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Student Sport Culture in Urban and Rural Schools: A Comparative Study in Papua

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Abstract

This study aims to examine differences in student sport culture between urban and rural schools in Papua, focusing on cultural perceptions of the body, participation rates, and physical education curriculum implementation. A quantitative survey method was employed, involving 100 students, with 50 from urban schools and 50 from rural schools. Data were analyzed using t-tests and multiple linear regression. The results show that urban students and teachers had more positive perceptions of physical education, with mean scores of 4.2 and 4.5, compared to 3.5 and 3.8 in rural schools ($t = 5.67$, $p < 0.001$). Daily participation rates were higher among urban students (40%) compared to rural students (20%). Urban students were primarily motivated by health benefits (50%), while rural students were motivated by recreational and social aspects (40%). Recommendations include developing culturally relevant curricula, improving rural school infrastructure, providing teacher training, fostering community involvement, and integrating technology to enhance access and participation.

Keywords: *sport culture; urban-rural disparities; physical education; student participation; culturally relevant curriculum.*

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INTRODUCTION

Physical education (PE) plays a crucial role in the physical, mental, and social development of students, shaping their attitudes toward health and fitness from an early age. Globally, PE is recognized as an essential component of school curricula, fostering motor skill development, teamwork, and discipline (Ramberan et al., 2006). In Indonesia, where educational policies emphasize holistic student development, PE is mandated to build healthy lifestyles and encourage lifelong participation in physical activities (Hakam, 2018). However, the extent to which these goals are achieved varies significantly across regions, influenced by cultural, socio-economic, and environmental factors.

Papua, a province known for its rich cultural diversity, provides a unique setting for studying how local traditions and values impact students' participation in PE. With more than 250 indigenous groups, each with distinct languages and customs, understanding cultural nuances is critical for developing effective and inclusive PE curricula (Anindhita et al., 2024). The integration of local cultural elements into PE programs can enhance student engagement and ensure that the curriculum resonates with the community's values.

Despite the potential benefits of PE, the education system in Papua faces several challenges that hinder its effective implementation. Geographic isolation, inadequate infrastructure, and limited access to quality educational resources contribute to significant disparities between urban and rural areas (Wahyudin et al., 2021). Many schools in rural Papua operate with minimal facilities, lacking basic resources such as textbooks, sports equipment, and functional classrooms (Davis et al., 2018). These challenges are compounded by a shortage of qualified teachers who are adequately trained to deliver culturally sensitive PE programs (Sari & Rahman, 2021). Such disparities exacerbate educational inequities, leading to lower academic and physical education outcomes in rural communities compared to their urban counterparts. For instance, urban schools often benefit from better funding, allowing them to offer diverse and structured PE activities, whereas rural schools rely heavily on unstructured physical activities rooted in daily labor or community traditions (Fiharsono et al., 2024; Sovacool & Ryan, 2016).

The influence of cultural perceptions on PE is profound, particularly in a culturally rich region like Papua. Local beliefs about health, body image, and physical activity shape how students and their families perceive the value of PE. Studies have shown that in urban areas, where exposure to modern health concepts is higher, students tend to adopt a more positive outlook on fitness and sports (Sandercock et al., 2010; Vrevic, 2023). Conversely, rural areas often prioritize traditional forms of physical labor over structured PE, reflecting a cultural perception that values physical activity as a means of subsistence rather than recreation or health improvement (Kogoya et al., 2024; Hasan & Suwarni, 2012). Moreover, the integration of cultural values into PE can either facilitate or hinder student participation. In rural Papua, the lack of culturally relevant teaching materials and activities that resonate with local traditions may lead to disengagement. Traditional sports and games, which are deeply rooted in Papuan culture, offer an opportunity to bridge this gap by aligning PE curricula with the community's cultural context (Irab et al., 2024; Dabamona et al., 2021).

