



## *Panel Session 2*

*17<sup>th</sup> December 2021 (16:45 – 17:45)*

# **Quality Physical Education (QPE) – The Research, Findings and Inspiration for the QPE Study from 2010 to Present**

*Walter Ho*

*University of Macau*



# Quality Physical Education – Background of Study

*Walter Ho*



## *UNESCO International Charter of Physical Education and Sport (1978) (2015 Revised Version)*

- **Article 1 to 3** – Human Right, benefits of PE and PA & policies and strategic priority
- **Article 4 to 5** – inspire lifelong participation & sustainable for future development
- **Article 6 to 7** – Research and personnel development
- **Article 8 to 9** – Safety in space, facilities and equipment & risk management
- **Article 10** – Ethical concerns and values in PE
- **Article 11** – Role of PE and Sports in peace
- **Article 12** – International cooperation



**Executive Board**  
Hundred and ninety-sixth session

**196 EX/9**

PARIS, 18 March 2015  
Original: English

[Item 9 of the provisional agenda](#)

REPORT ON THE PROGRESS OF THE REVISION OF THE  
INTERNATIONAL CHARTER OF PHYSICAL EDUCATION AND SPORT



## *Developmental Efforts from UNESCO after the 1978 Charter*

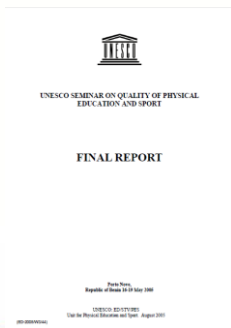
**2005** - Report on Quality Physical Education (2005).

**2013** - 5<sup>th</sup> International Conference of Ministers and Senior Officials Responsible for Physical Education and Sport (MINEPS V)

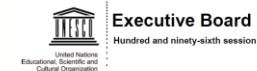
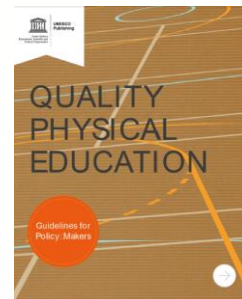
**2013** - Declaration of Berlin (2013)

**2015** - Quality Physical Education – Guidelines for Policy Makers

**2015** - International Charter of Physical Education and Sports (Revision)



The Ministers meeting at the 5th International Conference of Ministers and Senior Officials Responsible for Physical Education and Sport (MINEPS V), held in Berlin (28-30 May 2013),



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REPORT ON THE PROGRESS OF THE REVISION OF THE  
INTERNATIONAL CHARTER OF PHYSICAL EDUCATION AND SPORT

## *Efforts from National Association for Sport and PE (NASPE) and Center for Disease Control and Prevention (CDC)*

**2004** - NASPE National Standard for Physical Education

**2006** - Masurier and Corbin and the ten top reasons to support the implementation of the NASPE standard

**2006** - Centers for Disease Control and Prevention (CDC) and the Physical Education Curriculum Analysis Tool (PECAT)

**2010** - CDC Strategies to Improve the Quality of Physical Education, ...

### Top 10 Reasons for Quality Physical Education

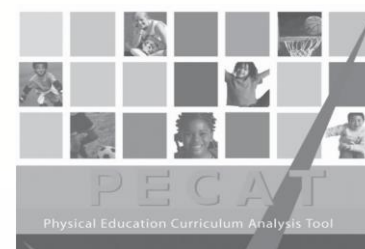
GUY LE MASURIER

CHARLES B. CORBIN

*When they ask "why," this is what you tell them.*



When the clock struck midnight on December 31, 2000, we moved into the 21st century. Noted historian Roberta Park (1989) has suggested that



