

The perceptual understanding of quality Physical Education (QPE) from professional in Ecuador La percepción de la Educación Física de calidad (EFC) desde la óptica de los profesionales en Ecuador

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Abstract. UNESCO in 2005 was the first institution to establish a universal concept of what is quality physical education. However, establishing parameters to measure such quality, either taking that concept as a reference or the variants that have arisen subsequently is a complex task that has triggered multiple scientific researches. This study invited Physical Education professionals to answer a questionnaire, which was adopted from the study by Ho et al. (2021) in QPE, as a blueprint to investigate professionals' understanding of Physical Education development in Ecuador. A total of 374 (216 male and 158 female) Physical Education teachers and professionals were invited to participate in this study. The data were obtained from nine cities in Ecuador. The dimensions quality teaching in Physical Education had the highest score and the lowest scored dimension Plans for Feasibility and Accessibility of Physical Education. The overall average mean of the questionnaire was 6.05 from maximum ten. The instrument had excellent internal consistency ($\alpha = .985$). The works in QPE are slightly above average. It carries the message that the recommendation for QPE is not fully achieved.

Keywords: Quality, Physical Education, Development, Strategic improvement, Ecuador.

Resumen. La UNESCO en el año 2005 fue la primera institución que estableció un concepto universal sobre qué es la educación física de calidad. Sin embargo, establecer parámetros para medir dicha calidad, ya sea tomando como referencia ese concepto o las variantes que han surgido posteriormente es una tarea compleja que ha desencadenado en múltiples investigaciones. Este estudio invitó a los profesionales de Educación Física a responder un cuestionario adaptado del estudio de Ho et al. (2021) en EFC, como modelo para investigar la comprensión de los profesionales sobre el desarrollo de la Educación Física en Ecuador. Un total de 374 (216 hombres y 158 mujeres) profesores y profesionales de Educación Física participaron en este estudio. Los datos se obtuvieron de nueve ciudades del Ecuador. Las dimensiones Calidad de la enseñanza en Educación Física obtuvieron la puntuación más alta y la dimensión Planes de Viabilidad y Accesibilidad de la Educación Física la puntuación más baja. La media global media del cuestionario fue de 6,05 de un máximo de diez. El instrumento tuvo una excelente consistencia interna ($\alpha = .985$). Los trabajos en EFC están ligeramente por encima del promedio, sin embargo, aún no se ha logrado por completo una EFC.

Palabras clave: Calidad, Educación Física, Desarrollo, Mejora estratégica, Ecuador

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Introducción

Currently, no one doubts the importance of Physical Education (PE onwards), as Vera-Estrada et al. (2018) point out "the subject of Physical Education can be the backbone of healthy leisure alternatives that increase students' physical activity" (p. 665). PE seems to help students create long-lasting habits of physical activity and sports that can improve their overall health status (Arday et al., 2010). Multiple health benefits can be generated through PE; those that are perhaps more obvious and have been more studied are linked to strict physical benefits, such as improving physical condition, working on basic motor skills, and providing regular and healthy physical activity, to those that are more novel and emerging, such as the benefits at the level of emotional or social health (Hidalgo et al., 2018; Pellicer, 2015; de la Osa et al., 2014, WHO 2020). In general, PE is a teaching subject that affects the growth and development of children (Dragutinovic & Mitrovic, 2020).

The purpose of PE is physical-motor development, promotion of physical culture, and the contribution to the global approach to integral development, as citizens of a democratic society, fundamentally in the development of

key professional competencies and in the integral development of students from, with, and through motor skills (López-Pastor et al., 2016). This development, according to Contreras et al., (2010), is promoted in educational centers since it allows the transmission of values, attitudes, and norms of citizenship to students. Although focusing on subject knowledge, skills, and competencies that trainee teachers ought to develop may be insufficient and, at the same time, it is important to pay attention to social aspects, critical thinking. (Capel, 2008). Learning experience offered to children and young people through PE classes should be appropriate to help them acquire the psychomotor skills, cognitive understanding, and social and emotional skills they need to lead a physically active life (UNESCO, 2015), hence the importance of these learning experiences being of quality.

