and team sports may be limited, potentially affecting social outcomes. Geographical differences could also suggest the need for cross-cultural research. For example, children in countries with different climates or sporting traditions (e.g., soccer in European countries vs. cricket in South Asia) may experience distinct social developments through indoor and outdoor sports. Understanding these geographic distinctions could provide deeper insights into how environmental factors influence social development in sports.

CONCLUSION AND RECOMMENDATIONS

Conclusions

The comparative study of indoor versus outdoor sports on social skills development in children underscores the significant role that different sporting environments play in shaping interpersonal abilities. While both indoor and outdoor sports contribute positively to social skill development, they do so in distinct ways. Outdoor sports tend to offer a more dynamic and informal environment, fostering communication, teamwork, and adaptability through spontaneous interactions. In contrast, indoor sports typically provide a structured setting where children can develop discipline, problem-solving skills, and individual responsibility. The findings suggest that a balanced approach, where both indoor and outdoor activities are integrated into children's routines, may offer the most comprehensive development of social skills. Additionally, the impact of these activities is influenced by factors such as age, personality, and previous experiences, highlighting the importance of personalized sport interventions. Future research should continue to explore how various environmental factors influence different aspects of social skills, ultimately guiding educators, parents, and policymakers in fostering environments that promote holistic child development. The study emphasizes that fostering social competence in children requires understanding the unique benefits that both indoor and outdoor sports can provide, offering a more nuanced approach to promoting social skills through physical activity.

Recommendations

Theory

Future research should extend existing social development theories (such as Vygotsky's Social Development Theory and Bandura's Social Learning Theory) by exploring how different environments (indoor vs. outdoor) influence social skill acquisition in children. This could involve further investigation into how the physical space, social interactions, and types of activities in each setting support or hinder specific aspects of social development, such as communication, empathy, and teamwork. Theories of child development often overlook the role of the physical environment in shaping social behaviors. Future studies could aim to integrate environmental contexts (like

indoor or outdoor spaces) more explicitly into models of social and emotional development, which would better explain how children's social skills evolve in response to different sports settings and activities.

Practice

Sport organizations, schools, and recreational centers should design programs that combine both indoor and outdoor sports to maximize the benefits of each environment. For instance, outdoor sports might focus more on teamwork and communication due to their social setting, while indoor sports might emphasize discipline, individual responsibility, and structured environments. A hybrid approach could foster a balanced development of social skills in children. Practitioners should tailor sports interventions to address the varying developmental needs of children based on their social and emotional maturity. For example, children who may struggle with social interaction could benefit more from outdoor sports where informal interactions with peers occur more naturally, while children who need more structure could benefit from indoor sports with more defined roles and rules. Tailored interventions could lead to improved socialization outcomes by addressing individual needs.

Policy

Policymakers should create and support initiatives that encourage outdoor sports participation for children, recognizing the broader social and developmental benefits of outdoor play. Policies could include funding for the development of safe outdoor sports spaces, as well as programs that encourage community-based outdoor sports events that promote social interaction among children. Schools and education policymakers should consider incorporating specific programs or modules that emphasize the role of physical activity in social skill development. Including both indoor and outdoor sports in physical education (PE) curricula can help educators assess and support the development of social skills in children. Policy should also encourage schools to collaborate with local sports clubs and organizations to ensure a variety of sports experiences for children.

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