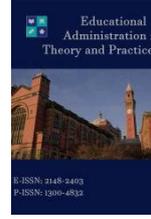




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Research on Integration and Application of Ethnic Sports, Folk Sports, and Traditional Sports in School Education among Minority Groups

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	Abstract
<p>Article History</p> <p>Article Submission 20 July 2023</p> <p>Revised Submission 24 August 2023</p> <p>Article Accepted 22 September 2023</p>	<p>As ethnic sports can improve students' physical health and cultural heritage, there is increased interest in incorporating them into school curricula. The current literature on this topic doesn't fully examine the basic mechanisms and contextual factors that affect these relationships, especially for minority students. This study aimed to investigate how including ethnic sports in school curricula relates to the cultural identity and physical fitness outcomes of minority students. In addition, the research aimed to explore how cultural identity plays a role in between, and how the school environment and socioeconomic status affect this relationship. The research used a quantitative design and included minority students from various cultural backgrounds as participants. A total of 470 minority students were used in the study to collect data. The researchers used statistical methods like mediation and moderation models and regression analysis to look into the connections and test the ideas. The study's findings showed a statistically significant and favorable relationship between the inclusion of ethnic sports in the academic curriculum and students' levels of physical fitness. Furthermore, it was shown that cultural identity mediated the relationship, suggesting that students' levels of cultural identification contributed to their motivation to exercise. The results showed that the relationship between ethnic sports integration and fitness outcomes was moderated by the educational environment. The present study adds to the extant body of literature by furnishing empirical substantiation regarding the favorable influence of assimilating ethnic sports on the physical fitness outcomes and cultural identity of students.</p> <p>Keywords: Ethnic Sports; Cultural Identity; Physical Fitness; School Environment; Socioeconomic Status</p>

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Introduction

Incorporating physical fitness and sports involvement into a comprehensive school curriculum is crucial, as it not only enhances physical well-being but also fosters social engagement, collaborative efforts, and individual growth (Feng, Lu, Yin, & Qi, 2021). Notwithstanding, minority students frequently encounter obstacles and inequalities when it comes to accessing and participating in sports and physical education programs. The aforementioned inequalities stem from a multifaceted interaction of sociocultural variables, encompassing inadequate representation of their ethnic identities, discrepancies in educational settings, and variations in socioeconomic standing (Ibrahim & Hassanain, 2022). It is essential to comprehend the effects of incorporating ethnic sports into school education on the physical fitness of minority students.

Research shows that minority students demonstrate lower levels of participation in athletics and physical fitness than their minority peers. The factors contributing to the observed inequalities are multifaceted and include restricted sports facilities, inadequate facilities, cultural barriers, and lack of representation and inclusion in sports programs (Black, Johnston, Propper, & Shields, 2019). Consequently, minority students experience low levels of physical fitness, with consequences for their health, overall well-being and academic performance. A person's cultural identity, including his or her group affiliation, shared values, and shared customs, has a profound effect on his or her behavior and the outcomes he or she receives (Kim, Hino, Asami, & Kondo, 2022). One approach is to support minority students to feel more connected to school and community and to incorporate ethnic sports into the curriculum. Students' motivation, self-esteem and participation in sporting activities all improve when they feel their cultural identity is respected and encouraged at school (Kumar, Manoli, Hodgkinson, & Downward, 2018). Therefore, using students' cultural identities as a driving force, the incorporation of ethnic sports has the potential to favorably affect minority students' physical fitness levels (Kang-Yi et al., 2018).

The role of cultural identity as a mediator suggests that the participation of minority students in ethnic sports that are congruent with their cultural heritage can enhance their sense of affiliation and identification within the sports milieu. Consequently, it is plausible that this could amplify their drive and dedication toward engaging in physical activities, ultimately resulting in better physical fitness results (Larsen et al., 2023). Additionally, a robust cultural identity can have a favorable impact on the adoption of healthy lifestyles beyond the realm of sports, thereby making a significant contribution to overall physical well-being (Cheng, Chen, Pan, Gao, & Li, 2023).

Prior research has investigated the favorable impacts of engaging in sports activities on physical fitness results and cultural identification among student populations. Pace, Mollborn, and Rigles (2022) conducted a study that revealed that engagement in ethnic sports had a beneficial impact on the physical fitness of students. This resulted in enhancements in cardiovascular endurance, flexibility, and muscular strength. Furthermore, research conducted by Coenen & Kunst, (2021) revealed that participation in ethnic sports activities facilitated the development of a more robust cultural identity among students from various cultural backgrounds. The aforementioned studies offer preliminary indications regarding the possible advantages of incorporating cultural sports into academic curricula. Notwithstanding these preliminary findings, further investigation is required to comprehend the fundamental mechanisms and examine the function of cultural identity as an intermediary between the incorporation of ethnic sports in school education and the physical fitness of students (Coenen & Kunst, 2021). Comprehending the correlation between cultural identity and the physical fitness of students can aid in the development of more precise interventions that foster both physical health and cultural affiliation. Furthermore, it is necessary to investigate the potential moderating impact of the school environment and socioeconomic status on the correlation between the assimilation of ethnic sports and the physical fitness of students (López-Mulnix, 2019). The educational setting assumes a pivotal function in molding the physical activity experiences and opportunities of students. The positive outcomes of ethnic sports integration on students' physical fitness can be further enhanced by the provision of a supportive and inclusive school environment (Jasińska et al., 2022). Moreover, the socioeconomic status of individuals may serve as either an impediment or an

enabler to their engagement in sports activities and enhancement of physical fitness levels, particularly among students (Bozkurt, 2021). An examination of these moderating factors will yield a comprehensive comprehension of the intricate interplay among ethnic sports integration, the physical fitness of students, and contextual factors.

The Chinese education system has long been noted for emphasizing hard academic pursuits and fostering a highly competitive environment (Ma et al., 2022). However, recent events may have caused changes in its structure and purpose. Sports' significance in academic education cannot be overstated. Physical activities and sports have been proven to provide several benefits to students. Physical fitness is an important component of general health and well-being (Marttinen et al., 2022). Sports exercise improves cardiovascular health, muscle strength, flexibility, and helps maintain a healthy weight (Brinkley et al., 2022). Physically fit kids are more likely to have better concentration, more energy, and less stress, all of which can improve academic achievement (Xie et al., 2022). Furthermore, engagement in athletics promotes cognitive growth. Regular physical activity has been demonstrated in studies to improve memory, problem-solving skills, and the ability to focus and concentrate (López-Sánchez et al., 2020). Team sports, in particular, allow kids to acquire important social skills and understand the value of teamwork (Endsley, 2023). Interacting with peers in a sports situation develops interpersonal skills, leadership abilities, and the capacity to interact effectively with others, all of which are important for success in a variety of areas (Nicolopoulou et al., 2015). Sports have major emotional ramifications for students in addition to physical and cognitive benefits. Sports can increase self-esteem, decrease anxiety, and promote a good attitude in life (Nyland & Pyle, 2022). Students who regularly participate in sports frequently have better emotional well-being, which can improve their academic performance (Feldman & Matjasko, 2007). Sports' importance in the Chinese school system can also be linked to cultural heritage. Cultural components can be incorporated into physical education by adding traditional activities and sports from other cultures, such as martial arts like Kung Fu, which have deep cultural importance (Barcelona et al., 2021). Cultural dances, music, and folk activities can also be incorporated into physical education curricula to promote cultural diversity and an appreciation for other traditions (Li, 2022). Sports, in terms of educational ramifications, promote the physical, mental, emotional, and social parts of a student's personality (Martinez et al., 2022). Sports participation can also foster a good and inclusive learning environment, fostering a sense of community and school spirit (Logan et al., 2023). Furthermore, active participation in sports has been associated with lower dropout rates, since students who participate in sports frequently feel more connected to the school and their friends (Watkins et al., 2021).