Concept of quality physical education (QPE onwards) was proposed by UNESCO in 2005, defining it as "the planned, progressive, and inclusive learning experience that is part of the curriculum in early childhood, primary, and secondary education" (UNESCO, 2005, p.9).

This definition already gives us a glimpse of the main bases to consider achieving quality PE: learning and progressive planning. Later, in 2015, UNESCO published a

guide for policymakers with the aim of redesigning PE in their respective countries (UNESCO, 2015). The guidelines for policy makers are built on three fundamental principles: equality, safeguarding, and meaningful participation. This initiative emphasizes how important and necessary PE is and of the latent desire to achieve quality in its practice. Many studies have focused on this issue (del Val et al., 2021; Ho et al., 2021; Ho et al., 2019; Korthagen, 2004; Lara et al., 2018; Rodríguez et al., 2021; Roux & Dasoo, 2020).

Additionally, as Ho et al. (2021) pointed out, there are many issues to consider in achieving quality PE, such as the debate on the mandatory nature of PE for all children without discrimination, an assignment inadequate time, personnel problems (lack of it or insufficient training), lack of government support or the need for official recognition of quality PE, and contribution to health context through PE.

According to UNICEF (2021), 97% of countries declared PE as a compulsory subject; however, there are persistent problems: only 79% of countries have prescribed curricula, only 71% adhere to implementation regulations and delivery, and problems with PE in primary schools in the sense of trained and qualified teachers. Insufficient qualification, inadequate preparation of primary-level teachers, and lack of confidence in teaching PE subjects have been observed in studies from different places (Lynch et al. 2017; Fletcher & Mandigo, 2012; Morgan & Bourke, 2008). Continuing with a persistent gender problem as for instance in Sweden, PE is a “boyish” subject. Although it is highly valued by pupils (boys and girls) and their parents, boys are those who attain higher grades in PE enjoy it more and are more involved in content (Quennerstedt et al. 2008). Even though PE was legitimized in various ways, in many parts of the world, PE remains under discussion (Ekberg, 2019).

Physical education in Ecuador

In Ecuador, since 2014, the new curriculum of Basic General Education (from 5 to 14 years of age) began to take shape because of a ministerial agreement 0041-14, which was approved in 2016.

As the main novelty for the PE area, the new curriculum contemplated the increase hours of class, passing these from two to five hours of class per week (MinEduc, 2021). One of the main arguments for this increase in hours is the increase in the rates of childhood and youth obesity (ENSANUT, 2014). In Ecuador, three out of ten school-aged children were overweight, and 78.9% of the population between five and ten years of age practiced less than two hours of physical activity per week. In addition, PE is generated on the health of students, providing a series of benefits, such as affective-motivational, social insertion, and cognitive or interpersonal relationships (Hortigüela, 2016; Pérez-Pueyo et al., 2020; Reynaga-Estrada, 2016).

Despite having a new curriculum that has more hours

and updated content for PE, Ecuador has two major problems regarding PE. On the one hand, a deficit in terms of PE training because there are a small number of universities that offer PE courses. Additionally, there is no standardisation of the curricular networks among the different universities, which causes the knowledge imparted to be inadequate and insufficient with low quality training for PE professionals and with heterogeneous competencies (Rodríguez Torres et al., 2017). On the other hand, weaknesses have been observed in the teaching practice of professionals in areas where the application of traditional pedagogical models persists (Villafuerte, 2019). Logically, these practices can negatively impact students' future adherence to sports practice (Moreno-Murica, 2019a; Moreno-Murcia, 2019b), which would cause them to refuse to practice sports, despite their potential contribution to sports, people's health, and emotional well-being (Hidalgo et al., 2018; López-Pastor et al., 2016; Pellicer, 2015; Reverter & Jové, 2012).