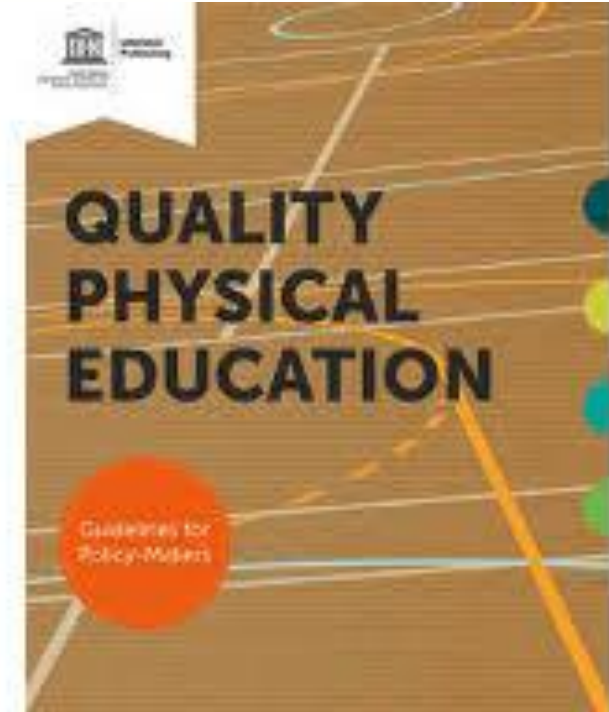
Strategies to Improve the  
Quality of Physical Education



## *Quality Physical Education – The Policy Guidelines from UNESCO (2015)*

Quality Physical Education (QPE) is the  
planned,  
progressive,  
inclusive learning  
experience  
that forms part of the curriculum in  
early years,  
primary and  
secondary education.

Sources: adopted from UNESCO (2015). *Quality physical education (QPE): Guidelines for policy-makers*. p.9.







## *The Difficulties in having Quality Physical Education (QPE)*

- In Singapore, the desire to improve the quality development of physical education was limited in the identification of solutions to **staffing issues**, the inadequate duration for physical education lessons and class size (McNeill et al., 2010).
- In China, quality improving approaches in physical education became a dream when it was common to have 50 to 60 students in a single class, and 80 students was the norm (Wang & Yao, 2004). **The lack of adequate space** and **equipment** in physical education made quality improvements difficult (Yang, Liu & Ji, 2006).
- Sarwar (2010) discussed the physical education **development in the industrial city of Gujranwala in Pakistan**, and the major problems regarding physical education development comprised the **lack of funds, space, and facilities** and the **lack of interest** of staff, students and parents.



- De D'Amico, Ramos and Guerrero (2014) discussed the problem of physical education development in **Venezuela** as a result of the failure to establish long-term participation of physical activity and structured recreational activities (p. 547). This problem escalated in conditions in which there was a **lack of qualified physical education teachers** to work with children and youth in school (De D'Amico, Ramos & Guerrero, 2014).
- A similar situation occurred in **Mexico** where “**many schools did not have a physical education teacher** in class” (Taylor, Ulloa & Villalobos, 2014, p. 315).
- In some cases, it was a result of **principals who did not believe in the physical education** program or teachers who had negative perceptions regarding physical education and did not believe in contributing to it (Holzweg, et al. 2013).





## *The Reality for PE in schools*

- Sollerhed (1999) argued that “even with her strong historical traditions in physical education, **time was reduced** from three hours to one hour per week during the compulsory years of school” (p. 167) in Sweden.
- The Speednet Survey (1999) in England recorded the loss of a half million hours of physical education in primary schools in the academic year 1998–1999 to **make way for literacy and numeracy work**. One-third of England’s primary schools experienced this reduction in time for physical education. The decreasing amount of curriculum time and the instructional methods and activities in physical education classes have raised concerns.



## Allocation of Physical Education Curriculum Time in Regions (Mean Minutes per Week)

Latin America	Min per Week	Europe	Min per Week	Asia	Min per Week	Africa	Min per Week
Brazil	110	Luxembourg	142	China	105	Ethiopia	225
Chile	135	Andorra	165	Kazakhstan	115	South Africa	58
Colombia	120	Poland	156	Hong Kong	90	Gabon	150
Cuba	183	England	120	India	60	Guinea	100
Mexico	75	France	220	Japan	125	Lesotho	110
Venezuela	90	Germany	135	South Korea	120	Libya	125

Source: UNESCO-NWCPEA: World-wide Survey of School Physical Education (2013).