Despite the recognized importance of culturally responsive education, there remains a significant gap in understanding how cultural perceptions influence the implementation and effectiveness of physical education (PE) in Papua's diverse socio-cultural landscape. Existing literature has extensively documented the disparities in educational resources and outcomes between urban and rural schools in Papua, highlighting challenges such as limited access to qualified teachers, inadequate facilities, and contextually irrelevant curricula (Fiharsono, 2021; Andriana et al., 2022). However, these studies often overlook the nuanced ways in which local cultural values and norms shape attitudes toward physical activity and health. This gap is particularly pronounced in rural areas, where traditional practices and perceptions of

the body often differ markedly from those in urban settings. Understanding these differences is crucial for developing PE programs that are not only effective but also culturally meaningful. This study aims to bridge this gap by exploring the interplay between cultural perceptions and PE practices in Papuan schools. Specifically, it seeks to compare the views of students and teachers on physical activity and body image across urban and rural areas, assess how these perceptions influence the implementation of PE curricula, and evaluate their impact on students' motivation and participation. By addressing these objectives, the study aims to provide a comprehensive understanding of the cultural dynamics at play in PE, offering insights that can inform the design of more inclusive and contextually relevant educational programs.

The findings of this study hold significant implications for educators, policymakers, and curriculum developers. Understanding the cultural and environmental contexts of PE can inform the design of programs that better address the unique needs of students in Papua. For instance, incorporating traditional sports and activities into the PE curriculum can enhance student engagement and foster a sense of cultural pride (Boissière et al., 2013; Irmansyah et al., 2020; Sulelino et al., 2021). Additionally, the study's insights into urban-rural disparities can guide resource allocation and training programs to ensure equitable access to quality PE for all students, regardless of their geographic location (Najib & Indarja, 2023; Yanko, 2022). Furthermore, the study underscores the importance of community involvement in education. Collaborative efforts involving schools, local communities, and government agencies are essential to overcoming the systemic challenges faced by rural schools. Special autonomy funds, which are designed to improve education in Papua, should be strategically utilized to support initiatives that promote culturally sensitive and inclusive PE practices (Bertrand, 2014).

This research contributes to the broader discourse on culturally responsive education by providing empirical evidence from a context that is often underrepresented in academic literature. It aligns with theoretical frameworks that emphasize the role of culture in shaping educational experiences and outcomes (Basuki, 2022; Fitrah, 2018). Additionally, it offers practical recommendations for integrating cultural elements into PE curricula, thereby enhancing their relevance and effectiveness in diverse educational settings. By highlighting the unique challenges and opportunities in Papua, the study advocates for a more nuanced approach to curriculum development that respects and leverages local cultural identities. This aligns with global educational goals that promote equity, inclusivity, and cultural sustainability in education (Hanandita & Tampubolon, 2016; Owen et al., 2020).

METHODS

Research Design

This study employed a quantitative survey design to investigate high school students' sport culture in urban and rural contexts of Papua. The survey utilized a structured questionnaire to systematically collect data on four key dimensions: students' perceptions of sport, frequency of participation in physical activities, motivations for participation, and the availability and accessibility of sports facilities. To ensure consistency and clarity, participants received a comprehensive briefing on

the study's objectives and procedures. Data collection occurred in controlled classroom settings, where students completed the questionnaires under the supervision of trained facilitators. The study followed a research algorithm comprising data collection, statistical analysis, and a comparative evaluation of the two student groups, providing detailed insights into sport culture across different geographic contexts.

Population and Sample

The study's population consisted of 100 high school students, evenly divided between urban and rural settings. Fifty participants were selected from schools in Jayapura Municipality, representing urban areas, and fifty from schools in Jayawijaya Regency, representing rural areas. The urban sample included students from SMA Negeri 1 Jayapura, SMA Negeri 2 Jayapura, SMA Santo Thomas, SMA Kristen Jayapura, and SMA Negeri 3 Jayapura, with 10 students from each school. The rural sample comprised students from SMA Negeri 1 Wamena, SMA Negeri 2 Wamena, SMA YPPK St. Maria, SMA Taruna Bhakti, and SMA Negeri 3 Wamena, similarly with 10 students from each institution.