These weaknesses in the teaching practice of the professionals are probably due to the lack of trained professionals capable of assuming an increase in hours, which forced that this increase would have to be assumed by teachers who are not professionals, with the evident risk that this implies (Bulwik, 2000; González-Gil et al., 2013).

This study proposes to ask we what level of quality is perceived by professionals in the PE field of Ecuador, based on the understanding and perception of this professionals about what is QPE.

It tries to develop a deeper look into real situations and compare them with set up guidelines for QPE (UNESCO, 2015). As a quality measurement tool to examine the QPE, an adapted questionnaire entitled “Quality Physical Education Study” developed by Ho et al. (2021) was translated into Spanish for the Ecuadorian context. The questionnaire contained eight dimensions focused on the examination of different areas in QPE. Successfully implemented policies in subject PE can improve the health and well-being of youth.

Material and methods

Participants

The sample consisted of 374 (216 male and 158 female) PE teachers and professionals from different cities in Ecuador who were invited to participate in this study. All invited participants were primary or secondary school PE teachers, professionals working in the field of PE in/at universities or government-educational authorities, and school supervisors responsible for developing PE curricula. The participants were recruited by an online platform in 2020. The participation of these professionals in the questionnaire survey was voluntary and anonymous. The aim and purpose of the current study was introduced to the participants if they agreed with the purpose of the research and desired to participate. They were asked to

sign a consent form before completing the questionnaire. Only those who signed the consent form were included in the study. The questionnaire was delivered online.

The respondents' work position during the research period was as follows: 139 (37.2%) were working as "PE teachers in primary schools," 125 (33.4%) were working as "PE teachers in secondary schools," and 110 (29.4%) – the "others" group – were working as teachers, professors, lecturers, coaches at universities or in government, and at sport offices. The respondents were divided into groups according to their years of work experience. The distribution of participants among cities and years of experience are shown in Table 1.

More than half of the PE professionals were working in the capital city of Ecuador, Quito (N=200/ 53.5%). The 74 (19.8%) participants worked in Santo Domingo, 29 (7.8%) in Esmeraldas, in Ibarra worked 18 (4.8%), in Ambato 17 (4.5%), in Cuenca 15 (4.0%) and 5.6% of participants worked in the cities of Portoviejo (9) Riobamba (7) and Guayaquil (5). All participants worked in urban areas. The participants reported their years of work experiences and the number as well as percentage of participants in the certain groups of the years of work experiences are showed in Table 1. Additionally, 143 (38.2%) participants during participation in this study worked in governmental schools, 164 (43.9%) worked in the private school, and 67 schools were "others" (professional technical education, artistic education, special education, permanent education of youth and adults, rural education, bilingual intercultural education). (Table 1*)

Table 1.
The number and percentage of participants according to gender among cities, positions, and years of work experience

	Male N (%)	Female N (%)	Total N (%)
City			
Ambato	15 (6.9)	2 (1.3)	17 (4.5)
Cuenca	13 (6.0)	2 (1.3)	15 (4.0)
Esmeraldas	17 (7.9)	12 (7.6)	29 (7.8)
Guayaquil	4 (1.9)	1 (.6)	5 (1.3)
Ibarra	11 (5.1)	7 (4.4)	18 (4.8)
Portoviejo	6 (2.8)	3 (1.9)	9 (2.4)
Quito	114 (52.8)	86 (54.4)	200 (53.5)
Riobamba	6 (2.8)	1 (.6)	7 (1.9)
Santo Domingo*	30 (13.9)	44 (27.8)	74 (19.8)
Total	216 (100%)	158 (100%)	374 (100%)
Position			
Primary Teacher	48 (22.2)	91 (57.6)	139 (37.2)
Secondary Teacher	91 (42.1)	34 (21.5)	125 (33.4)
Others	77 (35.6)	33 (20.9)	110 (29.4)
Total	216 (100%)	158 (100%)	374 (100%)
Years of work experience			
1 - 5 years	69 (31.9)	70 (44.3)	139 (37.2)
6 - 10 years	40 (18.5)	26 (16.5)	66 (17.6)
11 - 15 years	44 (20.4)	22 (13.9)	66 (17.6)
16 - 20 years	63 (29.2)	40 (25.3)	103 (27.5)
Total	216 (100%)	158 (100%)	374 (100%)