## We see the problems of ...

- Staffing issues
- Inadequate duration for physical education lessons
- Lack of adequate space
- Lack of funds and facilities
- Lack of interests in physical education
- Lack of qualified physical education teachers ...



- **The desire to have quality physical education has received the interest and support from stakeholders; however, its implementation is difficult and remains a challenge.**
- **This observation emerged the curiosity among stakeholders for investigating the different antecedents of success and strategies for developing /improvement of QPE**



## *The Research Work for Quality Physical Education 2010 to present*

- In 2009, the representatives from the four international associations namely ISCPES, FIEP, AIFAP and IAPESGW met in Brisbane and had the discussion of the issues in Quality Physical Education (QPE) development.
- There was the suggestion to conduct the QPE study in 2010.
- The project was then assisted by the team from Macau with different phases to learn the works of QPE development.







## ***QPE Research Tool Development (2010 to 2018)***

- **2010 to 2012** – Collection of statements that are relevant in QPE study
- **2013 to 2014** – Scanning works; of the statements into items that are relevant to QPE study
- **2014 to 2015** - The development of a questionnaire survey with a title of ‘Professional Perceptions Toward Quality Physical Education (PPTQPE)’ to identified items with good fit loading for research in QPE
- **2016 to 2018** – Research Tool in QPE and analytical works

*Identification of 48 items in 8 dimensions which are good fit to be adopted for*

*QPE Research*

## ***QPE – The Global Research (2019 to Present)***

- 2019 to 2021 – The 48 items in 8 dimensions serve as the materials to develop the questionnaire survey ‘Global Index of QPE’ to investigate the strategies of success in QPE and barriers that limit its advocacy

**First Phase (2010 to 2012) -**

Global Voice in Quality Physical Education

**Second Phase (2013 to 2015) –**

Professional Perceptions Toward Quality Physical Education (PPTQPE) &  
Research Tool Development

**Third Phase (2019 to 2021 & Beyond) –**

Global Index of Quality Physical Education and Strategies for QPE Development



## *The QPE Sharing (17<sup>th</sup> December 2021)*

- The developmental process of QPE Research from 2010 to 2021 and beyond (**Walter Ho**)
- The research tool development for QPE study and methodology for QPE research (**Dilsad Ahmed**)
- The GIQPE Study – the overall work and performances of QPE in continents and cities (**Klaudia Kukurová**)
- Cases Report on QPE development (**Cherry Liu, Jessie Hu & Jennie Xie**)
- QPE study – the issues, scenario and future strategies in investigation (**Walter Ho**)



# Research tool development for QPE study and methodology for QPE research

*Dilsad Ahmed*



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2,299

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CrossRef citations  
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EDUCATIONAL ASSESSMENT & EVALUATION

# Development and validation of an instrument to assess quality physical education

Walter King Yan Ho, Md. Dilsad Ahmed & **Klaudia Kukurova**   | Sammy King Fai HUI (Reviewing editor)

Article: 1864082 | Received 14 May 2020, Accepted 01 Dec 2020, Published online: 07 Jan 2021

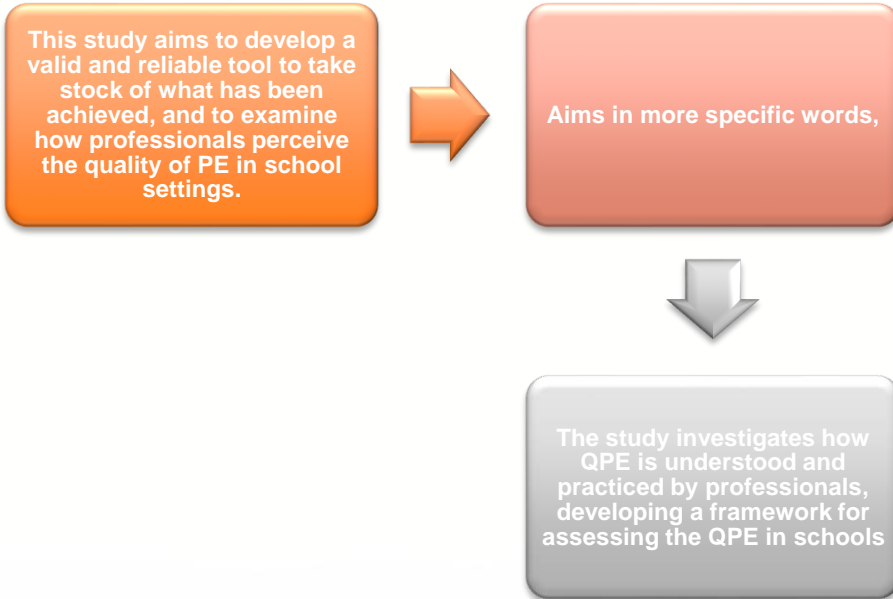
Download citation  <https://doi.org/10.1080/2331186X.2020.1864082>