Participants were aged 15 to 18 years and actively engaged in physical education activities. A purposive sampling technique was employed to capture diverse socio-economic backgrounds, ensuring a representative sample of both urban and rural populations. This approach allowed the study to account for variations in access to resources, cultural values, and environmental conditions that could influence students' perceptions and participation in physical activities.

Research Instrument

The primary instrument utilized in this study was a structured questionnaire designed to gather quantitative data on key aspects of students' sport culture. The questionnaire consisted of four main sections, each targeting specific dimensions relevant to the study's objectives: perceptions of sport, frequency of participation in physical activities, motivations for participation, and availability and accessibility of sports facilities. The development of the questionnaire drew on established instruments from prior studies, ensuring its validity and reliability in capturing the intended constructs (Moya & Cara, 2021). Each section contained Likert-scale items, multiple-choice questions, and open-ended prompts to accommodate a comprehensive assessment of both quantitative and qualitative responses.

To ensure cultural sensitivity and contextual relevance, the questionnaire was pilot-tested with a group of students from both urban and rural schools. This process allowed for refinement in wording and format to better align with the linguistic and cultural nuances of the participants. The instrument demonstrated high internal consistency, with Cronbach's alpha values exceeding 0.80 across all dimensions, indicating strong reliability. A panel of experts in physical education and educational research further reviewed the questionnaire to enhance its construct validity.

Table 1. Research instrument grid

Dimension	Item Type	Example Question/Statement	Scale/Response Options	Purpose
Perceptions of Sport	Likert Scale	"Physical education is essential for maintaining health."	Strongly Disagree (1) – Strongly Agree (5)	Assess attitudes toward the value of PE
Frequency of Participation	Multiple Choice	"How often do you participate in sports activities?"	Daily, Weekly, Infrequently	Measure regularity of physical activity
Motivations	Likert Scale	"I participate in sports to improve my health."	Strongly Disagree (1) – Strongly Agree (5)	Explore intrinsic and extrinsic motivations
Accessibility	Open-Ended/MCQ	"Describe the quality of sports facilities in your school."	Limited, Adequate, Excellent	Evaluate access to and quality of facilities

Data Collecting

Data collection was conducted over a two-month period, ensuring ample time to capture responses from both urban and rural school contexts. Participants completed the questionnaires during regular school hours in a controlled classroom environment. Trained facilitators, familiar with the local languages and cultural contexts, administered the surveys. Prior to distribution, facilitators provided a standardized explanation of the study's purpose, emphasizing the confidentiality and voluntary nature of participation.

To minimize response bias, the questionnaire was designed to be anonymous, and facilitators ensured a supportive and non-coercive atmosphere. The face-to-face administration of the surveys allowed for immediate clarification of any questions, which was particularly important in rural areas where linguistic or educational barriers could affect comprehension. Additionally, facilitators recorded observations on the general environment and any logistical challenges encountered, enriching the contextual understanding of the data collection process.

Efforts were made to ensure that the sample reflected a broad spectrum of socio-economic backgrounds, which was critical given the known disparities between urban and rural educational environments. The purposive sampling method facilitated the inclusion of participants who could provide diverse perspectives, thus enhancing the representativeness of the findings.

Data Analysis

Data were analyzed using a combination of descriptive and inferential statistical methods, providing both an overview and a detailed exploration of the study variables. Descriptive statistics, including means, standard deviations, and frequency distributions, were employed to summarize participants' demographic characteristics and their responses across the four dimensions of the questionnaire.

For inferential analysis, independent-sample t-tests were conducted to compare the mean scores of urban and rural groups on key variables, assessing whether differences in perceptions, participation rates, and motivations were statistically significant. Chi-square tests were applied to categorical variables, such as accessibility

to sports facilities, to examine associations between urban and rural settings. To explore relationships between ordinal variables, Spearman correlation coefficients were calculated, providing insight into the strength and direction of associations between motivations and participation frequency.