Source: Likert questionnaire

Research tool

The questionnaire adopted in this research was given the title Quality Physical Education (QPE) study. The methods and procedures of item development in this questionnaire were listed and verified to be valid and reliable in

the study by Ho et al. (2021) and validated for the Ecuadorian context by del Val (2021).

The items were divided into eight dimensions: Skill Development and Bodily Awareness (SDBA), 8 items; Facilities and Norms in PE (FNPE) – 13 items; Quality Teaching of PE (QTPE) – 6 items; Plans for Feasibility and Accessibility of Physical Education (PFAPE) – 2 items, Social Norms and Cultural Practice (SNCP) – 3 items, Governmental Input for PE (GIPE) – 5 items, Cognitive Skill Development (CSD) – 5 items, and Habituated Behaviour in Physical Activities (HBPA) – 6 items. The questionnaire focused on and investigated all important areas in PE, mentioned in Quality Physical Education Guidelines for Policy Makers (2015).

However, after authors' consideration, one item was added in the dimension entitled SDBA, due to meaning of original item that explores only if PE subject is compulsory in school and it does not recognise if PE is compulsory subject in primary/secondary school or high school. A Likert scale scoring system from zero to ten was employed, with zero indicating totally not achieved and ten indicating full achievement. The original language used in the questionnaire was written in English. Additionally, translations or interpretations were available and carried out by our research partners from the different cities were targeted for our study.

These research partners were proficient in English and native speakers of the language in the country/regions that they had lived or worked. The translation was verified by at least two native speakers in the selected language in this case it was Spanish, and at the same time, they were proficient in English.

Data Analysis

The data were analysed using SPSS software, version 23. Descriptive statistics, frequencies, and Cronbach's alpha were used to explore the consistency of all dimensions and the QPE (overall) score. The Kolmogorov-Smirnov test was used to verify the normal distribution of the data.

The Mann-Whitney U test was used to explore the significant differences between the two groups, and the Kolmogorov-Smirnov test was used for comparisons between more than two groups. Additionally, effect size (ES) for statistical tests was calculated (Thomas et al. 2011); ES of or greater than .08 is reported as large, ES around .05 is reported as moderate and ES of 0.2 or less is considered as small. The association between dimensions, QPE (overall), and years of work experience was investigated using a correlation (Kendall's) analysis. The significance level was set at .05 for all statistical tests.

Results

The results of the present study explored the situation of QPE based on PE professionals' perceptions. The questionnaire survey was used to collect the data, with a Likert

scale ranging from zero (totally not achieved) to ten (fully achieved).

The results of the descriptive analysis of overall QPE and its dimensions are shown in Table 2. The dimensions are presented in the sequence from the highest score (QTPE = 6.51) to the lowest scored dimension (PFAPE = 4.83), with the last row of overall QPE (6.05). According to skewness, the data are negatively skewed, and kurtosis in most cases showed negative values as well.