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## AIMS





21<sup>st</sup> Biennial Conference of ISCPES - 2021

**How to assess QPE in Asian schools based on the professional's perception and what are the factors that underprint professionals' perception of QPE?**



Country (City)	Primary School PE Teacher			Secondary School PE Teacher			University PE Teachers			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
<b>Macau SAR</b>	34.61	10.95	18	47.88	9.50	18	45.91	7.79	24	43.11	10.79	<b>60</b>
<b>Taipei</b>	43.93	12.27	16	47.07	6.79	66	48.41	7.88	17	46.79	8.10	<b>99</b>
<b>Kobe</b>	35.00	1.29	7	39.04	6.67	22	39.34	9.32	58	38.91	8.36	<b>87</b>
<b>Tel Aviv</b>	41.00	3.91	4	47.00	3.60	3	49.70	2.83	10	47.17	4.74	<b>17</b>
<b>Seoul</b>	42.33	6.69	15	41.85	8.25	20	43.87	8.49	39	43.01	8.04	<b>74</b>
<b>Changsha</b>	38.14	8.78	7	38.00	10.95	25	36.37	9.43	58	36.96	9.75	<b>90</b>
<b>Chengdu</b>	43.08	8.77	24	39.76	11.44	21	35.72	10.09	40	38.80	10.46	<b>85</b>
<b>Teheran</b>	44.45	9.88	20	41.85	10.42	20	41.92	9.16	40	42.53	9.61	<b>80</b>
<b>Kuala Lumpur</b>	39.41	11.15	17	45.1	5.97	20	44.21	7.50	46	43.44	8.23	<b>83</b>
<b>Amravati</b>	45.05	7.08	20	39.6	8.66	26	39.59	14.10	37	40.92	11.28	<b>83</b>
<b>Mawari</b>	37.14	8.02	7	45.2	9.51	8	42.57	10.34	26	42.17	9.94	<b>41</b>
<b>Total</b>	41.23	9.67	155	43.0	9.15	249	41.10	10.15	395	41.74	9.78	<b>799</b>



## Why Professionals' working at *Primary, Secondary and University* setting were recruited in this study?

- It was considered that without knowing the **concerns of the professionals** dialectically, it would be difficult to identify a proper focus for developing quality PE in schools.
- They are **educated**, they have **earned qualifications in relevant fields**, they have an understanding of the profession,
- they are the ones **who implement PE policies** at the ground level.
- Understanding their perspective and taking their inputs could lead us in the **right direction**.
- This study could help **to develop a comprehensive and productive programme** to facilitating the involvement of students in structured PE programmes in Asia.



**Table 2. Gender-based descriptive information of participants with respect to their professional status and years of work experience**

	Professional Status	Years of work experience		Total
		M	SD	
Male	Primary School PE Teacher	8.60	6.4	105
	Secondary School PE Teacher	9.97	7.1	145
	Other PE Professionals	9.01	7.6	250
	<b>Total</b>	<b>9.20</b>	<b>7.2</b>	<b>500</b>
Female	Primary School PE Teacher	6.86	4.9	50
	Secondary School PE Teacher	9.96	7.3	104
	Other PE Professionals	9.19	7.5	145
	<b>Total</b>	<b>9.07</b>	<b>7.1</b>	<b>299</b>





- The four international sport associations assisted in the invitation.
- Professionals were recruited during local seminars, meetings, and training activities.
- The participation of these professionals at the seminar and completion of the questionnaire were voluntary as well.