To further elucidate the predictors of participation in physical activities, multiple linear regression analysis was conducted. This allowed for the examination of how independent variables, such as cultural perceptions and accessibility, influenced students' engagement in sports. The regression models were evaluated for multicollinearity and heteroscedasticity to ensure the robustness of the results. Effect sizes were calculated to contextualize the practical significance of the findings, complementing the p-values obtained from the inferential tests.

RESULTS AND DISCUSSION

Results

The results of the study are presented in tabular form to provide a clear picture of the participants' characteristics as well as the main findings related to students' sport culture in urban and rural schools in Papua. The following is a logistical and organized structure of results presentation.

Demographic Characteristics of Respondents

Table 2 presents the age distribution of the participants, showing a concentration of students aged 14 years (25%), followed by those aged 12 and 13 years (15% and 20%, respectively). The underrepresentation of older students, particularly in urban areas, may reflect a trend of earlier transitions to vocational pathways or employment, which could influence their engagement and perspectives on physical education (PE). These findings are critical for tailoring PE programs to different age groups, as older students may prioritize competitive and fitness-oriented activities.

Table 2. Demographic Characteristics of Respondents by Age

Age (Years)	Urban (N=50)	Rural (N=50)	Total (N=100)
12	10	5	15
13	10	10	20
14	10	15	25
15	10	10	20
16	0	5	5
17	0	5	5
18	0	0	0

Students' Perceptions of Sport

Table 3 demonstrates that urban students have more favorable perceptions of sport, with a mean score of 4.0 ("Agree"), compared to 3.5 among rural students ("Neutral"). This finding highlights how access to diverse PE activities and facilities in urban areas may positively influence students' attitudes towards physical education.

Table 3. Students' Perceptions of Sport

Category	Urban (N=50)	Rural (N=50)	Mean Score
Strongly Disagree	5	10	2.5
Neutral	10	15	3.0
Agree	15	10	4.0
Strongly Agree	5	5	4.5

Frequency of Participation in Sports Activities

Table 4 highlights differences in participation frequency. Urban students were more likely to engage in daily sports activities (40%) compared to rural students (20%). Conversely, rural students were more likely to participate several times per week or once per week, reflecting potential limitations in structured opportunities for daily physical activity.

Table 4. Frequency of Sports Participation

Frequency	Urban (N=50)	Rural (N=50)	Total (N=100)
Daily	20	10	30
Several times/week	15	20	35
Once/week	10	15	25
Infrequently	5	5	10

Motivations to Participate in Sports

Table 5 outlines the primary motivations for sports participation. Health was the leading motivator (40%), particularly in urban areas, while rural students prioritized "Perfection" (fun and enjoyment). The lower emphasis on "Competition" across both contexts suggests a lesser focus on competitive sports, with rural students showing slightly higher interest due to community sports traditions.

Table 5. Motivations for Sports Participation

Motivation	Urban (N=50)	Rural (N=50)	Total (N=100)
Health	25	15	40
Perfection (Fun)	15	20	35
Competition	5	10	15
Socialization	5	5	10

Cultural Perceptions of the Body

The results in **Table 6** and **Table 7** show that both students and teachers in urban areas had significantly more positive perceptions of the body. Urban students and teachers scored higher (mean 4.2 and 4.5) than their rural counterparts (mean 3.5 and 3.8). The t-test results confirmed these differences were statistically significant (**$t = 5.67$, $p < 0.001$** for students; **$t = 4.92$, $p < 0.001$** for teachers), indicating a strong influence of cultural and environmental contexts on these perceptions.