The internal consistency of the instrument for measuring the QPE dimensions according to Cronbach's alpha showed excellent reliability (from the lowest $\alpha = .827$ to the highest $\alpha = .958$). The overall QPE also showed excellent consistency ($\alpha = .985$). (Table 2*)

Table 2. Statistical description of overall QPE and its dimensions among all data

	95% CI*						
	Range	Mean \pm SD	Lower	Upper	Skewness	Kurtosis	α
QTPE	0-10	6.51 \pm 1.92	6.32	6.71	-.511	.073	.925
FNPE	0-10	6.26 \pm 1.74	6.08	6.44	-.401	-.180	.932
SDBA	0-10	6.20 \pm 1.96	6.00	6.40	-.495	.033	.942
CSD	0-10	6.14 \pm 2.25	5.91	6.37	-.628	-.093	.958
HBPA	0-10	6.13 \pm 2.05	5.93	6.34	-.509	-.244	.941
SNCP	0-10	5.63 \pm 2.09	5.42	5.84	-.326	-.269	.827
GIPE	0-10	5.27 \pm 2.13	5.05	5.48	-.211	-.580	.871
PFAPE	0-10	4.83 \pm 2.66	4.56	5.10	-.180	-1.02	.887
Overall QPE	0-10	6.05 \pm 1.84	5.87	6.24	-.381	-.218	.985

Source: Likert questionnaire

Note: *95% Confidence Interval for Mean; QTPE = Quality Teaching of PE; FNPE = Facilities and Norms in PE; SDBA = Skill Development and Bodily Awareness; CSD = Cognitive Skill Development; HBPA = Habituated Behaviour in Physical Activities; SNCP = Social Norms and Cultural Practice; GIPE = Governmental Input for PE; PFAPE = Plans for Feasibility and Accessibility of Physical Education; QPE (Overall) = Overall of Quality Physical Education

Table 3 presents the mean, standard deviation, and results of statistical comparisons of QPE and its dimensions among gender, position, years of work experience, and type of school system. There was no significant difference in QPE and its dimensions between schools' systems ($p > .05$); among gender, there was a significant difference

Table 3. Statistical comparisons among gender, position, years of work experience

	SDBA M \pm SD	FNPE M \pm SD	QTPE M \pm SD	PFAPE M \pm SD	SNCP M \pm SD	GIPE M \pm SD	CSD M \pm SD	HBPA M \pm SD	QPE M \pm SD
Gender									
Male	6.30 \pm 1.9	6.29 \pm 1.7	6.66 \pm 1.9	4.51 \pm 2.7	5.51 \pm 2.1	5.09 \pm 2.2	6.25 \pm 2.3	6.16 \pm 2.1	6.07 \pm 1.8
Female	6.06 \pm 2.0	6.22 \pm 1.8	6.31 \pm 2.0	5.27 \pm 2.6	5.78 \pm 2.1	5.51 \pm 2.0	6.00 \pm 2.2	6.10 \pm 2.0	6.03 \pm 1.9
M-W. U test	15800	16637.5	15412	19900	18477.5	18955	15895.5	16493.5	16810
p-value	.221	.680	.110	.006**	.171	.067	.258	.580	.806
R	.06	.02	.08	.14	.07	.09	.06	0.03	.01
Position									
Primary	6.22 \pm 2.0	6.25 \pm 2.2	5.65 \pm 2.2	5.86 \pm 2.1	5.41 \pm 2.6	6.50 \pm 2.0	6.38 \pm 1.8	6.25 \pm 2.0	6.19 \pm 1.9
Secondary	6.56 \pm 1.7	6.43 \pm 1.6	6.96 \pm 1.6	4.59 \pm 2.7	5.70 \pm 2.1	5.28 \pm 2.2	6.52 \pm 2.1	6.49 \pm 1.8	6.30 \pm 1.7
Others [#]	5.72 \pm 2.1	5.91 \pm 1.7	6.02 \pm 2.1	4.36 \pm 2.5	5.25 \pm 2.0	4.77 \pm 2.0	5.58 \pm 2.4	5.62 \pm 2.2	5.60 \pm 1.9
K-W	9.235	6.919	12.473	11.793	7.099	13.417	11.155	9.551	9.692
p-value	.010**	.031*	.002**	.003*	.029*	.001**	.004**	.008**	.008**
η^2	.02	.01	.03	.03	.01	.03	.02	.02	.02
Years of work experience									
1 - 5 years	6.35 \pm 1.8	6.38 \pm 1.7	6.47 \pm 1.8	5.68 \pm 2.3	6.06 \pm 1.9	5.69 \pm 2.0	6.26 \pm 2.0	6.26 \pm 1.9	6.24 \pm 1.8
6 - 10 years	6.14 \pm 2.1	6.21 \pm 1.8	6.67 \pm 1.9	4.83 \pm 2.6	5.56 \pm 2.0	5.36 \pm 2.1	6.04 \pm 2.3	6.16 \pm 2.1	6.05 \pm 1.9
11 - 15 years	6.34 \pm 1.9	6.43 \pm 1.6	6.63 \pm 2.0	4.71 \pm 2.7	5.47 \pm 2.1	5.25 \pm 2.3	6.47 \pm 2.0	6.47 \pm 2.0	6.19 \pm 1.8
16 - 20 years	5.93 \pm 2.1	6.02 \pm 1.8	6.40 \pm 2.08	3.75 \pm 2.8	5.19 \pm 2.3	4.65 \pm 2.2	5.84 \pm 2.7	5.79 \pm 2.2	5.72 \pm 1.9
K-W	2.678	3.075	1.519	29.872	11.135	14.056	2.086	4.020	5.150
p-value	.444	.380	.678	.000**	.011**	.003**	.555	.259	.161
η^2	.00	.00	.00	0.08	.02	.03	.00	.01	.01

