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Looks or Performance? How Physical Education Teachers' Body Shape and Physical Appearance Shape Student Motivation

(Rupa atau Prestasi? Bagaimana Bentuk Badan dan Penampilan Fizikal Guru Pendidikan Jasmani Mempengaruhi Motivasi Pelajar)

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ABSTRACT

This study examines the correlation between the body shape and physical appearance of physical education (PE) teachers and the motivation of secondary school students in PE classes in Malaysia. Using a correlational research design, the study sampled 590 students aged 15-18 from urban, suburban, and rural secondary schools in Malaysia. Data collection was facilitated through a self-developed questionnaire: Physical Education Teacher Body Shape (PETBS), Physical Education Teacher Physical Appearance (PEPA), and Physical Education Intrinsic and Extrinsic Motivation (PEIEM). The scales Cronbach's alpha values are between 0.850 and 0.929. Descriptive statistics, T-tests, and Pearson's correlation analyses were performed using SPSS version 29. The results indicated significant differences in students' perceptions of their PE teachers' body shape and appearance and students' motivation varied by school type. Perceptions at urban schools were significantly lower than those in suburban and rural schools, with suburban schools significantly lower than rural schools. There were strong positive correlations between the teachers' body shape (r = 0.952) and appearance (r = 0.935) and the student's motivation in PE classes. These findings underscore the significant influence of PE teachers' physical characteristics on student motivation, highlighting the importance of considering these attributes in teacher recruitment and professional development. Future research should consider employing experimental and longitudinal study designs, as well as mixed-methods approaches, to further investigate their implications for educational practices.

Keywords: Physical education, body shape, physical appearance, motivation, teachers

ABSTRAK

Kajian ini mengkaji perkaitan antara bentuk badan dan penampilan fizikal guru Pendidikan Jasmani (PJ) dengan motivasi pelajar sekolah menengah dalam kelas PJ di Malaysia. Menggunakan reka bentuk penyelidikan korelasi, kajian ini menggunakan sampel seramai 590 pelajar berumur 15-18 dari sekolah menengah bandar, pinggir bandar dan luar bandar di Malaysia. Pengumpulan data telah dipermudahkan melalui soal selidik yang dibangunkan sendiri: Bentuk Badan Guru Pendidikan Jasmani (PETBS), Penampilan Fizikal Guru Pendidikan Jasmani (PEPA), dan Motivasi Intrinsik dan Ekstrinsik Pendidikan Jasmani (PEIEM). Skala nilai alfa Cronbach adalah antara 0.850 dan 0.929. Statistik deskriptif, ujian-T, dan analisis korelasi Pearson telah dilakukan menggunakan SPSS versi 29. Keputusan menunjukkan perbezaan yang signifikan dalam persepsi pelajar terhadap bentuk badan dan penampilan guru PJ mereka serta motivasi pelajar berbeza mengikut jenis sekolah. Persepsi di sekolah bandar jauh lebih rendah daripada sekolah pinggir bandar dan luar bandar, dengan sekolah pinggir bandar jauh lebih rendah daripada sekolah luar bandar. Terdapat korelasi positif yang kuat antara bentuk badan guru (r = 0.952) dan penampilan (r = 0.935) dan motivasi pelajar dalam kelas PJ. Penemuan ini menggariskan pengaruh ketara ciri fizikal guru PJ terhadap motivasi pelajar, menonjolkan kepentingan mengambil kira sifat-sifat ini dalam pengambilan guru dan pembangunan profesional. Penyelidikan masa depan harus mempertimbangkan untuk menggunakan reka bentuk kajian eksperimen dan longitudinal, serta pendekatan kaedah campuran, untuk menyiasat lebih lanjut dan implikasinya terhadap amalan pendidikan.

