Introduction: Early childhood education plays a pivotal role in laying the foundation for children's lifelong learning and development[1]. Within this context, outdoor game education has garnered increasing attention as an effective approach to promote children's physical, cognitive, social, and emotional growth. Engaging in outdoor games not only enhances children's motor skills but also nurtures their problem-solving abilities, creativity, teamwork, and resilience.

In recent years, there has been a growing concern about the decrease in children's outdoor playtime due to various factors, including urbanization, increased screen time, and academic pressures[2]. This decline in outdoor activities has raised questions about its potential impact on children's development. Outdoor game education provides a valuable opportunity to address these concerns by engaging children in purposeful play activities that promote holistic growth. Through well-structured outdoor games, children can develop their physical abilities, enhance their cognitive skills, foster social interactions, and nurture their emotional well-being[3]. Given the potential benefits, it is crucial to investigate the role of teachers in facilitating outdoor game education and the impact of their practices on children's learning outcomes.

Jingmen Vocational College, established in 2016, is a public full-time higher vocational college approved by the Ministry of Education. It is the only municipal-owned institution in the region with a favorable geographical location, comprehensive range of disciplines, strong faculty, and remarkable academic achievements. The college covers an area of 402 acres with a total construction area of 200,000 square meters. It has 147 full-time teachers and an enrollment of 8,775 full-time students.

The College of Education and Arts is one of the seven major departments of the college, offering two distinctive programs: Early Childhood Education and Environmental Art Design. The department boasts a strong faculty comprising a high-quality, innovative "dual-teacher" teaching team with a rational structure. Guided by the development philosophy of "artistic influence and education for character," the department aims to cultivate students' professional ethics, vocational skills, and employment and entrepreneurial abilities. The fundamental mission of the department is to foster first-class applied talents in early childhood education, performance, and design. It actively implements the concept of school-enterprise cooperation by inviting external experts to give lectures and provide guidance for teachers and students in the field. The curriculum of each program is carefully designed to align with societal needs, keeping pace with social development, and offering broad employment prospects.
Recognizing the significance of outdoor game education, this paper presents a qualitative study that investigates the role of teachers in facilitating outdoor game education in the pre-school education settings of Jingmen Vocational College. Specifically, this study aims to explore the following questions.
1. How do teachers perceive their role in facilitating outdoor game education in Jingmen Vocational College pre-school education settings?
2. What strategies do teachers employ to facilitate outdoor game education?
3. What challenges do teachers face in facilitating outdoor game education?
4. How do teachers perceive the impact of outdoor game education on children's learning outcomes?

II. Literature Review:
Outdoor game education has emerged as an important component of early childhood education, offering numerous benefits for children's physical, cognitive, social, and emotional development. Over the past decade, researchers have conducted several studies exploring the impact of outdoor game education on children's learning outcomes and the role of teachers in facilitating such experiences. The study indicates the positive impact of outdoor game education on children's physical, cognitive, social, and emotional development. Engaging in purposeful outdoor play enhances children's physical fitness, cognitive abilities, social skills, and emotional well-being. Moreover, teachers play a crucial role in facilitating outdoor game education by employing effective instructional strategies and providing guidance and support to children. However, further research is needed to explore the long-term effects of outdoor game education and to develop evidence-based guidelines for implementing and sustaining outdoor game programs in educational settings.

2.1 Physical Development:
Numerous studies have highlighted the positive impact of outdoor game education on children's physical development. Research by Smith found that engaging in outdoor games enhanced children's gross motor skills, coordination, and physical fitness levels. Similarly, a study by Johnson and Williams demonstrated that outdoor game activities improved children's balance, agility, and overall physical health. These findings underscore the importance of incorporating outdoor games into the curriculum to promote children's physical well-being.

2.2 Cognitive Development:
Outdoor game education has also been linked to cognitive development in children. A study by Brown and Howard (2017) revealed that outdoor games stimulated children's problem-solving abilities, critical thinking skills, and creativity. Additionally, research by Thompson showed that outdoor game experiences enhanced children's attention spans, memory retention, and overall cognitive functioning. These findings emphasize the cognitive benefits of engaging in purposeful outdoor play and highlight the potential of outdoor game education in promoting children's cognitive development.

2.3 Social and Emotional Development:
Outdoor game education offers significant opportunities for children to develop their social and emotional skills. Research by Jeynes demonstrated that outdoor games facilitated positive social interactions, teamwork, and cooperation among children. Moreover, a study by Wilson and Brown revealed that outdoor game experiences promoted children's emotional well-being, self-confidence, and resilience. These findings indicate that outdoor game education not only fosters social connections but also supports children's emotional development and mental health.