only in dimension PFAPE ($p < .01$), where females evaluated this dimension higher than males (5.27 vs 4.51). A significant difference was found between different years of work experience in three dimensions: PFAPE ($p < .01$), SNCP ($p < .05$), and GIPE ($p < .01$), with the same pattern; the highest score was given by PE professionals with less (1-5) years of work experience and the lowest score among PE professionals with at least 16 years of work experience. In the PFAPE dimension, participants with one to five years of work experience evaluated better than those with six to ten years, 11-15 years ($p < .05$), and 16 or more years ($p < 0.01$). Participants with six to ten years of work experience scored better than those with 16 or more years ($p < .01$) as well as 11 - 15 years ($p < .05$). In the SNCP dimension, a significant difference was observed between participants with one to five years of work experience and 11 - 15 years ($p < .05$) and 16 or more years ($p < .01$). In the GIPE dimension, a significant difference was observed between participants with 16 or more years of work experience and one to five years ($p < .01$) and six to ten years ($p < .05$).

Table 4 shows the results of Kendal's correlation between dimensions, overall QPE, and years of work experience. In the case of comparisons among different positions, in all dimensions, and overall QPE was evidence of significant comparison. In five dimensions (SDBA, FNPE, GIPE, CSD, and HBPA) and overall QPE, the primary and secondary school teachers evaluated items significantly higher than others ($p < .05$), and between secondary and primary school teachers did not find significant comparisons ($p > .05$). In the dimensions QTPE, PFAPE, and SNCP, the significant comparison was found out between "others" and primary school teachers ($p < .05$) and as well between primary and secondary school teachers ($p < .01$). Additionally, in all cases, the effect size had a low effect. (Table 3*) (Table 4*).

School system									
Government	6.29±2.0	6.40±1.6	6.78±1.8	4.61±2.8	5.70±2.1	5.22±2.2	6.37±2.2	6.37±2.0	6.19±1.8
Private	6.02±1.8	6.24±1.8	6.24±1.8	6.46±1.9	4.87±2.6	5.58±2.1	5.25±2.1	6.02±2.2	6.04±2.0
Other	5.89±2.2	5.99±1.9	6.08±2.2	5.20±2.5	5.59±2.1	5.40±2.2	5.95±2.4	5.85±2.3	5.85±2.0
K-W	2.812	3.101	.636	.430	2.264	5.429	1.631	.956	1.238
P-value	.620	.442	.066	.322	.806	.727	.212	.245	.539
η^2	.00	.00	.00	.00	.00	.01	.00	.00	.00

Source: Likert questionnaire

Note: SDBA = Skill Development and Bodily Awareness; FNPE = Facilities and Norms in PE; QTPE = Quality Teaching of PE; PFAPE = Plans for Feasibility and Accessibility of Physical Education; SNCP = Social Norms and Cultural Practice; GIPE = Governmental Input for PE; CSD = Cognitive Skill Development; HBPA = Habituated Behaviour in Physical Activities; QPE (Overall) = Overall of Quality Physical Education, #PE professionals work at universities, governmental officers, or coaches, * $p < .01$; ** $p < .05$

Table 4.

Correlation between QPE and its dimensions and years of work experience

	SDBA	FNPE	QTPE	PFAPE	SNCP	GIPE	CSD	HBPA	QPE
Years of work experience	-0.54	-.056	-.002	-.217	-.134	-.143	-.023	-.056	-.079
	.170	.151	.961	.000**	.001**	.000**	.555	.157	.044

Source: Likert questionnaire

Note: SDBA = Skill Development and Bodily Awareness; FNPE = Facilities and Norms in PE; QTPE = Quality Teaching of PE; PFAPE = Plans for Feasibility and Accessibility of Physical Education; SNCP = Social Norms and Cultural Practice; GIPE = Governmental Input for PE; CSD = Cognitive Skill Development; HBPA = Habituated Behaviour in Physical Activities; QPE (Overall) = Overall of Quality Physical Education; ** $p < .05$

We examined a linear regression model with gender, position, and years of work experience to predict the outcome of QPE (overall) development. The suggested model was significant, $F(3,370) = 3.133$, $p < .05$, with $Rsq = .025$. The adjusted Rsq indicated that only 2.5% of the variance in QPE could be explained by this model. Furthermore, the results indicate that position has a significant impact on QPE ($p < .05$); 22.1% could be explained by gender, 28.6% by position, and 12.5% could be explained by different years of work experience.

Discussion

The present study explored the current situation of PE based on the perceptions of 57.8% of male and 42.2% female PE professionals from Ecuador regarding the quality of physical education teaching. If the current situation of PE is in line with the expectations and guidelines for PE (UNESCO, 2015), the results would be close to the maximum possible achievable number, which is ten. A lower number indicates that the recommendation for QPE was not achieved. Based on the perceptions of PE professionals, the average mean of the overall questionnaire QPE in Ecuador was 6.05, with scores ranging from zero to ten. It is slightly above average and hard work, and significant strategies to ensure improvements are needed. To have good guidelines and recommendations is just half of the work necessary to implement it in real situations, which agrees with the findings of Dyson et al. (2018) that the practise does not always match recommendations. For example, as in the case of recommended time devoted to daily physical activity for children and adolescents, exists great justification and guidelines on how many minutes children should be active (CDC, 2021; WHO, 2021). However, there are many different reasons for why guidelines cannot be accomplished.

The reasons for this include lack of clear policy adoption, lack of motivation, poor communication between research, practice, and policy (Cooper et al., 2016), poor federal support (McMurrer, 2008), insufficient facilities,

insufficient importance for PE subjects, and non-qualified teachers. Thus, research on the real situation of the QPE is important.

The scores of the selected dimensions reflect the situation in QPE, where the maximum score was 10 points, what reflects a total achievement in matching QPE situation with UNESCO guidelines for QPE (2015). Three dimensions scored below six points; the lowest scored the dimensions Plans for Feasibility and Accessibility of Physical Education (PFAPE) (4.83 ± 2.66) a little better scored Governmental Input for PE (GIPE) (5.27 ± 2.13), and Social Norms and Cultural Practice (SNCP) (5.63 ± 2.09). The PFAPE dimension focused on issues of international and inter-city collaborations between institutes related to QPE development. Improving this dimension can be challenging but not impossible. One of the ways to ensure better collaboration between schools and institutes might be by improving communication, hiring advisors responsible for QPE development at the city, state, and international levels who will communicate with authorities. For example, some insights to this idea of improving inter-collaboration works is offering a review by Atkinson et al. (2007).

In Ecuador, there is a figure of municipal districts (each city has its own depending on the number of population) that are responsible for regulating processes, such as the allocation of jobs, promoting teacher training proposals, or managing administrative aspects inherent to their daily chores. For adults, each school has an inspector (something like "delegate of the school management") who oversees processes that are more focused on school discipline (clothing, punctuality, respect guidelines, educational policies of the school). It is essential that between municipal districts and delegates, there are continuous and open communication channels that favour school operations and that bet on the improvement of educational quality.

The second dimension with the lowest score is GIPE, which explores whether there are any efforts of the government to support research to improve QPE; if the gov-

ernmental system ensures that PE teachers are qualified, government authorities recognise PE as a human rights issue for all children and as realisation of human potential, health, and well-being (UNESCO, 2015).

The experience of the university professor shows only beliefs and not knowledge in relation to the teaching process, and they consider that the passage from belief to knowledge is a decisive factor for an awareness of what it is necessary for successful teaching (Lafuente, 2010). The lack of teacher training may be the trigger for this negative assessment because once a certain teaching experience has been achieved, training in this field goes into the background, especially in contexts such as Latin America. However, we cannot forget that "quality education it offers the hope of improving people's living conditions and it is not possible to achieve a quality education without training" (Cobos, 2014).

The more experienced teachers have been able to see how the levels of demand are gradually lowered scandalously to guarantee that a tolerable level of school failure is maintained, which in their opinion reduces the quality of the educational process (García-Moriyon, 2017).

The last dimension that achieved less than six points is SNCP, the dimension reflecting the situation related to equal learning opportunities in PE in the school's PE program and equal opportunities for both genders. It is essential to end gender separation in PE classes, work on coeducation, and promote equal respect and collaboration. Sports as content in PE classes should be the means to create and strengthen social relationships among students and should not be considered as a delimiter of physical capabilities (Lleixa et al., 2020).

Conclusions

This study reflected the situation of QPE based on the perceptions of PE professionals in nine Ecuador's cities. The overall QPE indicates that the QPE situation in Ecuador is in the middle of success, and there is the need to work hard to improve the quality of PE. This understanding is reflected in the overall average mean score of the QPE questionnaire that a scale of six is obtained out of a maximum score of ten. The focus turns to the need in having substantial works on issues such as international and inter-city collaborations, governmental input, social norms, and cultural practices. The understanding of these needs are reflected from the low score in the dimensions of "Social Norms and Cultural Practice, Governmental Input for PE, and Plans for Feasibility and Accessibility of Physical Education".

The average mean in these dimensions was lower than six (5.63 ± 2.09 ; 5.27 ± 2.13 and 4.83 ± 2.66 , respectively). Nevertheless, the improvement of these dimensions depends on the proficiency and abilities of the professionals. To achieve such quality change in the short run, there is the suggestion to create the position of PE advisor by local government to support and coordinate the change of PE

development in school. The person should be an expert in the subject of PE and have profound knowledge in PE curriculum and guidelines for QPE based on the UNESCO (2015). The advisor shares the duty to travel between schools and give advice as well to ensure the collaborative development between professionals. The success of quality improvement in PE relies on the long-term investment of suitable professionals who has the good understanding of QPE development. For that there will have the possibility of real improvement in achieving the best benefits for students in Ecuador. The study successfully met its aim and purpose. The contribution of this study is recognized in the better understanding of the QPE situation in Ecuador and in the observation of the gaps between reality of QPE and international guidelines for QPE by UNESCO. The limitations of this study lie in the number of participants and the fact that most participants were just from two cities. Another limitation comes from general limitations of any questionnaire survey. Future works and studies should conduct qualitative research to exactly distinguish problems in QPE.

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