Kata kunci: Pendidikan jasmani, bentuk badan, penampilan fizikal, motivasi, guru

INTRODUCTION

In Malaysia, physical education (PE) forms an essential part of the secondary school curriculum, designed to promote physical health, foster social skills, and develop lifelong wellness habits. However, motivating students in PE can be challenging due to various educational, cultural, and socioeconomic factors. Student motivation in PE is influenced by their attitudes toward physical activity, which are shaped by personal, family, and societal influences. Given the high priority placed on academic success in Malaysia, PE may not always be considered a priority, which affects student engagement and motivation. Cultural norms significantly influence attitudes toward physical activities, especially among female students. Traditional views on gender roles often limit participation, as physical robustness is generally more valued in males, leading to a gender disparity that affects motivation and participation rates among female students. This is evident in their lower activity levels and engagement in PE classes (Kong, 2021). Additionally, economic factors play a role in PE participation. Students from lower socioeconomic backgrounds may have reduced access to sports facilities outside of school, which can impede their engagement and skill development in PE. Furthermore, schools in economically disadvantaged areas might lack the resources to offer a diverse range of activities, thereby further restricting student exposure to and enthusiasm for physical education (Nair & Rajan, 2022). Malaysian educational policy emphasizes examination results, potentially leading to a decreased focus on non-academic subjects like PE. The scarcity of status and resources for PE can degrade its quality and lower students' motivation to participate actively. These challenges are compounded by a shortage of trained PE teachers and the use of inadequate pedagogical strategies that do not make PE engaging or relevant to students' lives (Hoe, 2013).

BODY SHAPE

Physical appearance and body shape have been increasingly recognized as factors that can affect the credibility and effectiveness of PE teachers. According to research, students often perceive teachers' physical fitness as a reflection of their expertise and capability to teach PE effectively (Cale et al., 2019). This perception can impact student engagement and participation in PE classes, which are critical for promoting lifelong physical activity (Martin & Murtagh, 2021). Thus, the body shape of PE teachers emerges as a potentially influential factor in health and physical education educational outcomes. There is a significant lack of research on the topic of how physical education instructors' physique affects their ability to instruct, even though this is an important topic. Most existing studies have focused on student perceptions and attitudes towards physical activity rather than examining how these perceptions translate into actual learning outcomes (McKown, 2017). Furthermore, there is a scarcity of research exploring how teachers' self-perception of their body image affects their teaching style and efficacy (Barker et al., 2023). Bridging these gaps could provide deeper insights into the complex dynamics between teacher characteristics and student outcomes in physical education.

Addressing the influence of body shape on teaching effectiveness in PE could lead to several practical applications. First, it might encourage educational institutions to support PE teachers in maintaining a healthy lifestyle for their health and to enhance their credibility and role modeling for students (Demchenko et al., 2021). Additionally, understanding the impact of teachers' physical appearance could lead to improved training programs emphasizing holistic professional development, incorporating physical fitness as a component of teacher education (Cardina & DeNysschen, 2018). Methodologically, there is a need for longitudinal and experimental studies to assess the impact of changes in PE teachers' body shape over time on student engagement and learning outcomes. Such studies would provide causal evidence of the effects observed in cross-sectional studies and could incorporate a range of biometric and psychological assessments to understand the nuances of these relationships (Azzarito et al., 2014).

PHYSICAL APPEARANCE

The reputation of teachers and the quality of their physical education (PE) lessons are significantly influenced by their appearance (McKown, 2017). PE teachers who are fit and well-groomed are often perceived by students as more competent and are more likely to inspire students to engage in physical activities (Ramos & McCullick, 2015). This is particularly important in adolescent education, where attitudes toward physical activity are developed and may persist into adulthood. While there is substantial research on how teacher behaviours and teaching styles affect student outcomes, there has been relatively less focus on the impact of teachers' physical appearance on these dynamics. Current studies primarily examine students' subjective perceptions of their teachers' appearance without evaluating objective outcomes related to physical education, such as student fitness levels, engagement in PE classes, or attitudes toward health (Pennington, 2021). Understanding the influence of PE teachers' physical appearance on student outcomes could lead to significant improvements in educational practices. Schools and teacher training programs might underscore

the importance of personal fitness and professional appearance as part of teacher education. Additionally, this understanding could inform policies that support PE teachers in maintaining their physical fitness, potentially including wellness programs, gym memberships, or time allocated for personal fitness activities during the school day (Karasievych et al., 2021).