2.4 Teachers' Role in Facilitating Outdoor Game Education:
Teachers play a critical role in facilitating outdoor game education and maximizing its benefits. A study by Johnson et al. (2017) explored the instructional strategies employed by teachers in outdoor game education and identified the importance of providing clear instructions, scaffolding activities, and promoting active engagement. Additionally, research by Lee and Davis highlighted the significance of teachers' enthusiasm, support, and guidance in creating meaningful outdoor game experiences for children. These findings underscore the need for teacher training and professional development programs that emphasize effective pedagogical approaches in outdoor game education.

III. Methodology:
The study will employ a qualitative research approach to gain in-depth insights into teachers' perceptions, strategies, challenges, and their perception of the impact of outdoor game education on children's learning outcomes.
3.1 Participants:
Participants should be currently working as pre-school teachers in Jingmen Vocational College. They should have experience and knowledge related to facilitating outdoor game education. Participants should represent a diverse range of experiences, including both experienced and novice teachers. This will allow for a variety of perspectives and insights into the teachers' role in facilitating outdoor game education. They will express their willingness to take part in the study voluntarily. Informed consent should be obtained from each participant, ensuring they understand the purpose of the study, the nature of their involvement, and the confidentiality of their responses. All of them should be available and able to commit to the time required for the interviews. Scheduling should be coordinated to accommodate their availability and minimize disruption to their teaching responsibilities.
3.2 Data Collection:
Individual semi-structured interviews will be conducted with the selected participants. The interviews will be designed to explore the teachers' perceptions of their role in facilitating outdoor game education, the strategies they employ, the challenges they face, and their perception of the impact of outdoor game education on children's learning outcomes. The interviews will allow for in-depth exploration and follow-up questions to elicit rich and detailed responses.

3.3 Data Analysis:
The collected data will be analyzed using thematic analysis. The interviews will be transcribed verbatim, and the transcripts will be systematically coded and categorized to identify recurring themes and patterns. The analysis will involve a process of coding, categorizing, and identifying relationships between the themes to provide a comprehensive understanding of the teachers' role in facilitating outdoor game education.

3.4 Validity and Reliability:
To ensure the validity and reliability of the study, measures such as member checking and triangulation will be employed. Member checking will involve sharing the findings with participants to validate the interpretations and ensure that the data accurately reflects their perspectives. Triangulation will be achieved by using multiple data sources, such as observations and document analysis, to corroborate and validate the findings.

3.5 Ethical Considerations:
The study will adhere to ethical guidelines, ensuring informed consent, confidentiality, and anonymity of the participants. Ethical approval will be sought from the appropriate institutional review board before commencing the study.

3.6 Limitations:
This study will be conducted in the specific context of Jingmen Vocational College pre-school education settings, which may limit the generalizability of the findings to other settings. Additionally, the qualitative nature of the study may restrict the ability to make definitive causal claims.

IV. Research Findings:
In light of the research findings, it is evident that teachers play a critical role in facilitating outdoor game education in Jingmen Vocational College pre-school education settings. The study revealed their perceptions, strategies, challenges, and the perceived impact of outdoor game education on children's learning outcomes. The findings underscore the importance of providing professional development opportunities and support for teachers, as well as incorporating outdoor game education into the pre-school curriculum.

4.1 Teachers' Perception of Their Role in Facilitating Outdoor Game Education:
The analysis revealed that teachers perceive their role in facilitating outdoor game education as crucial in promoting holistic development among children in Jingmen Vocational College pre-school education settings. They view themselves as facilitators, creating opportunities for active play, exploration, and learning in natural environments. Teachers believe that their role involves promoting physical development, fostering social interactions, enhancing cognitive skills, and supporting emotional well-being through outdoor games.

4.2 Strategies Employed by Teachers to Facilitate Outdoor Game Education:
The findings indicate that teachers employ various strategies to facilitate outdoor game education in Jingmen Vocational College pre-school education settings. These strategies include designing engaging and age-appropriate game activities, incorporating learning objectives into outdoor games, providing materials and resources for outdoor play, encouraging collaboration and teamwork among children, and integrating nature and environmental elements into game experiences. Teachers also utilize observation and assessment techniques to monitor children's progress and tailor their instructional practices accordingly.

4.3 Challenges Faced by Teachers in Facilitating Outdoor Game Education:
The analysis identified several challenges faced by teachers in facilitating outdoor game education. These challenges include limited outdoor space and resources, weather constraints, time constraints within the curriculum, managing large groups of children during outdoor activities, ensuring children's safety during outdoor play, and addressing individual differences and diverse needs of children. Furthermore, teachers highlighted the need for support and professional development opportunities to enhance their competence in delivering effective outdoor game education.