Furthermore, athletic tournaments within schools have a variety of advantages. Competitions provide students with specific objectives to work toward, assisting them in setting and achieving goals (Eusébio et al., 2022). Competing in sports teaches kids important life skills such as resilience, perseverance, and sportsmanship (Özdiç, 2020). Furthermore, competitions can be effective motivators for students to develop their abilities and work hard (Rong-Da Liang, 2021). To encourage children to participate in sports, educators and schools can provide a variety of sports opportunities, stress diversity, and highlight role models who began their athletic careers in school sports (Black et al., 2021). Intramural tournaments can also encourage involvement without the pressure of external events (Conner & Bohan, 2021). Furthermore, studies have shown that regular exercise and physical activity might improve academic performance in college students. Regular physical activity improves cognitive performance, reduces stress and anxiety, improves sleep quality, boosts mood, and boosts enthusiasm to face scholastic problems (Estrada Guillén et al., 2022).

The necessity to fill knowledge gaps in the literature and make a contribution to the fields of education and health promotion served as the justification for undertaking this study. This study explores how ethnic sports are integrated into the curriculum, cultural identity, and physical fitness in order to shed light on the complex interaction of factors that affect students' wellbeing. Since they have particular demands and challenges, minority kids are the main subject of the study. Minority students frequently encounter obstacles to engaging in physical activity and may encounter a sense of cultural alienation within conventional educational environments. The study seeks to examine the impact of the integration of ethnic sports on the physical fitness and cultural identity of minority students. Its objective is to generate recommendations based on empirical

evidence to enhance their overall well-being and integration in school settings. The objective of this investigation is to analyze the correlation between the incorporation of ethnic sports into educational institutions, cultural identity, and the physical fitness achievements of students. The study's aims are delineated as follows: 1). To investigate the relationship between the integration of ethnic sports in school education and students' physical fitness outcomes, including cardiovascular endurance, flexibility, and muscular strength, 2). To explore the relationship between the integration of ethnic sports in school education and students' cultural identity, including a sense of belonging and connection to their cultural heritage, 3). To examine the mediating role of cultural identity in the relationship between the integration of ethnic sports in school education and students' physical fitness outcomes, 4). To assess the moderating influence of the school environment on the relationship between the integration of ethnic sports in school education and students' physical fitness outcomes, 5). To examine the moderating effect of socioeconomic status on the relationship between the integration of ethnic sports in school education and students' physical fitness outcomes.

The present study has made significant contributions to the respective field. The study presented empirical evidence regarding the effects of incorporating ethnic sports into school curricula on the physical fitness outcomes of students. Comprehending the correlation between the integration of ethnic sports and physical fitness was imperative in devising efficacious interventions that fostered the health and overall welfare of students. The study made a contribution to the comprehension of the correlation between the incorporation of ethnic sports into school curricula and the cultural identity of students. The study examined the impact of the integration of ethnic sports on cultural identity, shedding light on the significance of cultural practices in promoting a feeling of affiliation and interrelatedness among students. The study has shed light on the underlying mechanisms through which ethnic sports participation influenced physical fitness outcomes by examining the mediating role of cultural identity. The aforementioned findings have contributed to the advancement of our comprehension regarding the mechanisms by which cultural identity may exert a favorable influence on the physical welfare of students. Furthermore, by exploring the moderating impact of both the school environment and socioeconomic position, the study added significantly to the current body of literature. School climate, socioeconomic position, ethnic sports integration, and fitness outcomes: exploring these interrelationships may shed light on how to improve educational policies and programs for all students.

Literature Review

Integration of Ethnic Sports in School Education

Ethnic sports have received significant attention in recent years as a way to appreciate cultural diversity, advance inclusivity, and foster community engagement in the classroom. Ethnic sports, often known as traditional sports, have significant cultural and historical value for particular communities or ethnic groups (Dede Yildirim & Roopnarine, 2019). Researchers have devoted their time to figuring out the benefits of including these activities in school curricula, giving pupils exceptional opportunities to research and interact with many cultures. The integration of ethnic sports within a school environment was investigated in a study by Coenen and Kunst (2021), and the results showed its beneficial impact on students' understanding and respect of various cultures. According to the study, such integration helps kids from different backgrounds feel more united. Students who participate in traditional sports get a strong regard for the many social traditions and customs as well as knowledge of the associated cultural heritage (Fielding, 2022). Additionally, by mixing ethnic sports with academics, traditional values and cultural heritage are actively preserved (Godfrey, Coleman, & Eys, 2021).

Cultural Identity

Cultural identification includes a person's strong sense of belonging as well as the values, traditions, and rituals that they associate with their particular cultural or ethnic group. Numerous studies have proven how crucial cultural identity is to students' overall development and well-being (Neha, Reese, Schaughency, & Taumoepeau, 2020). The inclusion of ethnic sports in the curriculum plays a crucial part in fostering a sense of cultural identity because it gives pupils a

meaningful way to connect with their roots. The effect of engaging in ethnic sports on students' cultural identification was looked at in a study by Williams, Lugo, and Firth (2022). The results showed that students' cultural identities were positively impacted by active participation in ethnic sports activities. Such activities boosted self-esteem and cultural pride. Ethnic sports give students a priceless opportunity to connect with their culture, understand their identity, and strengthen their ties to their ethnic community (Allen & Uskul, 2019).

Students' Physical Fitness

The overall health and holistic development of students depend heavily on their physical fitness. When ethnic sports are included in academics, it offers a singular chance to meld physical activity with cultural encounters (Martinen, Wilson, Fisher, Beitzel, & Fredrick, 2022). It has been repeatedly shown through research that participating in ethnic sports improves students' physical fitness as well as their psychological and social well-being. A comparison between the physical fitness outcomes of students who engaged in ethnic sports activities and those who participated in traditional physical education programs was made in a study by Tadiotto et al. (2021). The results revealed that when compared to their peers in traditional physical education programs, students participating in ethnic sports activities demonstrated greater cardiovascular fitness, muscular strength, and agility (Roldão da Silva et al., 2020). This can be linked to the dynamic and physically taxing motions frequently found in ethnic sports, which can help students' levels of physical fitness overall. Students have the chance to improve their physical health as well as their understanding of many cultures by introducing ethnic sports into their academic curriculum (D'Agostino, Day, Konty, Larkin, & Wyka, 2019). This integration enables children to partake in culturally-based physical activities, building a sense of pride and connection to their cultural heritage while gaining the many advantages of increased physical fitness (Butz & Hancock, 2019).

School Environment

Students' experiences and performance are significantly influenced by their school environment. An inclusive and culturally sensitive environment can be created by incorporating ethnic sports into classroom instruction (Tannert & Gröschner, 2021). Schools can promote intercultural dialogue, reduce prejudice and discrimination, and increase students' participation and sense of belonging by adding ethnic sports, especially for kids from varied backgrounds. Gonçalves Galdino da Costa, Souto Barreto, Magno da Silveira, Aragoni da Silva, and Samara Silva (2020) looked into how integrating ethnic sports will affect the school environment. The research found that schools that supported ethnic sports saw a number of benefits. These included a rise in student satisfaction with the overall school atmosphere, a decrease in bullying incidences, and greater social cohesiveness. Ethnic sports are inherently inclusive, allowing kids from different backgrounds to interact, celebrate variety, and foster tolerance for one another (Binasis, Kaplun, & Schmied, 2022). The general well-being and academic success of kids can be considerably impacted by such a supportive and peaceful learning environment. The inclusion of ethnic sports in the curriculum increases students' cultural exposure while also fostering a feeling of community and respect for diversity (Li, 2023). Schools may establish a positive environment where students feel valued, respected, and encouraged to thrive academically and personally by fostering an inclusive and culturally sensitive environment (Schmidt, Bratland-Sanda, & Bongaardt, 2022).

Socioeconomic Status

Access to resources and opportunities is strongly influenced by a person's socioeconomic status (SES), which includes factors such as income, level of education, and occupation. When deciding how to incorporate ethnic sports into the school curriculum, it is essential to consider the potential implications of student engagement based on their socioeconomic background (Abreu-Mendoza, Chamorro, Garcia-Barrera, & Matute, 2018). Schools must take proactive measures to eliminate these gaps in order to guarantee that all children have an equal opportunity to participate in cultural activities. In order to promote equitable participation in ethnic sports programs, particularly among students from different socioeconomic backgrounds, Heger and Hoffmann (2021) have underlined the importance of inclusive policy and financial assistance. Schools must be aware of the financial difficulties some families may be experiencing and offer the necessary aid and resources to ensure that all students have access to racial sports programs (Heradstveit, Hysing, Nilsen, & Bøe, 2020). Schools can work to ensure that all children and can

benefit from ethnic sports programs by addressing socioeconomic gaps (Fleming et al., 2023).

The inclusion of ethnic sports in the curriculum has the potential to enhance more than a few factors, such as socioeconomic reputation, student fitness, and sociocultural identity. Schools that support ethnic sports encourage inclusivity, develop cultural diversity, improve students' expertise in different cultures, and bolster students' sense of pride in their ancestry (Åvitsland, Leibinger, Kollé, Haugen, & Dyrstad, 2021). To ensure that all students can benefit from ethnic sports programs, however, it's far more important for faculties to increase inclusive regulations, offer equal possibilities, and deal with socioeconomic inequities. The long-term impacts and ideal methods for successfully incorporating ethnic sports into classroom instruction require more study (Dede Yildirim & Roopnarine, 2019).

Integration of Ethnic Sports in School Education and Students' Physical Fitness

A growing body of research has shown that including ethnic sports in the curriculum benefits students' physical fitness. Ethnic sports provide a distinctive fusion of physical exercise and cultural experiences since they are historically and culturally significant to particular communities or ethnic groups (D'Agostino et al., 2019). Numerous research have looked into the connection between students' levels of physical fitness and the inclusion of ethnic sports in the curriculum. Andrews (2020) compared the physical fitness outcomes of students who engaged in ethnic sports activities with those of students who participated in traditional physical education programs. The results showed that when compared to their counterparts in traditional physical education programs, students who participated in ethnic sports activities showed greater cardiovascular fitness, muscular strength, and agility (Kidokoro, Kohmura, Fuku, Someya, & Suzuki, 2020). The dynamic and physically taxing aspect of ethnic sports helps students' physical fitness levels to improve. Additionally, the inclusion of ethnic sports activities in the curriculum promotes participation in physical activity and engagement. Students are encouraged to take part in sports which is essential to their culture, which will increase their amusement and adherence to fitness regimens (Mathur et al., 2022). By including ethnic sports in the curriculum, schools provide children the chance to develop their physical fitness while simultaneously promoting an exploration of many cultures (Butz & Hancock, 2019).

Integration of Ethnic Sports in School Education and Cultural Identity

The inclusion of ethnic sports in the curriculum has a significant effect on students' sense of cultural identification. Students can connect with their cultural roots and develop a greater awareness of their own cultural identity through ethnic sports, which serve as traditional sports that represent cultural legacy (Caldwell, 2020). Numerous studies have looked at the connection between students' cultural identities and the inclusion of ethnic sports in the curriculum. The impact of taking part in ethnic sports activities on students' cultural identities was looked into in a study by Darvin, Mumcu and Pegoraro (2021). The effects confirmed a positive affiliation between ethnic sports activity participation and an accelerated feeling of cultural identity, which in turn caused better tiers of self-esteem and cultural pleasure. Students have the chance to deepen their information of their non-public identification even by fortifying their ties to their ethnic institution through active participation in ethnic sports (Staley et al., 2019). Additionally, including ethnic sports in the curriculum encourages kids from various backgrounds to recognize and value other cultures. Students are exposed to numerous practices, traditions, and values through participation in activities that represent many cultures. Through this exposure, the pupil body is recommended to respect one another, experience empathy for each other, and work together to create welcoming surroundings where different cultures are valued. Students are able to examine and admire the diversity and richness of other cultures thanks to the inclusion of ethnic sports activities in school instruction, which acts as a catalyst for intercultural dialogue (Dede Yildirim & Roopnarine, 2019).

Cultural Identity and Students' Physical Fitness

Cultural identity influences students' physical fitness attitudes and actions, according to research. Cultural identity the sensation of belonging and connection to one's cultural or ethnic group is linked to students' physical fitness. Barcelona, Castelli, Duncan Cance, Pitt Barnes, and Lee (2021) found that teenagers with stronger cultural identities were more physically fit. Cultural identity motivates people to exercise, according to experts. Strong cultural identities may feel

obligated to preserve their traditions, including fitness practices. Additionally, a student's cultural identity may influence how they see exercise and physical fitness (Jang, So, & Jeong, 2021). People who feel a strong sense of cultural identity may place a priority on culturally relevant physical fitness activities. For instance, ethnic sports can give kids a way to engage in physical activity while also strengthening their sense of cultural identity (Williams et al., 2022). Students can foster both their cultural identity and physical fitness by embracing and engaging in ethnic sports. This integration enables children to partake in culturally significant activities, building a deeper understanding of their ancestry while gaining the physical advantages connected with physical fitness routines (Morgan, Fletcher, & Sarkar, 2019).

Cultural Identity as a Mediator

Understanding how ethnic sports in the curriculum affect students' physical health and cultural identity as a mediator is crucial. Cultural identity, including membership and beliefs, customs, and traditions, affects students' ethnic sports engagement and physical health (Godfrey et al., 2021). Numerous research has looked into the mediating effect of cultural identity between the inclusion of ethnic sports in the curriculum and the physical health of pupils. The inclusion of ethnic sports in the curriculum has a direct impact on cultural identity because it encourages students to engage with their cultural history. In addition, playing ethnic sports encourages physical activity, which improves students' physical fitness (Beneke & Cheatham, 2020). The relationship between the integration of ethnic sports, cultural identity, and students' physical fitness can be better understood by recognizing the mediating role of cultural identity (Guo, Cao, & Zhu, 2022). For instance, Luchoro-Parrilla et al. (2021) looked at the role that cultural identification played in mediating the link between students' physical health and the inclusion of ethnic sports in the curriculum. The results showed that cultural identification considerably moderated the connection. This meant that students who actively participated in ethnic sports had better levels of physical fitness than those whose cultural identities were weaker. This link is mediated by cultural identity in a number of ways. First off, cultural traditions, values, and practices are frequently strongly ingrained in ethnic sports. These exercises help students identify with their cultural heritage (Luchoro-Parrilla et al., 2021). Students' cultural identity motivates them to exercise. Second, culture shapes physical fitness views. Culturally identified students may view culturally relevant physical activity as crucial to preserving and expressing their heritage. This perspective stimulates increased commitment and dedication to physical fitness practices, which improves results (Andrews, 2020). Cultural identity also boosts pupils' fitness and self-confidence. Ethnic sports provide students with a sense of mastery and confidence in their physical abilities. Due to enhanced self-efficacy, students are encouraged to exercise regularly (Liu, 2021).

School Environment as a Moderator

The learning environment at school has a significant impact on how kids experience learning and perform, as well as how physically fit they are. It might serve as a moderator in the relationship between students' physical fitness and the inclusion of ethnic sports in the curriculum. When it comes to integrating ethnic sports to encourage students' physical health, the school environment is made up of a variety of elements, including policies, resources, facilities, and support systems (Cagas et al., 2022). In order to better understand how the school setting influences the link between students' physical health and the inclusion of ethnic sports in the curriculum, Hidalgo, Parra, and Abril (2020) performed a study. The study found that integrating ethnic sports into the curriculum had a beneficial impact on student's physical fitness outcomes and was greatly increased by a supportive and inclusive school atmosphere. The physical fitness of kids will increase as a result of their active involvement in ethnic sports at schools that value physical activity, offer suitable facilities, and foster an inclusive and engaging culture (Hetzl, Boivin, Patrizio, & Chau, 2019).

School settings affect students' attitudes, motivation, and physical activity. Ethnic sports and physical activity in a supportive educational atmosphere can foster camaraderie, enjoyment, and drive. This enhances their interest in and willingness to spend money on physical fitness activities related to ethnic sports (Takahashi, Ozawa, & Harizuka, 2020). On the other hand, a hostile or unwelcoming school climate may prevent children from participating in ethnic sports and reduce the positive effects on their physical fitness (Cagas et al., 2022).

Socioeconomic Status as a Moderator

Income, education, and occupation determine someone's socioeconomic status (SES). SES moderates the relationship between ethnic sports and student fitness. Kids' ethnic sports participation and fitness benefits may depend on socioeconomic background. Black et al. (2019) examined how socioeconomic status moderates the relationship between students' physical fitness and ethnic sports in the curriculum. According to the findings, children from poorer socioeconomic situations may face barriers to ethnic sports, which may harm their physical fitness. Socioeconomic position affects resources, facilities, transportation, and finances, which can limit students' participation in ethnic sports and physical fitness (Basterfield, Burn, Galna, Karoblyte, & Weston, 2021). Additionally, the assets and aid systems that might be found in faculties are very beneficial in reducing the impact of socioeconomic level at the link among the inclusion of ethnic sports and physical fitness. Schools that place a high value on diversity and inclusion are near the opportunity gap and guarantee the same access to ethnic sports activities programs by offering financial resources, transportation, and resources to students from lower socioeconomic backgrounds (Heradstveit et al., 2020). Schools can enhance the benefits of integrating ethnic sports into college students' physical fitness and develop fairness in physical interest opportunities by addressing socioeconomic gaps (Chang, Bang, Kim, & Nam-Speers, 2021).

H1. Integration of Ethnic sports in School education has a significant and positive impact on Students' Physical Fitness.

H2. Integration of Ethnic sports in School education has a significant and positive impact on Cultural Identity.

H3. Cultural Identity has a significant and positive impact on Students' Physical Fitness.

H4. Cultural Identity mediates the relationship between the integration of Ethnic sports in School education and Students' Physical Fitness.

H5. School environment moderates the relationship between the integration of Ethnic sports in School education and Students' Physical Fitness.

H6. Socioeconomic status moderates the relationship between the integration of Ethnic sports in School education and Students' Physical Fitness.

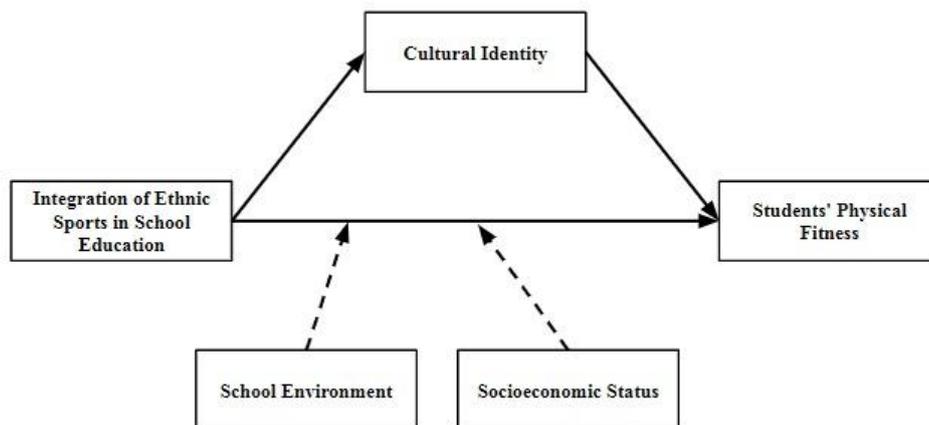


Figure 1. Conceptual Framework

Methodology

A quantitative cross-sectional approach was used for this investigation. Data can be collected at a single point in time in a cross-sectional study, making it possible to examine relationships. The aforementioned design is deemed appropriate for fulfilling the research objectives as it

facilitates the exploration of the influence of incorporating ethnic sports into school curricula on the physical fitness and cultural identity of students. The study's focus was on minority students who attend schools that have incorporated ethnic sports into their physical education curriculum. The methodology utilized for sampling is stratified random sampling. The schools were categorized according to their geographic location and socioeconomic status. A random selection of schools was made from each stratum.

All eligible students were included in the study from the schools that were selected. The employed sampling technique guarantees inclusivity of participants from varied geographical locations and socioeconomic strata, thereby augmenting the universality of the outcomes. The determination of the sample size was based on a power analysis, which involved the consideration of effect sizes from prior research and the desired level of significance. The inclusion criteria necessitate that the individuals must be registered in a school that is part of the study and must provide informed consent to participate. The researchers determined the sample size for the study to be 470 participants. The inclusion criteria for the sample encompassed minority students who were currently enrolled in a school located in China. The study involved administering structured questionnaires to participants to evaluate various variables, including cultural identity, school environment, socioeconomic status, and physical fitness. The questionnaires utilized in the study were derived from established validated measures and were modified to align with the particular contextual parameters of the research. The data that was gathered was subjected to appropriate statistical techniques in order to investigate the research inquiries and verify the hypotheses. The process of analyzing data was conducted through the utilization of statistical software, specifically SPSS. The statistical techniques employed to provide a summary of the sample characteristics and variables of interest included descriptive statistics, specifically means, standard deviations, and frequencies. The study conducted bivariate correlations to investigate the associations among the amalgamation of ethnic sports, cultural identity, and the physical fitness of students. The study utilized regression analysis to evaluate the influence of incorporating ethnic sports on both cultural identity and physical fitness, while also accounting for pertinent covariates. The study employed mediation analysis techniques, specifically path analysis and bootstrapping, to investigate the mediating effect of cultural identity on the association between the integration of ethnic sports and physical fitness. A moderation analysis was conducted to investigate the potential moderating impact of the school environment on the association between the integration of ethnic sports and physical fitness outcomes.

Measures

Cultural Identity: A 5-item scale adapted from Neha et al. (2020) was used to assess cultural identity. Sample items include: “Engaging in cultural activities helps me develop a sense of identity”.

School Environment: A 4-item scale adapted from Gonçalves Galdino da Costa et al. (2020) was used to measure the school environment. Sample item: “Rate the availability of sports facilities in your school on a scale from 1 to 5”.

Physical Fitness: A 7-item scale adapted from Andrews (2020) was used to measure the school environment. Sample item: “Physical education classes are offered regularly to improve students’ physical fitness”.

Integration of Ethnic Sports: A 6-item scale adapted from Coenen and Kunst (2021) was used to measure the integration of ethnic sports. Sample item: “Ethnic sports are an integral part of the school curriculum”.

Results

Demographic Profile

Participants were from three age groups. 150 participants which is 31.9% of the sample are 10-12 years old. 200 participants which is 42.6% of the sample are 13-15 years old. 120 participants which are 25.5% of the sample are 16-18 years old. The sample is gender diverse. 220 participants which is 46.8% of the sample are men. 230 participants which is 48.9% of the sample which is are women. 20 people which is 4.3% of the sample are non-binary. The sample is diverse

in socioeconomic position. 150 participants (31.9%) are low-income. 230 people which is 48.9% of the sample are middle-income. 90 participants which are 19.1% of the sample are high-income. Finally, the sample comprises students from different grades. 160 participants which is 34.0% of the sample are in 6th grade. 180 respondents were from 9th graders comprising 38.3% of the sample. 130 respondents were from 12th graders comprising 27.7% of the sample. Table 1 shows the demographic profile of respondents.

Table 1. Demographic Profile

Demographic Variable	Options	Frequency	Percentage
Age	10-12 years	150	31.9%
	13-15 years	200	42.6%
	16-18 years	120	25.5%
Gender	Male	220	46.8%
	Female	230	48.9%
	Non-binary	20	4.3%
Socioeconomic Status	Low-income	150	31.9%
	Middle-income	230	48.9%
	High-income	90	19.1%
School Grade/Level	6th grade	160	34.0%
	9th grade	180	38.3%
	12th grade	130	27.7%

Descriptive Statistic

Table 2 displays the descriptive statistics of four variables, namely Integrating Ethnic Sports, Cultural Identity, Students Physical Fitness, and School Environment. The statistical analysis presents the minimum, maximum, mean, and standard deviation for each variable, derived from a sample size of 470 individuals. In general, the participants exhibited a tendency to assign low scores to the incorporation of ethnic sports and cultural identity. The level of physical fitness was assessed to be of moderate degree, whereas the evaluations of the school environment exhibited moderate levels of variability.

Table 2. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Integrating Ethnic Sports	470	1	5	1.55	.683
Cultural Identity	470	1	5	1.63	.820
Students Physical Fitness	470	1	4	2.24	.717
School environment	470	1	5	2.01	.742

Normality Assessment

The normality assessment results for four variables are presented in Table 3. The statistical measures of skewness and kurtosis are utilized to determine the shape of the distribution for each variable. The incorporation of Ethnic Sports and Cultural Identity exhibits a distribution that is skewed towards the right, whereas the distributions of Students' Physical Fitness and School Environment are relatively symmetrical. The kurtosis values indicate that the distribution of Cultural Identity exhibits a higher degree of peakedness and heavier tails in comparison to the remaining variables, which demonstrate lighter tails.

Table 3. Normality Assessment

	Skewness	Kurtosis
Integrating Ethnic Sports	1.09	0.32
Cultural Identity	1.60	2.71
Students Physical Fitness	0.67	-0.15

	Skewness	Kurtosis
School environment	0.50	-0.42

KMO and Bartlett’s Test

The KMO measure is utilized to assess the appropriateness of the data for conducting factor analysis. A numerical score ranging from 0 to 1 is derived, with a greater score indicating a higher degree of suitability. The KMO measure in this instance has been determined to be 0.85, which suggests that the data is appropriate for factor analysis. Bartlett's Test of Sphericity evaluates whether there exists a statistically significant difference between the correlation matrix and the identity matrix, thereby suggesting the presence of latent associations among variables. The examination yields an estimated chi-square statistic, degrees of freedom (df), and a level of significance (Sig.). The present analysis yields an estimated chi-square value of 7884.45, based on 231 degrees of freedom. The reported significance level of 0.0001 indicates that there is a significant difference between the correlation matrix and the identity matrix. Table 4 shows the result of KMO and Bartlett’s test.

Table 4. KMO and Bartlett’s Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	Bartlett's Test of Sphericity		
	Approx. Chi-Square	df	Sig.
0.85	7884.45	231	0.0001

Confirmatory Factor Analysis

The findings of the Confirmatory Factor Analysis (CFA) are displayed in Table 5. The factor loadings, denoting the degree of association between each item and its corresponding factor, typically satisfy the widely recognized criterion of 0.4 or greater. This observation implies a robust correlation between the items and their corresponding factors. It is noteworthy that the factor loading of item IES2 is marginally below the threshold at 0.585. All variables in Table 5 exhibit Cronbach's alpha coefficients that surpass the acceptable threshold of 0.7, indicating high levels of internal consistency. This observation suggests a high level of internal consistency among the items that comprise each variable.

Table 5. Confirmatory Factor Analysis

Variables	Items	Factors Loading	Cronbach Alpha
IES	IES1	0.702	0.867
	IES2	0.585	
	IESSE3	0.782	
	IES4	0.634	
	IES5	0.631	
	IES6	0.818	
CI	CI1	0.573	0.885
	CI2	0.799	
	CI3	0.756	
	CI4	0.742	
	CI5	0.735	
SPF	SPF1	0.844	0.812
	SPF2	0.746	
	SPF3	0.675	
	SPF4	0.636	
	SPF5	0.799	
	SPF6	0.901	
	SPF7	0.723	
SE	SE1	0.715	0.702
	SE2	0.916	

Variables	Items	Factors Loading	Cronbach Alpha
	SE3	0.633	
	SE4	0.769	

Correlation Analysis

Table 6 displays the correlation matrix, which illustrates the interrelationships among the variables IESSE, CI, SPF, and SE. The study revealed statistically significant positive correlations between all pairs of variables, namely IESSE-CI, IESSE-SPF, IESSE-SE, CI-SPF, CI-SE, and SPF-SE, with a p-value less than 0.01. The findings indicate robust correlations among the variables, implying their interconnectedness.

Table 6. Correlation Matrix

		IESSE	CI	SPF	SE
IES	Pearson Correlation	1	.568**	.456**	.530**
	Sig. (2-tailed)		0	0	0
	N	470	470	470	470
CI	Pearson Correlation	.568**	1	.353**	.582**
	Sig. (2-tailed)	0		0	0
	N	470	470	470	470
SPF	Pearson Correlation	.456**	.353**	1	.699**
	Sig. (2-tailed)	0	0		0
	N	470	470	470	470
SE	Pearson Correlation	.530**	.582**	.699**	1
	Sig. (2-tailed)	0	0	0	
	N	470	470	470	470

** Correlation is significant at the 0.01 level (2-tailed).

Regression Analysis

The findings of the regression analysis are displayed in Table 7, which investigates the associations between variables and evaluates predetermined hypotheses. The tabular representation comprises the hypothesis, the type of association, the beta coefficient (which denotes the magnitude and direction of the correlation), the F-statistic (which indicates the overall significance of the regression model), and the p-value (which signifies the significance of the individual predictors). Hypothesis H1 posits that the incorporation of ethnic sports into the curriculum of educational institutions has a noteworthy and favorable effect on the physical fitness of students. The statistical analysis reveals that there exists a significant relationship between the variables under consideration, as supported by the beta value of 0.396, F-value of 7.591, and p-value of 0.001. This finding is consistent with the hypothesis. According to Hypothesis H2, the inclusion of ethnic sports in school curricula has a noteworthy and favorable influence on cultural identity. The obtained statistical results, namely the beta coefficient of 0.682, F-statistic of 14.947, and p-value of 0.001, indicate a statistically significant association, thereby providing support for the research hypothesis. According to Hypothesis H3, there exists a noteworthy and affirmative correlation between cultural identity and the physical fitness of students. The statistical analysis reveals that the hypothesis is supported, as evidenced by the significant relationship indicated by the beta value of 0.121, F-value of 2.784, and p-value of 0.006. Figure 2 shows the regression analysis between IES, IC and SPF and Figure 3 shows the regression analysis between IES and IC.

Table 7. Regression Analysis

Hypothesis	Relation	Beta Value	F	P-value	Hypothesis Supported
H1	IES -> SPF	0.396	7.591	0.001	Yes
H2	IES -> CI	0.682	14.947	0.001	Yes
H3	CI -> SPF	0.121	2.784	0.006	Yes

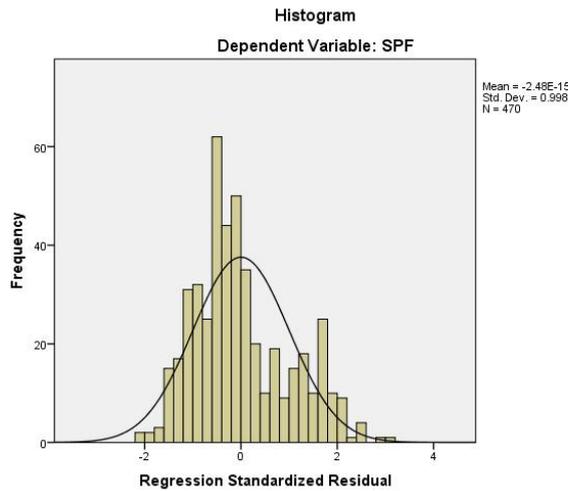


Figure 2. Regression analysis between IES, CI and SPF

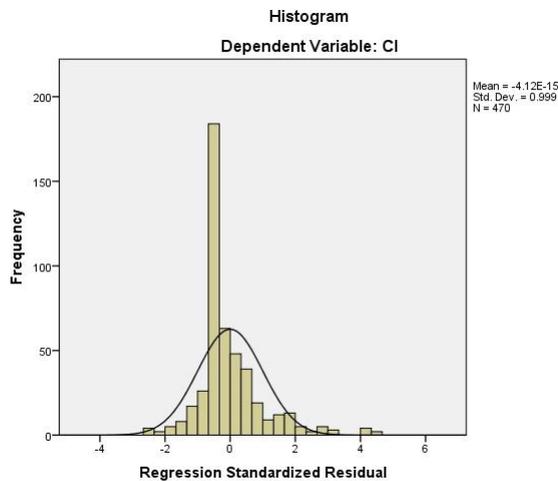


Figure 3. Regression analysis between IES and CI

Mediation Analysis

SPSS PROCESS macro is used to test the mediation hypotheses of H4. The prediction for H4 is that cultural identity positively mediates the relationship between the integration of ethnic sports in school education and students' physical fitness. The result provides support for the hypothesis which stated that cultural identity significantly mediates the relationship between the integration of ethnic sports in school education and students' physical fitness ($t=14.774$, $p=0.0001$). Table 8 shows the result of the mediation analysis.

Table 8. Mediation Analysis

Hypothesis	Relation	beta	T value	P value	Hypothesis Supported
H4	IES-> IC -> SP	0.118	14.774	0.0001	Yes

Moderation Analysis

The H5 hypothesis of the study states that the school environment moderates the relationship between the integration of ethnic sports in school education and students' physical fitness. The result provides support for the hypothesis which stated that school environment moderates the relationship between the integration of ethnic sports in school education and students' physical fitness ($t=12.187$, $p=0.0001$). Similarly, H6 hypothesis of the study states that socioeconomic status moderates the relationship between the integration of ethnic sports in school education and students' physical fitness. The result provides support for the hypothesis which stated that

socioeconomic status moderates the relationship between the integration of ethnic sports in school education and students' physical fitness ($t=3.414$, $p=0.007$). Table 9, Figure 4 and Figure 5 show the result of the moderation analysis.

Table 9. Moderation Analysis

Hypothesis	Relation	beta	T value	P value	Hypothesis Supported
H5	IES x SE -> SPF	0.473	12.187	0.001	Yes
H6	IES x SES -> SPF	0.104	3.414	0.007	Yes

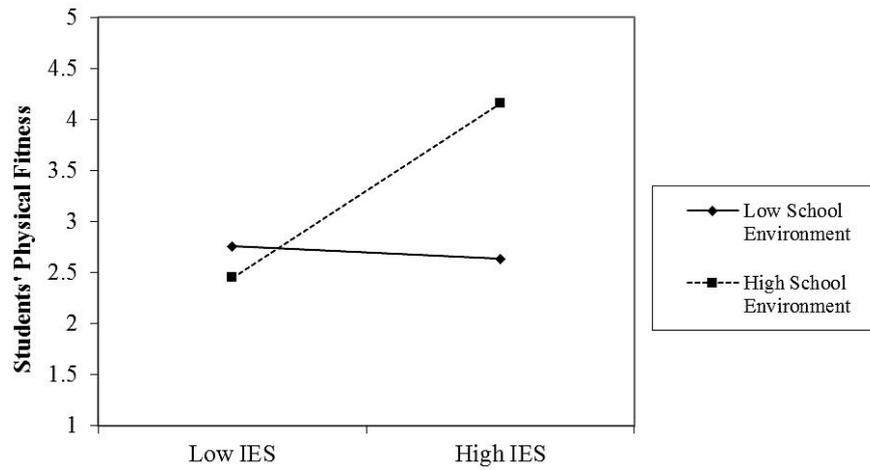


Figure 4. School Environment as Moderator between IES and SPF

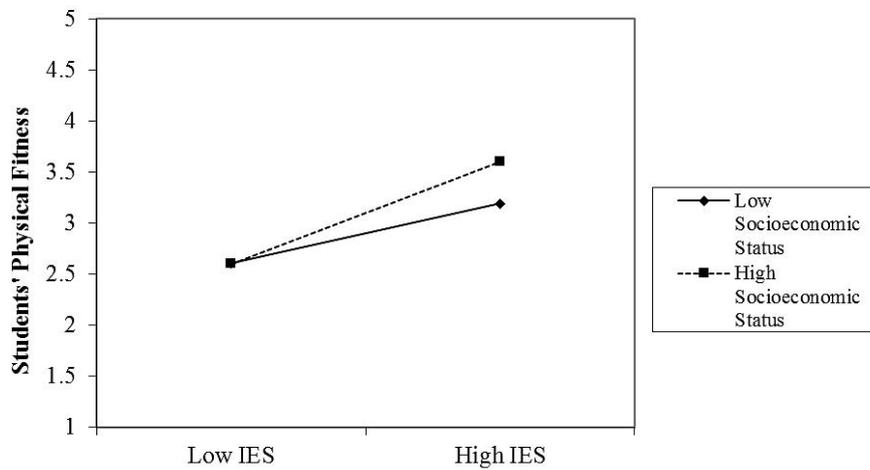


Figure 5. Socioeconomic Status as Moderator between IES and SPF

Discussion

The findings of H1 show that when ethnic sports are included in academic instruction, they significantly and favorably affect students' physical fitness. These outcomes are consistent with earlier research in the place. Ethnic sports activities, which have deep cultural and historical roots, give kids the opportunity to interact in physical activity at the same time as simultaneously fostering an experience of cultural identity (Coenen & Kunst, 2021). Ethnic sports participation frequently entails physically demanding activities like martial arts, indigenous games, or traditional dances. These exercises call on agility, muscular strength, and cardiovascular

endurance, all of which help pupils improve their total physical fitness (Godfrey et al., 2021). Students participating in traditional physical education programs and those who participate in ethnic sports were compared in a study by Galland, de Wilde, Taylor, and Smith (2020). The findings showed that the first group had greater physical fitness scores. Additionally, introducing ethnic sports into the curriculum encourages involvement in physical activity and active engagement. Schools boost students' enjoyment and commitment to these practices by giving them culturally meaningful opportunities to increase their physical fitness. This promotes long-term engagement and the maintenance of physical fitness levels (D'Agostino et al., 2019).

The findings of H2 demonstrate the considerable and advantageous effects on students' cultural identities of including ethnic sports in the curriculum. These results are in line with the body of knowledge already available. Ethnic sports give students a way to connect with their cultural roots and have a better understanding of their own cultural identities because they are traditional sports that represent cultural legacy (Thompson, Singh, Ibarra-Castro, Woodward-Lopez, & Madsen, 2019). Numerous studies have repeatedly shown that integrating ethnic sports has a favorable impact on cultural identity. Students actively engage with their cultural traditions, values, and customs by taking part in ethnic sports events (Morales-Alexander, 2021). This sustained engagement fosters pride in one's cultural history and a sense of belonging, which eventually strengthens one's sense of cultural identity. Hidalgo et al. (2020) on the effect of ethnic sports involvement on cultural identification found a link between ethnic sport participation and improved cultural identity, self-esteem, and pride in one's cultural heritage. Additionally, including ethnic sports in the curriculum encourages kids from various backgrounds to recognize and value other cultures (Caldwell, 2020). Students are exposed to varied practices, traditions, and values by taking part in activities that reflect many cultures. The varied student body is given the opportunity to develop empathy, respect, and a sense of solidarity, which strengthens their collective cultural identity (Godfrey et al., 2021).

The results of H3 show that cultural identification contributes significantly to students' physical fitness in a good way. The body of prior research on the subject lends credibility to these conclusions. Strong cultural identity among students has a favorable impact on their participation in physical activity, which in turn leads to better physical fitness outcomes (Morgan et al., 2019). Students are motivated to engage in physical fitness activities that are closely related to their cultural heritage by their cultural identity. Physical fitness is much more likely to be seen by the students as a critical factor in upholding and expressing their cultural identity in the event that they have a sturdy connection to their cultural heritage (Ibrahim & Hassanain, 2022). This view encourages a higher degree of commitment and participation in physical exercise routines, which leads to better physical fitness results. According to a study, students' self-efficacy and self-esteem in the place of physical health are improved by their cultural identification. Students gain a sense of mastery and competence through involvement in ethnic sports and cultural sports, which has a good effect on their self-notion and confidence in their physical prowess (Andrews, 2020). This raised self-efficacy can work as a motivator, enticing pupils to exercise frequently and keep up their physical fitness levels. Additionally, people's attitudes and beliefs regarding physical fitness are influenced by their cultural identities. Students who have a strong sense of cultural identification find the physical activity programs linked with their culture to be pleasurable and meaningful, which increases their adherence and involvement (Morales-Alexander, 2021). These favorable fitness attitudes encourage continued participation, which ultimately results in improved fitness outcomes (Marttinen et al., 2022).

The findings of H4 suggest that cultural identification mediates the link between students' physical health and the inclusion of ethnic sports in the curriculum. These findings are in keeping with the body of knowledge already to be had. Cultural identity is a key factor in the relationship between students' participation in ethnic sports and their level of physical fitness, serving as a mechanism through which the inclusion of ethnic sports affects college students' physical fitness (Donaghy et al., 2021). Students develop a bond with their cultural heritage, values, and customs after they interact in ethnic sports activities. This bond fosters a sense of pleasure in their cultural identification as well as a sense of belonging. Cultural identity also affects students' motivation for, attitudes toward, and perceptions of culturally specific physical activity (Martins & Loureiro, 2023). Culturally identified students are more likely to exercise regularly, improving their fitness. Cultural identity mediates the relationship between students' physical health and ethnic sports in

the curriculum, the study shows (Jang et al., 2021). For instance, (Barcelona et al., 2021) study on the association between Chinese college students' participation in ethnic sports and physical health looked at the mediating effect of cultural identity. According to the findings, cultural identification strongly mediated this link, indicating that students' participation in ethnic sports positively influenced their cultural identity, which in turn influenced the results of their efforts to maintain physical fitness (Sugden, Schlenker, Adair, & Frawley, 2020).

The results of H5 indicate that the relationship between students' physical health and the inclusion of ethnic sports in the curriculum is moderated by the school environment. These results are consistent with the body of prior research. The benefits of integrating ethnic sports into the classroom could be amplified if there is a supportive and welcoming climate at the school (Godfrey et al., 2021). An emphasis is placed on promoting and encouraging children to participate in physical fitness activities, especially ethnic sports, in a supportive school atmosphere. For students to take part in organized ethnic sports, the school offers the appropriate facilities, materials, and opportunities. This includes making sure there are suitable sporting facilities, tools, knowledgeable coaches, and planned events or contests (Hernández, Moreno-Murcia, Cid, Monteiro, & Rodrigues, 2020). With such assistance, students can fully engage in ethnic sports, which improves their physical fitness outcomes. By ensuring that each student, no matter their cultural identity, feels conventional, liked, and included in the integration of ethnic sports, an inclusive school environment goes a step further (Coenen & Kunst, 2021). Students from many cultural backgrounds are encouraged to participate because of this inclusivity, which develops a sense of belonging. Students are more likely to participate in ethnic sports, which finally leads to progressed physical fitness results when they feel supported (Grindheim, Hanne Værum, & Angela, 2021). A friendly and welcoming school environment has been shown to have a favorable impact on students' physical health. For instance, a study by Teeuwen et al., (2023) looked at the influence of the school environment on young people from ethnic minorities who participate in physical exercise. The results showed that ethnic minority kids engaged in more physical activity while attending schools with supportive environments, including inclusive policies, helpful personnel, and accessible facilities (Rana et al., 2022).

The finding of H6 endorses that the socioeconomic stage (SES) moderates the association between students' physical fitness and the inclusion of ethnic sports activities in schools. In contrast to their opposite numbers from higher socioeconomic backgrounds, students from lower socioeconomic backgrounds stumble upon a number of boundaries that prevent them from participating in ethnic sports activities and growing their physical fitness (Lara-Bocanegra, García-Fernández, Gálvez-Ruiz, Grimaldi-Puyana, & Bohórquez Gómez-Millán, 2022). The lack of resources and chances for playing ethnic sports is a significant barrier related to lower SES. Access to sports facilities, gear, and specialist coaching or teaching is restricted for students from lower socioeconomic backgrounds. They can't participate in ethnic sports or other culturally-related physical activities, which limits their fitness (Bozkurt, 2021). Budget constraints hinder pupils' participation in extracurricular activities like ethnic sports. Participating in ethnic sports frequently entails extra expenses including membership fees, equipment costs, and transportation charges. Students from poorer socioeconomic backgrounds might find it difficult to cover these costs, which would result in fewer possibilities for involvement and fewer chances to improve their physical fitness through ethnic sports (Basterfield et al., 2021).

Conclusion

The present study aimed to examine the incorporation of ethnic sports into the curriculum of educational institutions and its potential influence on the physical fitness and cultural identity of students. The study's principal discoveries have made significant contributions to the field in various aspects. The study revealed that the incorporation of ethnic sports into school curricula has a noteworthy and favorable influence on the physical fitness of students. The aforementioned underscores the significance of integrating culturally pertinent physical activities into the educational syllabus as a means of fostering the physical wellness of students. Subsequently, the investigation demonstrated that the incorporation of ethnic sports exerts a noteworthy and favorable influence on the cultural identity of students. Students can feel more connected to their

culture by playing sports that reflect it. The study also found that students' cultural identities influence their physical fitness. Higher levels of motivation and physical activity participation among students who identified more strongly with their cultural identity contributed to improved physical fitness outcomes. The study also showed that cultural identification mediates the relationship between students' physical fitness and the inclusion of ethnic sports in the curriculum. This data implies that a fundamental mechanism through which the inclusion of ethnic sports affects students' physical well-being is cultural identification. The study also discovered that the association between the inclusion of ethnic sports and students' physical fitness is moderated by the school atmosphere. The positive outcomes of ethnic sports integration on students' physical fitness are further enhanced by a school environment that is supportive and inclusive. The study ultimately determined that socioeconomic status serves as a moderator in the correlation between the assimilation of ethnic sports and the physical fitness of students. Individuals hailing from lower socioeconomic strata may encounter impediments to engagement in physical activity and exhibit restricted enhancements in physical fitness in contrast to their counterparts from higher socioeconomic backgrounds. Despite its valuable findings, this study has drawbacks. The population of the study may limit generalizability. Subsequent investigations ought to strive towards incorporating heterogeneous cohorts of participants hailing from various cultural contexts and academic environments to augment the generalizability of the results. The use of self-report measurements, which could induce biases, is another drawback. To gather more accurate and credible data, future studies should include objective tests of physical fitness and cultural identification. A deeper understanding of the temporal correlations between variables and the investigation of causal effects would come from longitudinal or experimental designs. Future studies should take into account additional variables like individual motivation, family support, and school-based interventions that may have an impact on the connections examined in this study. Understanding the significance of these elements can help us gain a deeper understanding of how ethnic sports, cultural identity, and students' physical health are all integrated.

Implication

The study's results have noteworthy practical implications for individuals involved in school education and physical fitness promotion, including policymakers, practitioners, and educators. The incorporation of ethnic sports into school curricula has the potential to significantly influence the physical well-being and cultural identity of students. The inclusion of ethnic sports in both the physical education curriculum and extracurricular activities offered by schools presents students with significant prospects to participate in physical fitness activities that hold cultural relevance and significance to them. Students who participate in ethnic sports experience improved physical health as well as a stronger sense of cultural identification. Students' participation in culturally significant sports might help them feel more connected to their ancestry, traditions, and social circle. The integration process facilitates the cultivation of a feeling of self-respect and inclusion, thereby promoting the formation of a constructive cultural persona. Establishing a culturally sensitive and inclusive educational setting is imperative in facilitating the assimilation of ethnic sports and optimizing the advantages for pupils. It is imperative for educational institutions to actively acknowledge and appreciate the diverse cultural heritages of their student body. The promotion of cross-cultural interactions among students, organization of cultural events, and embracing and celebrating ethnic sports and traditions are effective means of achieving this objective. Educational institutions that foster an environment that prioritizes diversity and inclusivity facilitate a sense of acceptance and belongingness among their student body. Consequently, this phenomenon results in a rise in engagement in physical fitness pursuits that are linked to the cultural heritage of the individuals involved. In order to optimize the incorporation of ethnic sports into the educational curriculum, it is recommended that specific interventions be implemented to mitigate the obstacles encountered by students hailing from economically disadvantaged backgrounds. The participation of individuals in ethnic sports activities may be impeded by financial limitations, restricted availability of sports facilities, and inadequate transportation options. Schools can promote greater equity in opportunities for students from diverse socioeconomic backgrounds to participate in ethnic sports and enhance their physical fitness by providing financial assistance, facilitating access to sports facilities and

equipment, and offering transportation support.

The present study offers a theoretical contribution to the literature by enhancing our comprehension of the correlation between cultural identity and the physical fitness of students. The proposition is made that cultural identity exerts a noteworthy influence on the motivation, attitudes, and involvement of students in physical fitness pursuits. Participating in ethnic-specific sports can benefit students' physical health and sense of cultural identification, which ultimately improves their overall sense of well-being. The study also highlights the role that cultural identification plays as an intermediate in the relationship between student's physical well-being and the absorption of ethnic sports. The influence of ethnic sports integration on physical fitness outcomes is mediated by cultural identity. The possession of a robust cultural identity by students is positively correlated with their participation in physical fitness activities that are linked to their cultural heritage, thereby resulting in enhanced physical fitness results. The investigation additionally underscores the moderating function of the educational institution milieu and socioeconomic standing. The positive outcomes of ethnic sports integration on students' physical fitness are enhanced by a school environment that is supportive and inclusive. The institution offers essential resources, amenities, and prospects for students to participate in cultural athletic activities and enhance their physical well-being. Conversely, students hailing from lower socioeconomic strata may encounter hindrances to their involvement in physical activities and exhibit restricted enhancements in their physical fitness as opposed to their counterparts from more affluent socioeconomic backgrounds. To mitigate these discrepancies, it is imperative to implement focused interventions and ensure fair and impartial access to resources and opportunities.

Limitation

The current study, while providing noteworthy findings, is constrained by specific restrictions that necessitate additional examination in subsequent scholarly investigations. The generalizability of the study's findings may be constrained by the specific context in which the research was conducted. Cultural diversity, financial level, and school environments vary between countries. Future studies could address this problem by including a more diverse sample of people from different cultural and educational backgrounds. Furthermore, self-report assessments used to assess factors like cultural identification and fitness level may induce biases. Social desirability bias can lead individuals to provide responses on self-report measures that align more closely with societal expectations rather than their actual experiences. Memory recall bias can affect the precision of self-reported data. In order to address the aforementioned limitations, forthcoming research endeavors may consider integrating more objective measures, such as fitness assessments and observations, to procure data that is more dependable and authentic with respect to the physical fitness and cultural identity of students. The cross-sectional approach used in this study is another limitation because it makes it more difficult to prove causation and pinpoint the temporal correlations between variables. It would be helpful to use longitudinal or experimental methods to document changes over time and investigate the causal impact of integrating ethnic sports on students' physical fitness and sense of cultural identity. Studies that follow participants over an extended period of time might look at how their cultural identity and level of physical fitness change as a result of the inclusion of ethnic sports. Furthermore, the analysis did not fully consider potential confounding variables. The associations between ethnic sports integration, cultural identity, and physical fitness may be impacted by various factors, including individual motivation, family support, and school-based interventions. Possible avenues for future research may involve incorporating these variables as covariates in order to gain a more comprehensive understanding of their impact and potential interrelationships.

Future Recommendation

Future research could look at various possible avenues to address these restrictions. The long-term impact of ethnic sports integration on students' physical fitness and cultural identity could be examined through longitudinal studies. Researchers can follow the evolution of cultural identity

and physical fitness across time and investigate the dynamic interactions between these factors by gathering data at various moments in time. Mixed-methods methodologies can be utilized to offer a more all-encompassing comprehension of the encounters and viewpoints of pupils engaging in ethnic sports. The integration of qualitative data, such as interviews or focus groups, can serve as a valuable complement to quantitative data in capturing the subjective experiences and nuances associated with cultural identity and physical fitness. The acquisition of more comprehensive insights into the fundamental mechanisms and personal experiences that contribute to the examined relationships would be facilitated. Conducting comparative analyses across diverse cultural contexts and educational systems may facilitate the identification of the impact of cultural variables and contextual factors. Through the analysis of the impact of incorporating ethnic sports on physical fitness and cultural identity in varied contexts, scholars can recognize cultural disparities and tailor interventions correspondingly. Intervention studies may be formulated with a particular focus on the incorporation of ethnic sports within the context of school-based education. Through the implementation of interventions and subsequent evaluation of their impact on physical fitness and cultural identity, researchers can offer evidence-based recommendations to educational practitioners and policymakers. Potential interventions may comprise providing teachers with cultural sensitivity training, establishing inclusive sports programs, and implementing community engagement initiatives.

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