STUDENTS MOTIVATION

Understanding and enhancing student motivation in physical education (PE) is crucial because it is associated with increased levels of physical activity, improved fitness, better school performance, and enhanced psychological well-being (Calderón et al., 2020). Motivated students are more likely to actively participate in PE classes, adopt a positive attitude towards physical fitness, and maintain an active lifestyle beyond their school years. Thus, exploring the factors that influence motivation in PE is essential for developing educational practices that promote lifelong healthy habits. The importance of studying both intrinsic and extrinsic motivation in PE lies in their direct impact on students' learning behaviours, attitudes towards physical fitness, and overall educational experiences. Research suggests that intrinsically motivated students are more engaged in physical activities because they find them enjoyable and satisfying, which leads to higher physical fitness levels and more persistent involvement in sports and exercise beyond the school environment (Dasso, 2019). Conversely, extrinsically motivated students may actively participate in PE classes to fulfill requirements, achieve good grades, or win competitions. While this can promote activity, it may not necessarily lead to a long-term commitment to physical health (Trbojević & Petrović, 2021).

Despite the recognized importance of student motivation in PE, there are significant gaps in the literature, especially regarding the differential impacts of intrinsic versus extrinsic motivators across diverse student populations. Many studies concentrate on short-term interventions and neglect long-term motivational trends (Suguis & Belleza, 2022). Additionally, the research often excludes students with disabilities and those from non-Western cultural backgrounds, limiting the applicability and inclusivity of the findings. The role of technology and digital tools in motivating students in PE is another underexplored area, becoming increasingly relevant with the growth of digital integration in education (Montilla et al., 2023). Furthermore, much existing research focuses on secondary school students in urban settings, leaving substantial gaps in understanding these motivations among younger children and those in rural or underrepresented populations (Shkola et al., 2022).

Addressing these gaps can significantly improve PE teaching practices. By identifying effective motivators for diverse student groups, teachers can customize their teaching methods to better align with the needs and preferences of all students. For instance, integrating technology such as fitness trackers and interactive games can modernize the curriculum and engage digitally savvy youth, potentially increasing their participation (Nagovitsyn et al., 2020). Teachers will be better equipped to accommodate their students' learning styles and interests if they understand what motivates different demographics of students.

RELATED THEORIES

According to Social Cognitive Theory (SCT), which offers a psychological perspective on human functioning, the social environment plays a crucial role in motivation, learning, and self-regulation (Schunk & Swartz, 1993). SCT highlights the significance of observational learning, or modeling, where individuals mimic behaviours observed in role models (Bandura, 1986, 1997, 2001). In physical education (PE), a teacher's physical fitness can act as a powerful model, promoting engagement and motivation among students. Under SCT, PE teachers who exemplify health and fitness serve as role models, facilitating the learning of behaviours through observation. When PE teachers model physical fitness, they can significantly enhance student engagement and motivation to participate in physical activities, demonstrating SCT's practical application in PE by providing tangible evidence of the impact of positive role models in the classroom.

Attribution theory, as proposed by Weiner (1985), explains how individuals perceive and interpret the causes of events, with perceived accountability playing a crucial role. Weiner (2021) identifies controllability and the perception of intentionality as key factors leading to the notion of responsibility. For instance, students may attribute a PE teacher's enthusiasm and effectiveness to their physical fitness, which could influence their motivation and engagement in physical activities. According to attribution theory, students may view their teachers' appearance and fitness levels as indicators of their capability and credibility, fundamentally affecting how they perceive and interact socially. This insight leads many to engage in self-presentation strategies to manage the impressions they project to others (Goffman, 2002; Jones & Pittman, 1982; Hayes et al., 2024). Self-presentation theory (Goffman, 2002) suggests that individuals, including teachers, tailor their appearance and behaviour based on the social context to create favourable impressions. Consequently, PE teachers might consciously or unconsciously adjust their appearance and attire to meet the expectations of being "fit," thus influencing student perceptions and interactions.

Figure 1 shows the conceptual framework that explores the interconnected relationships between body shape, physical appearance, and students' motivation. It also examines the differences of these variables across different types of schools.

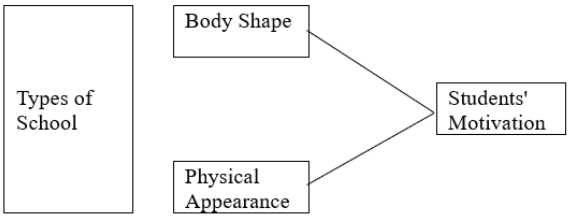

Figure 1. Conceptual Framework

Below are the research hypotheses from the conceptual framework:

Hypothesis 1 (H1): There is a significant difference in students' perceptions of PE teachers' body shapes across different school types.

Hypothesis 2 (H2): There is a significant difference in students' perceptions of PE teachers' physical appearances across different school types.

Hypothesis 3 (H3): There is a significant difference in students' motivation in PE classes across different school types.

Hypothesis 4 (H4): There is a positive correlation between PE teachers' body shape and students' motivation in PE classes.

Hypothesis 5 (H5): There is a positive correlation between PE teachers' physical appearance and students' motivation in PE classes.

METHODOLOGY

RESEARCH DESIGN

The research utilizes a correlational study design to explore the relationships between variables. This design is ideal for studying the nature and direction of the connections between physical education teachers' physical appearance and their students' motivation, as it does not involve altering the setting.

SAMPLE SELECTION

The sample includes 590 students aged 15-18 from secondary schools in a Malaysian state. This age range was chosen because it represents a critical period during which attitudes toward physical education and activity are solidified. A stratified random sampling method was employed to ensure a diverse representation of various school types (urban, suburban, rural) and genders. Each stratum is proportionally represented according to the overall population distribution within the selected schools.

INSTRUMENT CONSTRUCTION

The instrument is a self-administered questionnaire specifically developed for this study, using a 5-point Likert scale (ranging from 1 - Strongly Disagree to 5 - Strongly Agree). The study employs three questionnaires:

1. Students' perceptions of their PE teachers' body shape (PETBS).
2. Students' perceptions of their PE teachers' physical appearance (PEPA).
3. Students' intrinsic and extrinsic motivation in PE classes (PEIEM).

To ensure validity and reliability, the questionnaire underwent a pilot test with a small group of students not included in the final study. Feedback from this pilot was used to refine the questions. Face validity was established through reviews by experts in PE pedagogy, and reliability was assessed using Cronbach's alpha after the pilot test.

QUANTITATIVE ANALYSIS

Data from the questionnaires were analysed using SPSS 29 software. Descriptive statistics provided a summary of the variables. Pearson's correlation coefficient was used to analyse the correlations between instructors' body shape, appearance, and student motivation. Hypotheses were tested at a 0.05 significance level.

FINDING AND DISCUSSION

DEMOGRAPHIC

The gender distribution of the research participants, as shown in Table 1, was nearly balanced, which is crucial for minimizing potential biases arising from a skewed gender distribution. Specifically, there were 302 male participants, representing 51.2% of the total, and 288 female participants,

accounting for 48.8%. Such an equitable distribution ensures that the findings can be considered reflective of both genders, allowing for a comprehensive analysis of how the studied educational interventions might impact male and female students either differently or similarly. Age is also a critical factor in educational research, especially when the subjects are adolescents, as developmental stages can significantly influence behaviour and responses to educational stimuli. The age distribution within this study was as follows: 156 participants were 15 years old (26.4% of the sample), 144 were 16 years old (24.4%), 145 were 17 years old (24.6%), and 145 were 18 years old (24.6%). This balanced age distribution is advantageous as it encompasses a broad spectrum of the high school experience, providing insights into the efficacy of physical education across different stages of secondary education. The participants were evenly distributed across three types of school environments: 196 participants were from urban schools (33.2% of the total), 196 from suburban schools (33.2%), and 198 from rural schools (33.6%).

Table 1. Demographic Data

Gender		Frequency	Percentage
	Male	302	51.2
	Female	288	48.8
Age			
	15	156	26.4
	16	144	24.4
	17	145	24.6
	18	145	24.6
School Types			
	Urban	196	33.2
	Suburban	196	33.2
	Rural	198	33.6

n= 590

NORMALITY TEST

The mean for Physical Appearance, as presented in Table 2, is 4.14 with a standard deviation of 0.58, skewness of -0.361, and kurtosis of -0.601. Body Shape recorded the same mean and standard deviation as Physical Appearance but exhibited slightly different skewness at -0.289 and kurtosis at -0.777. The Intrinsic Motivation variable had a mean of 4.15, a standard deviation of 0.56, skewness of -0.157, and kurtosis of -1.28. Extrinsic Motivation displayed a mean of 4.14, a standard deviation of 0.56, skewness of -0.120, and kurtosis of -1.162. Overall Motivation matched the mean of Intrinsic Motivation at 4.15 and had the same standard deviation of 0.56, with skewness of -0.186 and kurtosis of -1.179. According to Kline (2023), skewness and kurtosis values within ±2 are generally considered acceptable for satisfying the normality assumption necessary for parametric analyses. All measured values are within these limits, indicating that the distributions of these variables do not significantly deviate from normality.

Table 2. Normality Test

	Mean	SD	Skewness	Kurtosis
Physical Appearance	4.14	.58	-.361	-.601
Body Shape	4.14	.58	-.289	-.777
Intrinsic Motivation	4.15	.56	-.157	-1.28
Extrinsic Motivation	4.14	.56	-.120	-1.162
Overall Motivation	4.15	.56	-.186	-1.179

INSTRUMENT RELIABILITY TEST

Table 3 shows high-reliability scores for each variable, indicating that the survey instruments used to measure these constructs are robust and produce consistent results. The scores for Physical Appearance and Body Shape are 0.857 and 0.858, respectively. These scores suggest that the items used to assess perceptions of teachers' physical attributes

are consistently interpreted by respondents, enhancing the validity of conclusions regarding the impact of these attributes on educational outcomes. With scores ranging from 0.850 to 0.929, the constructs of intrinsic motivation, extrinsic motivation, and overall motivation demonstrated strong internal consistency. This high level of reliability is particularly crucial for Overall Motivation, which achieved the highest alpha value of 0.929. This indicates that the composite measure of motivation is especially robust, reflecting a well-structured instrument that effectively captures the multifaceted nature of motivational dynamics in educational settings.

Table 3. Reliability Test Result

	Physical Appearance	Body shape	Intrinsic Motivation	Extrinsic Motivation	Overall Motivation
Cronbach's Alpha	.857	.858	.853	.850	.929

Hypothesis 1 (H1): There is a significant difference in students' perceptions of PE teachers' body shapes across different school types.

The one-way ANOVA conducted on the data yielded a p-value below 0.05 and a high F-value of 509.46, indicating a statistically significant difference in the perception of PE teachers' body shapes across the three types of schools ($F(2,587) = 509.46$, $p < .05$). Since the p-value did not exceed the alpha level of 0.05, there was not enough statistical evidence to reject Hypothesis 1. Results determined by the Tukey post hoc test indicated that perceptions of body shape in urban schools (Mean = 3.55) were significantly lower compared to both suburban (Mean = 4.20) and rural schools (Mean = 4.67), with suburban schools also rated significantly lower than rural schools. Thus, H1 was not rejected. Research suggests that urban areas, often characterized by higher density and lower socioeconomic status, may harbor different cultural attitudes towards body image and fitness compared to suburban and rural areas (González-Calvo et al., 2022). These attitudes could influence students' perceptions of their teachers. Rural and suburban areas might have better access to recreational facilities and outdoor spaces conducive to maintaining physical fitness (Pfledderer et al., 2021).

PE teachers in these areas might therefore engage more in physical activities, potentially influencing their body shape. In rural communities, where manual labor might be more prevalent, a robust physical presence might be valued more highly, which could influence student perceptions of ideal body shape (Pelletier et al., 2021). According to Bandura's Social Cognitive Theory (SCT) (1986), students are likely to observe and emulate the behaviours of role models they perceive as competent and credible. In the context of physical education, if students perceive their teachers as physically fit and embodying healthy lifestyle choices, they might be more likely to adopt these behaviours themselves. Self-Determination Theory (SDT) suggests that students will be more intrinsically motivated if they value the activity and feel it aligns with their personal goals and identities (Deci & Ryan, 2019). The physical appearance and fitness of PE teachers can impact how students value physical education activities and perceive their relevance to personal health and fitness goals.

These findings underscore the need for awareness and interventions that consider how physical perceptions can influence student engagement and motivation. Teachers and policymakers should consider the following:

1. Professional Development

   Training for PE teachers can include components on maintaining physical fitness not just for personal health, but also to enhance professional influence and student engagement (Siedentop & Van der Mars, 2022).

2. Inclusive Education Practices

   Develop educational materials that promote a balanced understanding of physical fitness and body image, acknowledging that effective teaching is influenced by diverse factors beyond physical appearance (Roberts et al., 2024).

3. Further Research

   Additional studies could explore the underlying reasons for these perceptions and how they impact student participation in PE, potentially including qualitative studies involving interviews or focus groups with students and teachers to gain deeper insights (Leo et al., 2022).

The study's findings highlight significant differences in how students from various school settings perceive the body shape of their PE teachers, which could have implications for educational strategies and student engagement.

Hypothesis 2 (H2): There is a significant difference in students' perceptions of PE teachers' physical appearances across different school types.

The one-way ANOVA results ($F(2,587) = 514.35$, $p < .05$) revealed that perceptions of PE teachers' physical appearance significantly differ across school types with an F-value of 514.35. Given that the p-value did not exceed the alpha level of 0.05, there was insufficient statistical evidence to reject Hypothesis 2. According to a Tukey post hoc test, the mean index scores indicated that students in urban schools rated their PE teachers' appearance significantly lower (Mean = 3.55) than their counterparts in suburban (Mean = 4.20) and rural schools (Mean = 4.68). Additionally, suburban schools were rated significantly lower than rural schools.

Social Cognitive Theory (SCT) posits that individuals acquire and perform new behaviours by observing others, particularly those considered role models (Bandura, 1986). In the context of PE, teachers who are perceived to have a positive physical appearance might be viewed as more credible and effective role models, thereby influencing students' attitudes toward physical fitness and activity. Ecological Systems Theory suggests that development reflects the influence of various environmental systems, and this study highlights how the microsystem of the school environment (urban, suburban, rural) can significantly influence student perceptions (Bronfenbrenner, 1979). The variance in socioeconomic status and resource availability across these school types could contribute to differing expectations and norms regarding physical appearance. The variance in perceptions might reflect broader socioeconomic and cultural differences between urban, suburban, and rural areas. Urban schools, facing higher poverty rates and lower funding, may have fewer resources available for health and fitness programs, which could in turn influence the appearance of teachers. Students' perceptions of their teachers' appearance can significantly impact their engagement and motivation in PE classes. Teachers who are perceived positively might inspire greater effort and participation among students, promoting better health and fitness outcomes. These findings suggest that educational policymakers should consider how perceptions of teacher appearance might influence student outcomes. Professional development and support for PE teachers in maintaining a professional appearance could be particularly beneficial in urban schools.

The significant differences in how students perceive their PE teachers' physical appearance across different school types underline the complex interplay between educational context, societal norms, and student outcomes. Understanding these dynamics is crucial for designing interventions that enhance educational experiences and promote healthy lifestyles across diverse school settings. Future research should explore the underlying causes of these perceptions and the direct impact of PE teachers' appearance on student health behaviours.

Hypothesis 3 (H3): There is a significant difference in students' motivation in PE classes across different school types.

A significant variance in PE students' motivation was determined by a one-way ANOVA ($F(2,587) = 528.54$, $p < .05$). Given that the p-value does not exceed the alpha level of 0.05, there was insufficient statistical evidence to reject Hypothesis 3. The Tukey post hoc test revealed that motivation levels in urban schools (Mean = 3.58) were significantly lower than those in suburban (Mean = 4.20) and rural schools (Mean = 4.66), with suburban schools also scoring significantly lower than rural schools. According to the Self-Determination Theory, motives are influenced by relatedness, competence, and autonomy (Deci & Ryan, 2019). Students in rural areas may experience more community cohesion and personal attention, enhancing relatedness and intrinsic motivation towards school activities like PE. Bronfenbrenner's theory posits that an individual's development is affected by their environment or ecosystem (Bronfenbrenner, 2019).

Differences in school resources, community values towards physical activity, and extracurricular opportunities can create varying ecosystems in urban, suburban, and rural schools that influence student motivation. Students in urban schools may face barriers such as larger class sizes, fewer resources, and less community support, negatively impacting motivation. Typically, suburban schools might offer more resources than urban schools but fewer than rural schools, positioning them in the middle in terms of student motivation scores. The higher motivation in rural schools might be attributed to smaller class sizes, greater community involvement, and possibly more space for physical activities. These differences highlight the need for targeted interventions to enhance motivation in urban and suburban schools. Programs designed to improve school and community engagement or to enhance the perceived value and enjoyment of PE could be particularly effective.

Policy Recommendations:

1. Urban Schools

   Implement smaller class sizes, increase resources for PE, and enhance community engagement programs.

2. Suburban Schools

   Boost extracurricular activities that enhance student autonomy and competence in sports.

3. Rural Schools
   Continue to support and expand existing programs that successfully promote high motivation levels.

The significant differences in PE student motivation across school types underscore the need for contextually adapted educational strategies. By aligning PE programs with the needs and circumstances of each school type, educators can foster higher levels of motivation, leading to better educational outcomes and healthier lifestyles.

Table 4. Anova Test Result

		Sum of Squares	df	Mean Square	F	Sig.
Body Shape	Between Groups	125.481	2	62.740	509.457	.000
	Within Groups	72.290	587	.123		
	Total	197.771	589			
Physical Appearance	Between Groups	125.690	2	62.845	514.345	.000
	Within Groups	71.722	587	.122		
	Total	197.412	589			
Internal Motivation	Between Groups	116.190	2	58.095	479.871	.000
	Within Groups	71.065	587	.121		
	Total	187.255	589			
Extrinsic Motivation	Between Groups	116.827	2	58.413	501.192	.000
	Within Groups	68.414	587	.117		
	Total	185.241	589			
Overall Motivation	Between Groups	116.508	2	58.254	528.542	.000
	Within Groups	64.697	587	.110		
	Total	181.205	589			

Hypothesis 4 (H4): There is a positive correlation between PE teachers' body shape and students' motivation in PE classes.

The findings from the Pearson correlation analysis presented in Table 5 revealed a remarkably high correlation coefficient of 0.952 between PE teachers' body shape and student motivation, with a significance level (2-tailed) of 0.00. A considerable positive correlation exists between the perceived favourable body shape of the teachers and student motivation in PE classes. Given that the p-value did not exceed the alpha level of 0.05, there was insufficient statistical evidence to reject Hypothesis 4. According to Social Cognitive Theory (Bandura, 1986), individuals acquire knowledge by observing, imitating, and modeling others. The high correlation suggests that students may view teachers with positive body shapes as role models, whose behaviours and attributes they are likely to emulate, thus enhancing their motivation. Expectancy-Value Theory posits that motivation is based on the expected outcome and the value of the activity (Wigfield & Eccles, 2000). Students might place a higher value on physical education activities if they see tangible examples of its benefits, such as a physically fit teacher, which in turn increases their motivation to participate.

Table 5. Correlation Test

		Body Shape	Physical Appearance	Motivation
Body Shape	Pearson Correlation	1	.949**	.952**
	Sig. (2-tailed)		.000	.000
	N	590	590	590
Physical Appearance	Pearson Correlation	.949**	1	.935**
	Sig. (2-tailed)	.000		.000
	N	590	590	590
Motivation	Pearson Correlation	.941**	.926**	.986**
	Sig. (2-tailed)	.000	.000	.000
	N	590	590	590

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

Hypothesis 5 (H5): There is a positive correlation between PE teachers' physical appearance and students' motivation in PE classes.

The analysis revealed a Pearson correlation of 0.935 between PE teachers' physical appearance and student motivation, with a significance level (2-tailed) of 0.000. This indicates a very strong positive correlation, suggesting that student motivation in PE is significantly associated with their perceptions of their teachers' physical appearance. Given that the p-value did not exceed the alpha level of 0.05, there was insufficient statistical evidence to reject Hypothesis 5. According to Bandura's Social Cognitive Theory (1986), individuals adopt new habits, perspectives, and ways of thinking by observing those around them, particularly those regarded as role models. In the context of PE, teachers who exhibit a fit and well-maintained appearance might be perceived as effective role models, thereby enhancing student motivation through observational learning. Expectancy-Value Theory (Wigfield & Eccles, 2000) suggests that motivation is driven by the expected outcomes of action and the value associated with achieving these outcomes. Students are likely to be more motivated if they value the outcomes associated with physical education, especially when these outcomes are embodied by the teacher's appearance, which aligns with societal ideals of health and fitness.

Given the strong correlation found in this study, it is evident that the physical appearance of PE teachers has a profound impact on student motivation. This underscores the importance of:

1. Professional Development

   Encouraging PE teachers to maintain physical fitness could be a strategic focus in professional development programs.

2. Recruitment Criteria

   Schools might consider the physical fitness and appearance of candidates as factors in the hiring process for PE teachers, recognizing their potential impact on student engagement.

While the results are compelling, future research should consider qualitative methods to explore the underlying reasons why physical appearance has such a significant influence on student motivation. Additionally, longitudinal studies could assess how these perceptions impact long-term student engagement and fitness outcomes. The strong correlation between the physical appearance of PE teachers and student motivation in PE suggests that perceptions of physical attractiveness and fitness significantly influence student engagement. These findings not only highlight the importance of role modeling in educational settings but also suggest practical approaches for enhancing student motivation through teacher presentation and fitness.

Future research should aim to use a combination of qualitative and quantitative methods to explore the influence of teachers' physical appearance on student engagement and outcomes. Longitudinal studies could help to track changes over time, providing insights into how sustained perceptions of teacher appearance impact student attitudes towards physical activity. Additionally, experimental designs could manipulate variables related to teacher appearance to directly observe effects on student motivation and engagement. To further understand how different motivating variables impact student involvement in physical education, future research should use a mixed-methods approach. Longitudinal studies are particularly needed to assess how motivation changes over time and during transitions between educational levels. Experimental studies that test new motivational strategies, such as gamification

or personalized learning plans, would also provide valuable insights into effective practices (Arufe-Giráldez et al., 2022).

CONCLUSION

This study provides strong evidence that the presentation of physical education instructors significantly influences their students' motivation to learn. The implications of these findings are substantial for educational policy and practice. They suggest that enhancing teacher training programs to include aspects of physical fitness and presentation could be beneficial. Moreover, considering fitness as a criterion in hiring practices is important not only for the health of the teachers but also for the inspiration it provides to their students. This study contributes to our understanding of the dynamics within physical education settings and offers actionable insights that can help structure more effective and motivating PE environments. Future research could build on these findings by exploring longitudinal impacts and integrating qualitative assessments to gain deeper insights into the psychological and social mechanisms underlying these correlations. Such efforts will ensure that physical education continues to effectively enhance students' physical well-being and educational experiences.

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