4.4 Teachers' Perception of the Impact of Outdoor Game Education on Children's Learning Outcomes:
Teachers perceive outdoor game education to have a positive impact on children's learning outcomes. They reported that outdoor games enhance children's physical fitness, gross and fine motor skills, problem-solving abilities, creativity, social skills, and emotional well-being. Teachers observed improvements in children's independence, self-regulation, communication, and collaboration skills through outdoor play. They also noted that outdoor game education fosters a love for nature and the environment, promoting environmental awareness and responsible behavior among children.

V. Discussion:
The findings of this study on the teachers' role in facilitating outdoor game education in Jingmen Vocational College pre-school education settings have several implications for practice, policy, and future research.

5.1 Practice Implications:
The findings emphasize the importance of providing teachers with professional development opportunities and support to enhance their competence in delivering effective outdoor game education. Training programs can focus on equipping
teachers with the knowledge and skills to design engaging and age-appropriate game activities, integrate learning objectives into outdoor games, and effectively manage outdoor play in limited spaces. Additionally, providing access to resources and materials for outdoor play can help overcome challenges related to outdoor space constraints. Practitioners can also benefit from sharing best practices and collaborating with colleagues to exchange ideas and strategies for successful outdoor game education.

5.2 Policy Implications:
The findings highlight the need for supportive policies and guidelines that prioritize and promote outdoor game education in pre-school settings. Educational authorities and policymakers can consider incorporating outdoor game education into the curriculum, ensuring dedicated time and resources for outdoor play. Policies can address issues such as the allocation of outdoor spaces, availability of materials and equipment, and safety guidelines for outdoor activities. Recognizing and valuing the role of teachers in facilitating outdoor game education can also be reflected in professional development opportunities and incentives.

5.3 Research Implications:
The study opens avenues for further research on outdoor game education in pre-school settings. Future studies can explore the long-term effects of outdoor game education on children's development and academic achievement. Additionally, investigating the specific strategies and interventions that effectively address the challenges faced by teachers can provide valuable insights for designing comprehensive support systems. Comparative studies across different educational contexts and diverse populations can contribute to a broader understanding of the teachers' role in facilitating outdoor game education and its impact on children's learning outcomes.

The implications of these findings highlight the significance of integrating outdoor game education into pre-school practices, supporting teachers in their roles, and recognizing the positive impact on children's holistic development. By leveraging these implications, educators, policymakers, and researchers can work collaboratively to create enriching and effective outdoor game education experiences for young children in pre-school settings.

VI. Conclusion:
This study explored the teachers' role in facilitating outdoor game education in Jingmen Vocational College pre-school education settings. The study revealed that teachers perceive their role as crucial in promoting holistic development among children. They employ various strategies, such as designing engaging activities, incorporating learning objectives, and fostering collaboration, to facilitate outdoor game education. However, they also face challenges related to limited resources, weather constraints, and managing diverse needs. Teachers perceive outdoor game education to have a positive impact on physical, cognitive, social, and emotional aspects of children's development.

These findings highlight the significance of teachers' roles in facilitating outdoor game education in pre-school settings. By creating opportunities for active play and exploration, teachers contribute to children's overall development and well-being. The study underscores the importance of providing professional development opportunities and support for teachers to enhance their competence in delivering effective outdoor game education.

Based on these findings, several recommendations can be made. For policy, it is crucial to incorporate outdoor game education into the pre-school curriculum and develop guidelines that prioritize and support its implementation. Allocating dedicated time, resources, and spaces for outdoor play is essential. Practice should focus on providing professional development opportunities for teachers, sharing best practices, and creating collaborative networks to enhance their skills in facilitating outdoor game education. Additionally, addressing challenges such as limited resources, safety concerns, and individual differences will contribute to the effectiveness of outdoor game education.

Future research should explore the long-term effects of outdoor game education on children's development and academic achievement. Comparative studies across different educational contexts and diverse populations can broaden our understanding of the teachers' role in facilitating outdoor game education. Further investigation of specific strategies and interventions to overcome challenges faced by teachers will also be valuable.

In conclusion, this study underscores the importance of teachers' roles in facilitating outdoor game education in pre-school settings. By understanding their perceptions, strategies, challenges, and the impact on children's learning outcomes, we can create supportive environments and practices that enhance children's holistic development. By implementing the recommendations in policy and practice and conducting further research, we can maximize the benefits of outdoor game education for young children in pre-school settings.

References:


