Full research paper

BOREDOM OR FUN? IMPACT OF PERCEPTION OF PHYSICAL EDUCATION CLASS ON LEISURE-TIME PHYSICAL ACTIVITY IN MEXICAN CHILDREN

ABSTRACT

The aim is to determine the predictive effect of Satisfaction/Fun, boredom, the importance of Physical Education (PE) classes, and intention to engage in leisure-time physical activity (LTPA) on the level of physical activity (PA) in primary school children. This is a cross-sectional causal study. A total of 519 children from the states of Jalisco and Nuevo León participated, with an average age of 10.50 ± 0.94 years. Inclusion criteria included signed informed consent; children with any pathology were excluded. The analysis included descriptive statistics and multiple linear relationships. The results showed high levels (M > 4) of Satisfaction/Fun, importance and usefulness of PE classes, and intention to practice LTPA; moderate to low levels of PA and boredom. Significant differences (p = .001) were found in PA levels by gender and state and in the importance of PE classes by gender. Fun/Satisfaction and intention to engage in LTPA were the best predictors of PA with values of B = .25; B = .19; F (2,516); (p = .001); $R^2 = .15$. PE classes should include strategies that promote student satisfaction and fun and reintegrate the learning unit into the current curriculum framework.

KEYWORDS

Boredom, enjoyment, physical education, relevance, school age

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Highlights

- Participants exhibit high levels of Satisfaction/Enjoyment and importance regarding PE classes, a high intention to engage in PA, and low levels of boredom and AF.
- Boys presented higher levels of PA compared to girls.
- Boys perceive PE classes as more important and useful compared to girls
- Satisfaction/Enjoyment of PE classes, as well as the intention to practice PA, has a predictive effect on PA

INTRODUCTION

Engaging in moderate to intense PA (60 minutes a day at least 5 days a week) has significant contributions to physical, psychological, and social health (Institute of Medicine, 2013; World Health Organization [WHO], 2021). Physical or physiological benefits of PA in children include reducing the risk of chronic non-communicable diseases (NCDs) such as diabetes, hypertension, and some cancers, among others. Regarding psychosocial benefits, it helps reduce stress, anxiety, and depression, improves concentration, attention, and promotes the acquisition of values such as respect, tolerance, justice, and peer support, among others (Álvarez-Pitti et al., 2020; Institute of Medicine, 2013; Martínez-Hernández et al., ¹Universidad Autónoma de Nuevo León, Facultad de Organización Deportiva, Mexico

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2024; World Health Organization [WHO], 2021; Paramio-Pérez, 2017; Ramírez-Granizo et al., 2019; Reyes-Soto et al., 2019; Rojo-Ramos et al., 2022).

However, despite the well-known benefits of PA, the latest report from the 2022 National Health and Nutrition Survey (ENSANUT) reported that 68.3% of Mexican children aged ten to 14 do not engage in 60 minutes of moderate to vigorous physical activity at least four days a week (Medina et al., 2023). These figures highlight a public health problem related to physical inactivity, making the promotion of PA a topic that the scientific and health community should pay more attention to (Tremblay et al., 2014).

Some studies indicate that the school environment is where

children spend most of their day, making it an ideal place to promote compliance with recommended PA levels in schoolaged children (Fin et al., 2017; Chu et al., 2020; Rojo-Ramos et al., 2022). Until 2022, Mexican school-aged children were required to take the PE learning unit, where they were required to practice an average of 40 minutes of PA twice a week (Secretaría de Educación Pública [SEP], 2011a, 2011b, 2015). However, in 2022, the SEP proposed a new primary education curriculum where PE ceased to be an independent learning unit and was placed in the field of formative knowledge and critical thinking, now having limited time and importance, with scientific knowledge taking the greatest emphasis (SEP, 2022, 2024). Given this situation, emphasizing the importance that children place on PE classes should gain greater relevance (González Rivas et al., 2023; Martínez-Hernández & Zamarripa, 2023; Rojo-Ramos et al., 2022), as it could be a good alternative for promoting PA and acquiring other healthy lifestyle habits, thereby helping to combat the high prevalence of physical inactivity, sedentary behavior, overweight, and obesity in the Mexican child population.

Current scientific literature indicates that PE plays an important and decisive role in acquiring and adhering to physical-sport behavior habits, which could persist into adulthood, but several factors interfere in the process (Muñoz, Gómez-López and Granero-Gallegos, 2019; World Health Organization, 2020; Moon and Park, 2022; Martínez-Hernández and Zamarripa, 2023), such as the satisfaction or motivation the child has towards PE, boredom during classes, perception of the importance of classes, intention to practice LTPA, previous negative experiences with teachers, inadequate facilities for physical-sport practice, among others (Fin et al., 2017; Chu et al., 2020; Rojo-Ramos et al., 2022; Martínez-Hernández and Zamarripa, 2023).

In this regard, some studies indicate that Satisfaction/Fun in PE classes plays a fundamental role in practicing LTPA and could determine commitment to class participation and, consequently, better adherence to PA outside the classroom (Muñoz-Miralles et al., 2016; Baños et al., 2019; Zueck et al., 2020; Aznar-Ballesta and Vernetta, 2022; Rojo-Ramos et al., 2022).

On the other hand, Muñoz-González et al. (2019) found that children who place greater importance and utility on PE have higher levels of extracurricular PA, so maintaining and increasing motivation, satisfaction, and perceived importance of classes should be fundamental (Baños et al., 2019; Muñoz, Gómez-López and Granero-Gallegos, 2019; Aznar-Ballesta and Vernetta, 2022).

In recent years, the desire to know the levels of Satisfaction/ Fun, boredom, the importance of PE classes, and the intention to practice LTPA in adolescents has increased considerably. These studies also highlight the importance of thoroughly investigating these variables during primary education, as it is during this stage that PA levels tend to decline (Muñoz, Gómez-López and Granero-Gallegos, 2019; Rojo-Ramos et al., 2022). The results reveal that primary school children have a high level of satisfaction, adequate perception of the importance of PE classes, and a willingness to engage in LTPA, as well as low levels of boredom (Martínez-Hernández and Zamarripa,

2023), but the relationship or predictive effect these variables may have on PA levels has not been studied.

Therefore, the following three objectives are proposed: first, to evaluate the level of PA, Satisfaction/Fun, boredom, importance of PE classes, and intention to engage in LTPA; the second objective is to establish differences in these variables by states of the Mexican Republic and by gender; finally, the third objective is to determine the predictive effect of Satisfaction/ Fun, boredom, importance of PE classes, and intention to engage in LTPA on PA levels in school-aged children.

MATERIALS AND METHODS

Design, Sample, and Sampling

This research study has a non-experimental, cross-sectional, and correlational-causal design (Hernández-Sampieri and Mendoza, 2018). A total of 541 children from seven primary schools in two different cities in Mexico participated; five from the West (Jalisco) and two from the Northeast (Nuevo León). Twenty-two surveys were eliminated due to incomplete information, leaving a sample of n = 519 children. Of the total sample, 61.5% were from Jalisco, 38.5% from Nuevo León, 50.1% were female, 39.7% and 33.7% were in the sixth and fifth grades of primary school, respectively, and 37.8% of the children were 11 years old. The average age was 10.50 ± 0.94 years, ranging from 9 to 12 years.

Inclusion criteria included only children who agreed to participate and had signed informed consent from their legal guardians. Children with any illness (asthma, diabetes, bronchitis, among others) that could limit outdoor activities and those with learning delays, as these children might not fully understand the questions, were excluded. This was assessed through direct questions to the group teacher and the parents or legal guardian.

The sample selection was non-probabilistic and convenient, as children were selected based on accessibility (Hernández-Sampieri and Mendoza, 2018), i.e., according to the access granted by the school authorities.

Study Variables

The Physical Activity Questionnaire for Children (PAQ-C) was used to evaluate the level of PA. This instrument is designed for children aged 8 to 14 years. It is self-administered and used to measure daily and free-time PA carried out in the last 7 days of the week. It is an instrument recommended for use during the school year, with questions involving school activities. It has a Cronbach's alpha of .83 in the Spanish child population (Manchola-González, Bagur-Calafat, and Girabent-Farrés, 2017; Martín-Bello, Vicente-Rodríguez, Casajús, and Gómez-Bruton, 2020) and a Cronbach's alpha of .83 in the Colombian child population (Herazo-Beltrán and Domínguez-Anaya, 2012). It consists of 10 questions, with five Likert-type response options that are scored from 1 to 5 (the less physical activity, the lower the score). The first question asks about activities carried out during free time; the next six questions evaluate the PA carried out in PE classes and during the academic break, at the end of class hours (daily PA) in the afternoons and on weekends; the last two questions assess the PA carried out during the weekend and the frequency with which PA is carried out each day of the week; the tenth question is a filter question, used to find out if the child was sick that week. The final score of the AF level is obtained by the average of the first 9 questions; question 10 is not used as part of the overall score (Kowalski, Crocker and Faulkner, 1997; Kowalski, Crocker and Donen Rachel, 2004; Herazo-Beltrán and Domínguez-Anaya, 2012; Manchola-González, Bagur-Calafat and Girabent-Farrés, 2017; Arévalo, Feu and De la Cruz Sánchez, 2020), finally, a pilot test was carried out in Mexican primary school children with an n = 48 children and a Cronbach's alpha of .76 was obtained.

To measure Satisfaction/Fun and boredom in PE class, the Sport Satisfaction Instrument adapted to Physical Education (SSI-PE) was used (Baena-Extremera et al., 2012). It contains eight items: five for Satisfaction/Fun and three for boredom, with responses on a Likert-type scale from 1 to 5 (strongly disagree to strongly agree). Higher scores indicate greater Satisfaction/ Fun or boredom. Reported alpha values in studies were.92 for the Satisfaction/Fun subscale and .79 for the boredom subscale (Muñoz, Gómez-López and Granero-Gallegos, 2019; Aznar-Ballesta and Vernetta, 2022; Baños et al., 2022).

The Importance and Utility of Physical Education (IEF) scale was used, developed, and validated in Spanish education to assess the importance and utility of PE according to students. This scale evaluates the importance and utility students attribute to PE classes. The instrument consists of three items answered on a Likert-type scale from 1 to 5 (strongly disagree to strongly agree) (Aznar Ballesta and Vernetta, 2022; Baños et al., 2019; Muñoz González et al., 2019).

To measure children's intention to engage in LTPA, the Intention to Participate in Leisure-Time Physical Activity scale adapted to PE (MIFA) was used (Granero-Gallegos et al., 2014). It consists of three items, with responses on a Likert-type scale from 1 to 5 (strongly disagree to strongly agree). Higher scores indicate a greater intention to participate in LTPA (Muñoz, Gómez-López, and Granero-Gallegos, 2019).

Procedure

Initially, permission was requested from the zone supervisor of the South Coast Region of Jalisco, Mexico. The project was then presented to the principals of five schools in the South Coast Region of Jalisco. The principals who agreed to the project granted permission, and a meeting with parents was organized to explain the project's objective and request the signing of informed consent. The informed consent outlined the main objectives of the research, the anonymity under which the instruments would be applied, the confidentiality of the information, the right to withdraw at any time, the data collection process, and all relevant information as established in the General Health Law on Health Research (Diario Oficial de la Federación, 2014) and the Declaration of Helsinki (World Medical Association, 2017).

Once informed consent was obtained from the children's guardians, the principal investigator presented the study's objective to the children, emphasizing voluntary participation, that it was not an exam, so there were no right or wrong answers, that participation would not affect their academic performance,

that they could stop answering the instrument at any time, that only the researchers would know the results of their responses, and to give their assent and sign with their name if they wished to participate. Finally, they were asked to answer as honestly as possible. The children completed the entire questionnaire in the classroom, always accompanied by the principal investigator to resolve any doubts that arose during the application. The response time ranged from 15 to 20 minutes.

This research project adhered to the General Health Law on Health Research, published by the Diario Oficial de la Federación in 2014 (Diario Oficial de la Federación, 2014) and the Declaration of Helsinki of the World Medical Association (WMA) - ethical principles for medical research involving human subjects (World Medical Association, 2017). Therefore, this research project was submitted to the Ethics Committee in Research of the Faculty of Sports Organization (CEIFOD), which granted its approval with registration key CEIFOD 0124 015.

Statistical Analysis

To address the first objective, evaluating the level of PA, Satisfaction/Fun, boredom, importance of PE classes, and intention to engage in LTPA, descriptive statistics were conducted: measures of central tendency for continuous variables and frequencies and percentages for categorized variables. Reliability analysis was performed using Cronbach's alpha for all scales used.

To meet objective number two, to establish the difference in the level of PA, Satisfaction/Fun, boredom, the importance of PE classes, and the intention to do PATL by the state of the Mexican Republic and sex, two statistical analyses were performed. First, with the categorized variables, an X^2 test was performed. To determine the classifications of the different scales used, a non-hierarchical cluster analysis (K-means) was performed with three categories: low, moderate, and high.

Then, to establish differences by gender and state of the Mexican Republic with continuous variables, the normality of the data set was determined through skewness and kurtosis analysis. It was observed that three scales had non-normal distribution, so data transformation was performed using the logarithmic method. Once the data were transformed, an independent samples t-test was used.

Finally, to address the third objective, a multiple linear regression analysis was conducted using the stepwise method, considering PA level as the dependent variable and Satisfaction/ Fun, boredom in PE classes, importance of PE classes, and intention to engage in LTPA as independent variables.

Statistical analyses were performed using the IBM Statistical Package for the Social Sciences (SPSS) version 21 for Windows. The effect size and statistical power of the results were analyzed using the G*Power program version 3.1.9.7 to avoid type II errors.

RESULTS

Reliability, Normality, and Descriptive Analysis

Regarding internal consistency values, four scales obtained acceptable indices to engage in the LTPA scale having the highest acceptability index (Cronbach's alpha of .86). In contrast, the boredom subscale had weak internal consistency with a value of .60 (see Table 1).

The skewness and kurtosis of the five scales used were analyzed using the Likert-type scales to determine data distribution. Skewness showed that the Satisfaction/Fun, importance of PE classes, and intention to engage in LTPA scales had negative skewness. In contrast, the PA level and boredom scales had right-skewed data, indicating positive skewness.

Regarding kurtosis values, most were positive, indicating that most scales had a leptokurtic distribution compared to a normal

distribution, except for the PA level scale items, which were negative. These values indicated that the data did not have a normal distribution (see Table 1), so data transformation was performed using the logarithmic method to work with parametric statistics.

Table 1 shows the descriptive results of the Satisfaction/Fun, importance and utility of PE classes, and intention to engage in LTPA scales, which have high levels ($M \ge 4$). The PA level and boredom subscale have the lowest means, indicating moderate levels of PA and boredom.

Scale	М	SD	Min	Max	α	S	K
PAQ-C	2.95	.743	1	5	.75	.063	319
Satisfaction/Fun in PE classes	4.12	.932	1	5	.82	-1.307	1.317
Boredom	2.30	1.04	1	5	.60	.764	.023
Importance and utility of PE classes	4.07	1.01	1	5	.86	-1.27	1.020
Intention to engage in LTPA	4.11	1.04	1	5	.86	-1.27	1.020

Note. *n = Total sample; M = Mean; SD = Standard Deviation; Min = Minimum; Max = Maximum; α = Cronbach>s alpha, S = Skewness, K = Kurtosis Table 1: Reliability, Normality, and Descriptive Analysis of the Scales (n = 519*) (own elaboration)

The results of the Student's *t*-test revealed statistically significant differences (p = .001) in PA levels by state and the importance and utility of PE classes by gender (see Table 2).

gender. Significant differences (p = .001) were also found in

	State of the Republic				Gender				
Scale	Jalisco	Nuevo León		p	Boys	Girls	IC95%	p	
	M(SD)	M(SD)	1095%		M(SD)	M(SD)			
PAQ-C	3.05	2.80	12.20	.001	3.17	2.73	.31;.56	.001	
	(.7)	(.6)	.12,.38		(.75)	(.66)			
Satisfaction/Fun in PE classes	4.09	4.16	23;.09	40	4.1	4.0	04;.28	.14	
	(.96)	(.91)		.42	(.92)	(.96)			
Boredom	2.76	2.74	12;.15	04	2.79	2.71	05;.21	.26	
	(.82)	(.79)		.84	(.84)	(.77)			
Importance/utility of PE classes	4.08	4.06	15;.19	00	4.17	3.9	.02;.37	.02	
	(1.0)	(.96)		.82	(.97)	(1.0)			
Intention to engage in LTPA	4.08	4.17	27;.10	20	4.19	4.04	02;.33	10	
	(1.0)	(.97)		.30	(1.0)	(1.0)		.10	

Note: *n = Total sample; M = mean; SD = Standard Deviation; 95% Cl and p < .05 were considered statistically significant

Table 2: Comparison of scales (continuous version) by state and gender ($n = 519^*$) (own elaboration)

The chi-square test analysis showed that a higher proportion of children from Jalisco (31.7%) had a high level of PA compared to children from Nuevo León, with children showing higher prevalences of adequate PA levels. Significant differences (p = .007) were found in the importance of PE classes by gender (see Table 3).

Variables		State of the Republic			Gender		-	
Variables		Jalisco	Nuevo León	P	Boys	Girls	ρ	
	Low Level	24.5% (78)	40.5% (81)		21.2% (55)	40.0% (104)		
	Moderate Level	43.9% (140)	38.5% (77)	.001	38.6% (100)	45.0% (117)	.001	
PAQ-C	High Level	31.7% (101)	21.0% (42)		40.2% (104)	15.0% (39)		
	Low Level	7.2% (23)	6.5% (13)		5.4% (14)	8.5% (22)	.18	
Satisfaction/Fun in PE classes	Moderate Level	23.2% (74)	21.0% (42)	.77	20.5% (53)	24.2% (63)		
	High Level	69.6% (222)	72.5% (145)		74.1% (192)	67.3 (175)		
Boredom in PE classes	Low Level	33.5 (107)	39.5 (79)		36.3 (94)	35.4(92)	.95	
	Moderate Level	47.3 (151)	41.0 (82)	.31	44.8 % (116)	45.0% (117)		
	High Level	19.1 (61)	19.5 (39)		18.9% (94)	35.4% (92)		
Importance/utility of PE classes	Low Level	9.1% (29)	8.5.% (17)		8.5 % (22)	9.2 % (24)	.007	
	Moderate Level	34.5% (110)	36.5% (73)	.88	29.0% (75)	41.5 % (108)		
	High Level	56.4% (180)	55.0% (110)		62.5% (162)	49.2(128)		
Intention to engage in LTPA	Low Level	7.8% (25)	4.0% (8)		6.2% (16)	6.5% (17)		
	Moderate Level	21.0% (67)	26.5% (53)	.10	20.1% (52)	26.2% (68)	.23	
	High Level	71.2% (227)	69.5% (139)		73.7% (191)	67.3% (175)		

Note: *n = Total sample; M = mean; SD = Standard Deviation; 95% CI and p < .05 were considered statistically significant

Table 3: Comparison of scales by state and gender $(n = 519)^*$ (own elaboration)

Multiple Linear Regression Analysis

Once it was verified that the scales' variance was different from 0 and that multicollinearity was not present, a multiple linear regression analysis was performed using the stepwise method to determine which of the independent variables was the best predictor of PA level.

The analysis showed two models and eliminated the variables of boredom and the importance of PE classes. The first model suggested that Satisfaction/Fun in PE classes was the best predictor of PA with values of B = .35; F(1,517) = 76.36, p = .001, β -1 = .99, and $R^2 = .12$, indicating that 12% of the PA level could be explained by the variable of Satisfaction/Fun during PE classes.

The second model showed that in addition to the Satisfaction/ Fun of physical education classes, the Intention to practice PATL could also have a predictive effect on PA with values of B = .25 and B = .19, with an explained variance of 15% (p = .001) respectively (see Table 4).

Predictor Variables	В	SE B	Beta	R ²	F _(df)	р	1- <i>6</i>
Constant	1.563	.147					
Satisfaction/Fun in PE classes	.202	.039	.253	.15	47.11 (2,516)	.001	.87
Intention to engage in LTPA	.136	.034	.192				

Note. PA = physical activity; B = unstandardized coefficients; SE B = Standard Error; Beta = Standardized; R² = coefficient of determination; F(df) = F value with the regression degree of freedom; <math>p < .05 were considered statistically significant; 1-6 = statistical power

Table 4: Multiple linear regression analysis where the dependent variable is PA and the independent variables are Satisfaction/Fun in PE classes and Intention to engage in LTPA (n = 519)* (own elaboration)

DISCUSSION

This study had three objectives: the first objective was to evaluate the level of PA, Satisfaction/Fun, boredom, the importance of PE classes, and the intention to do PATL; the second objective was to establish the differences between these variables by states of the Mexican Republic and sex, and the third objective was to determine the predictive effect that Satisfaction/Fun, boredom, importance of PE classes, physical education and intention to do PATL have in school-aged children.

To answer objective number one, to evaluate the level of PA, Satisfaction/Fun, boredom, the importance of PE classes, and the intention to do PATL, the findings showed that like Aznar-Ballesta (2022), Martínez-Hernández and Zamarripa (2023), Muñoz et al. (2019) and Baños et al. (2019) most of the scales have an $M \ge 4$, which indicates an adequate level of satisfaction, the importance of PE classes and intention to practice PATL, and present average levels in the boredom

subscale during PE classes and PA level; These results could be explained by the fact that currently, in the primary school children's curriculum, the PE subject is not an independent and exclusive subject, in which a moderate level of PA has to be carried out (60 minutes 3 to 4 days a week), a situation that was occurring until before 2022, which causes PA levels to decrease. In turn, the findings show that children have a high level of Satisfaction/Fun, perceive PE class as important, and intend to practice PATL, which should be an incentive for the promotion of PA, and the low level of boredom shows that children really like doing PA in PE classes.

Regarding the second objective, the results showed that more children from Jalisco have adequate levels of PA compared to children from the state of Nuevo León. These results are inconsistent with those reported by (Arévalo, Feu, and De la Cruz Sánchez, 2020), where no differences were found in the level of PA by geographic area. These discrepancies could be explained by the context in which the studies were carried out. Mexican children from the state of Jalisco were in suburban areas, while children from Nuevo León were in fully urbanized areas. Likewise, it is important to mention that the geographical context of Spain is totally different from the Mexican context, where in the areas of Jalisco, there are still marked gaps in the development of urbanization. Regarding the differences in the level of PA by sex, it was found, as in other studies (Martín-Bello et al., 2019; Aznar-Ballesta and Vernetta, 2022), that boys tend to be more physically active than girls and differ from what was reported by (Arévalo, Feu, and De la Cruz Sánchez, 2020), where no significant differences were found by sex; the concordant results are due to the fact that both studies were carried out on children in school education, it is also important to mention that children during this stage tend to be more extroverted and curious, likewise during this stage of development children receive compulsory physical education subjects, which forces students to be physically active while in secondary education the level of PA tends to decrease.

Another statistically significant difference was found in the importance and usefulness of PE classes; boys gave greater importance and usefulness to PE classes than girls; these results are similar to those reported by Muñoz et al. (2019) and Aznar-Ballesta and Vernetta (2022), where significant differences were also found in the perception of the importance and usefulness of PE classes, with boys being the ones who give the highest level of importance to PE classes, these results could be explained by several reasons, first because doing PA provides physical and psychological well-being and also provides fun and entertainment, (Vidarte et al., 2011; UNESCO, 2015; American Academy of Pediatrics, 2020) which contributes to giving a sense of importance to this type of activities.

Regarding the third objective of the study, the multiple linear regression analysis considering the PA level as the dependent variable and Satisfaction/Fun, boredom in PE classes, the importance of PE classes, and the intention to practice PATL as independent variables, the results showed that Satisfaction/Fun and intention to do PATL have a predictive effect of.25% and.19% respectively on the PA level, the results proposed here are based on a strong statistical power, these results, in turn,

agree with what was reported by Zueck et al. (2020), where it was found that a group of children who received a PE program considering Satisfaction/Fun in PE classes increased their PA levels. Likewise, the results of the present study agree with those found by Muñoz et al. (2019) and Baños et al. (2019), where a strong association was found between the level of Satisfaction/Fun in PE classes and the level of PA.

CONCLUSIONS AND PRACTICAL IMPLICATIONS

The results of this study show high levels of Satisfaction/Fun and the importance of PE classes, a high intention to engage in LTPA, and low levels of boredom and PA. Statistically significant differences were found in PA levels by state and gender, with children from Jalisco having higher PA levels compared to children from Nuevo León. In the general population, a higher proportion of boys had high PA levels compared to girls. Statistically significant differences were also found in the importance and utility of PE classes by gender, with a higher proportion of boys attributing importance and utility to PE classes than girls.

Finally, the findings showed that Satisfaction/Fun in PE classes and the intention to engage in LTPA have a predictive effect on PA. Therefore, it is concluded that the study highlights two important aspects regarding physical education: firstly, during the planning and implementation of PE classes, teachers should include strategies that promote fun, enjoyment, and satisfaction among children to encourage regular PA. Secondly, it is suggested that the mandatory and exclusive PE learning unit be immediately reintegrated into the primary education curriculum to combat significant public health issues in the country, such as physical inactivity, sedentary behavior, overweight, and childhood obesity.

Within the limitations of the present study, it can be mentioned that satisfaction and enjoyment during PE classes can be influenced by more variables, such as the attitude of the teacher who provides the physical education classes, the experiences that the student has had during the classes and the type of activities that are carried out in the physical education classes, so it is suggested that more studies be carried out that incorporate a greater number of variables that can influence PA and its relationship with physical education classes.

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