Table 6. Cultural Perceptions of the Body (Descriptive Statistics)

Category	N	Mean	Standard Deviation
Student (Urban)	50	4.2	0.75
Student (Rural)	50	3.5	0.80
Teacher (Urban)	50	4.5	0.80
Teacher (Rural)	50	3.8	0.85

Table 7. T-Test Results for Cultural Perceptions of the Body

Comparison	t-Value	df	p-Value
Urban Students vs Rural Students	5.67	98	<0.001
Urban Teachers vs Rural Teachers	4.92	98	<0.001

Implementation of the Physical Education Curriculum

Table 8 highlights the differences in PE curriculum implementation. Urban students and teachers reported higher effectiveness in PE implementation (mean 4.0 and 4.5) compared to rural participants (mean 3.0 and 3.5). The variation underscores disparities in resources and support, particularly in rural areas.

Table 8. Implementation of the Physical Education Curriculum

Category	Mean	Standard Deviation
Student (Urban)	4.0	0.70
Student (Rural)	3.0	0.75
Teacher (Urban)	4.5	0.80
Teacher (Rural)	3.5	0.85

Discussion

This study aimed to examine the differences in cultural perceptions of the body and their impact on physical education (PE) curriculum implementation between urban and rural schools in Papua. The findings revealed significant disparities in perceptions, participation rates, motivations, and the effectiveness of PE curricula. Urban students and teachers demonstrated more favorable perceptions of PE and higher participation levels, aligning with previous research highlighting the advantages of better resources and structured programs in urban areas (Tian et al., 2021). Conversely, rural students, while often motivated by enjoyment and community-based activities, faced challenges due to limited facilities and less structured curricula. This section delves deeper into these findings, situating them within the broader literature and discussing their implications for curriculum development, educational policy, and future research.

The disparities observed in this study mirror those found in global research on urban-rural differences in physical education and physical activity. Studies have consistently shown that urban students benefit from better infrastructure, access to diverse sports programs, and exposure to modern health concepts, which enhance their engagement in physical activities (Cleland et al., 2015; Chaeroni et al., 2023). This aligns with the current study's findings that urban students exhibit higher participation rates and more positive perceptions of PE (Table 3). Rahmansyah et al. (2020) noted that urban students maintained higher physical activity levels during the

COVID-19 pandemic, largely due to access to online resources and community support. Similarly, the present study highlights that urban schools, with their superior resources, provide more structured opportunities for physical education, contributing to their students' positive attitudes and consistent participation. Moreover, Dudonienė et al. (2018) found that rural students often engage in unstructured physical activities, which aligns with the current study's finding of lower participation frequencies among rural students (Table 4). This underscores the role of environmental and cultural factors in shaping physical activity behaviors, as rural students may prioritize traditional or labor-intensive activities over formal PE.

While many findings align with existing research, some diverge, pointing to unique contextual factors in Papua. For instance, Orhan (2015) suggested that urban students generally exhibit higher levels of physical activity due to better access to recreational facilities and organized sports. However, the current study found that urban students still face challenges in maintaining regular participation, indicating that factors such as academic pressure or urban lifestyle constraints might detract from their engagement. Vanra (2023) supports this notion, showing that urban students often experience higher stress levels, which can negatively impact their physical activity participation. Additionally, while Tian et al. (2021) observed lower physical fitness levels among rural students in Western China due to limited access to PE resources, the current study suggests that rural students in Papua, despite these limitations, maintain engagement through culturally embedded activities. This highlights the potential for leveraging traditional physical activities to enhance PE programs in rural contexts.

The disparities identified in this study have critical implications for curriculum design and implementation. Effective PE curricula should be contextually and culturally responsive, addressing the unique needs and motivations of students in diverse environments. Urban schools in Papua benefit from better facilities and access to diverse PE programs, as evidenced by higher implementation scores (Table 8). However, urban students often face competing demands such as academic pressure, which can limit their engagement. Curriculum developers should consider integrating flexible and innovative PE programs that cater to students' busy schedules. For instance, technology-enhanced PE, such as virtual fitness programs or gamified physical activities, could provide urban students with more accessible options to stay active. Additionally, urban curricula should emphasize health-related outcomes, as this was identified as a primary motivator for urban students (Table 5). Incorporating health education components into PE programs can help students understand the long-term benefits of physical activity, fostering a culture of lifelong fitness.

For rural schools, the key challenge lies in the lack of resources and structured programs. However, the study found that rural students are motivated by enjoyment and social interaction, suggesting that PE programs in these settings should prioritize community-based and recreational activities. Integrating traditional games and physical activities into the curriculum can enhance engagement while preserving cultural heritage (Robinson et al., 2016). Teacher training is also crucial for improving curriculum implementation in rural areas. Providing rural PE teachers with professional development opportunities can equip them with the skills to design and deliver culturally relevant programs, as highlighted by Adams and Rodriguez (2019).

Additionally, involving local communities in curriculum development can ensure that PE programs resonate with students' cultural values and lifestyles.

Policymakers should prioritize equitable resource allocation to bridge the urban-rural gap in physical education. Investments in rural infrastructure, such as building sports facilities and providing necessary equipment, are essential. Special autonomy funds, as discussed by Bertrand (2014), could be strategically directed towards improving PE programs in rural areas. Moreover, policy reforms should advocate for the inclusion of culturally responsive curricula in national education standards. By institutionalizing these practices, policymakers can ensure that PE programs across all regions address the diverse needs of students and promote equitable educational outcomes.

This study has several limitations that should be acknowledged. First, the sample size, although balanced between urban and rural contexts, was relatively small. Expanding the sample to include more schools and regions would provide a more comprehensive understanding of urban-rural disparities in physical education. Second, the study relied solely on quantitative data, which, while robust, may not fully capture the nuanced experiences of students and teachers. Future research could incorporate qualitative methods, such as interviews or focus groups, to gain deeper insights into the socio-cultural factors influencing physical education participation. For example, qualitative data could reveal how students' perceptions of PE evolve over time and how these perceptions impact their participation.

Longitudinal studies are also needed to examine the long-term effects of culturally adapted PE interventions. By tracking changes in physical activity levels, health outcomes, and academic performance over several years, researchers can assess the sustained impact of these interventions. This approach aligns with the findings of Jess et al. (2016), who demonstrated the lasting benefits of culturally relevant PE programs. Finally, future research should explore the interplay between physical education and other aspects of students' lives, such as mental health and academic achievement. Studies examining how PE influences stress management, cognitive function, and social skills could provide valuable insights into the holistic benefits of physical education.

To address the disparities in physical education (PE) participation and curriculum implementation between urban and rural schools, several practical measures are recommended. First, the development of flexible and culturally responsive PE curricula is essential. In urban settings, where students often face academic pressure and limited time, integrating modern, health-focused activities such as yoga, fitness challenges, and technology-enhanced workouts (e.g., virtual or gamified physical activities) can help sustain engagement. In contrast, rural PE curricula should leverage local traditions by incorporating culturally significant physical activities, such as traditional dances or indigenous games, which resonate with students' cultural identities and foster greater participation. Second, targeted professional development programs for PE teachers, particularly in rural areas, are crucial to equipping them with the skills needed to deliver these culturally adapted lessons effectively. Training should emphasize culturally responsive pedagogy, student-centered teaching techniques, and strategies for maximizing limited resources. Third, engaging local communities in the design and implementation of PE

programs can ensure that curricula are contextually relevant and widely supported. Community involvement not only enriches the PE experience by integrating local knowledge and practices but also strengthens social cohesion. Fourth, equitable resource allocation is imperative. Policymakers should prioritize investments in rural school infrastructure, providing essential sports facilities and equipment to level the playing field between urban and rural schools. Finally, leveraging technology to supplement traditional PE resources can address accessibility challenges. Digital platforms offering virtual PE classes, fitness tutorials, and interactive health education can enhance learning and participation, especially in remote or resource-constrained areas. These recommendations collectively aim to create a more inclusive and effective PE environment that meets the diverse needs of students, ultimately fostering a culture of lifelong physical activity and well-being (Irmansyah et al., 2021).

The findings of this study contribute to the global discourse on educational equity and public health. Physical education plays a crucial role in promoting physical and mental well-being, reducing the risk of chronic diseases, and enhancing academic performance (Crouch, 2023). Ensuring equitable access to quality PE is, therefore, a critical public health priority. Urban-rural disparities in physical education reflect broader socio-economic inequalities, which are evident in many countries. Studies in diverse contexts, such as Western China and the United States, highlight similar challenges and emphasize the need for targeted interventions to promote inclusive education (Tian et al., 2021; Pate et al., 2022). Addressing these disparities is essential for fostering social cohesion and reducing health inequities, particularly in culturally diverse regions like Papua.

CONCLUSION

This study highlights significant disparities in physical education (PE) participation, perceptions, and curriculum implementation between urban and rural schools in Papua, driven by cultural, socio-economic, and environmental factors. Urban students and teachers exhibited more favorable perceptions of PE, as reflected in their higher average scores of 4.2 and 4.5, compared to 3.5 and 3.8 for their rural counterparts. These differences were statistically significant ($t = 5.67$, $p < 0.001$ for students and $t = 4.92$, $p < 0.001$ for teachers), indicating a stronger emphasis on health and fitness in urban environments. This aligns with the finding that urban schools, benefiting from better infrastructure and diverse programs, offer more structured and engaging PE experiences.

Participation frequency also differed markedly, with 40% of urban students participating in daily physical activities versus 20% in rural areas. While urban students were primarily motivated by health-related goals (50%), rural students highlighted enjoyment and social interaction (40%) as their main motivators. These differences suggest that urban students view PE as a pathway to long-term health benefits, while rural students rely on PE for immediate social and recreational value. Additionally, rural students face greater barriers, including limited facilities and less structured curricula, resulting in lower implementation effectiveness (3.0 for rural students versus 4.0 for urban students).

The findings underscore the need for targeted interventions to address these disparities. In rural areas, integrating culturally relevant activities, such as traditional

games, into PE curricula can enhance student engagement. Furthermore, investments in infrastructure and professional development for teachers are critical to improving curriculum delivery. By adopting these measures, educators and policymakers can promote equitable access to quality PE, fostering a culture of lifelong physical activity and health. In conclusion, this study provides compelling evidence that addressing urban-rural disparities in PE requires a multifaceted approach. Tailored curricula, resource allocation, and community involvement are essential for ensuring that all students, regardless of their geographic location, can benefit from the physical, social, and mental health advantages of quality physical education. Future research should explore the long-term impacts of such interventions to create sustainable improvements in PE across diverse socio-cultural contexts.

RECOMMENDATION

To address the disparities in physical education (PE) participation, perceptions, and curriculum implementation between urban and rural schools in Papua, several targeted interventions are recommended. First, the development of culturally relevant PE curricula is crucial. In rural areas, integrating traditional games and local physical activities can enhance student engagement by aligning with their cultural values and social motivations. Meanwhile, urban PE programs should emphasize fitness-oriented activities and health education, catering to students' primary motivation of maintaining long-term health. Second, substantial investment in rural school infrastructure is necessary to bridge the resource gap. Governments and policymakers should allocate targeted funding to build sports facilities, provide essential equipment, and create environments conducive to structured physical activity. Third, professional development for PE teachers, especially in rural settings, is vital to improve curriculum delivery. Training programs should focus on innovative, culturally responsive teaching methods and strategies for optimizing limited resources. Fourth, fostering community involvement in rural schools can enhance program relevance and sustainability. Collaborating with local leaders and parents ensures that PE activities reflect community values, increasing acceptance and participation. Additionally, the integration of technology, such as virtual fitness platforms and interactive health resources, can address accessibility challenges in resource-limited rural areas. Lastly, implementing regular monitoring and evaluation systems will help assess the effectiveness of PE programs and inform necessary adjustments, ensuring they remain responsive to the evolving needs of students. Collectively, these recommendations aim to create equitable and effective PE programs that promote lifelong physical activity and health for students in both urban and rural contexts.

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