Item  
generation  
and content  
validity

## Professional Perceptions Toward Quality PE (PPTQPE)

### Reviewed research for designing Methodology

- Song and Chen (2012),
- Arar and Rigbi (2009),
- Subramaniam and Silverman (2007),
- Guan et al. (2005), and
- Keating and Silverman (2004).

Used **references** drawn from the guidelines on QPE developed by

- National Association for Sport and PE in 2004,
- 2005 UNESCO report on QPE,
- ICSSPE 2010 International Position Statement on PE, and
- ICSP's preliminary work to develop international benchmarks for PE systems (International Council of Sport Science and Physical Education [ICSSPE], 2010).



The **content validity** of the professional perceptions of QPE in schools (QPES) were evaluated to determine whether

- all important aspects were covered,
- identified, and
- items that were not desirable in specific construct domains were excluded (Straub et al., 2004).

The study adopted the **two-stage content-validity process** developed by

**Lynn (1986),**

Developmental and Judgement stages.



## *Developmental Stage*

The items comprised **descriptive statements**; thus, the authors extensively reviewed the items in the **literature** and subsequently related them to the context of their own country.

This process resulted in the initial dimensions proposed, that is,

- the status of PE,
- PE curriculum in schools,
- PE teachers and their qualifications,
- infrastructure required to conduct PE,
- teaching PE,
- benefits of PE, and
- current challenges to PE.

- The first stage focused on defining the professional perceptions regarding QPE, **generating content domains** for each component, and **developing an item pool** for each domain.
- Two methods were employed to generate **content domains and relevant items**.
- The first method required **pooling relevant items from previous studies** and subsequently generating new items.
- The second method was initiated by **gathering items and domains** from the target respondents.



The authors identified **105 items** regarding professional perceptions of QPE that were examined in terms of their clarity and readability (Ho et al., 2017).

These 105 items were **agreed upon** and the items recommended by the **authors represented the content validity**.

- Items from the literature reviews were subsequently generated for the assessment of each content domain, that is,
  - *skill development and bodily awareness (SDBA)*,
  - *facilities and norms in PE (FNPE)*,
  - *quality teaching of PE (QTPE)*,
  - *plans for feasibility and accessibility of PE (PFAPPE)*,
  - *social norms and cultural practice (SNCP)*,
  - *governmental input for PE (GIPE)*,
  - *cognitive skills development (CSD)*, and
  - *habituated behaviour in physical activities (HBPA)*.



As a secondary process, six volunteer students (who were **familiar with the concept of QPE in school settings**) were invited

- to determine **whether the items generated by the authors in each factor were sufficiently clear and relevant to describe professional perceptions of QPES,**
- whether **important aspects or domains had been omitted,** and whether **a statement needed to be excluded from the existing items.**

The six students included

- one PhD student,
- two final-year master's students,
- two sophomores, and one freshman.
- Three of the students studied PE, and the other three were in the social science field.

Based on their recommendations, four statements were revised. Thus, **65 items were finalised** (Ho et al., 2017; Song & Chen, 2012).





## *Judgement Stage*

- The judgement stage focused on **item validity** and **domain validity**.
- Three external experts (PE professors other than the authors) from other universities and the six previously mentioned student participants were invited to join in this process.
- The **three** professionals were invited to determine the **face validity** and to indicate whether the **questionnaire provided an appropriate description** regarding the study purpose and content area.

The team also evaluated the questionnaire in terms of

- feasibility,
- readability,
- consistency of style,
- formatting,
- clarity of the language used, and
- domain validity (Ho et al., 2017).

The adoption of these procedures was introduced by Haladyna (1999), Trochim (2001), and DeVon et al. (2007).



A quantitative sorting process was conducted to determine whether the statements fit the instrument in the assessment of professional perceptions of QPES and whether the statements were consistent with the eight corresponding dimensions.

The participants were asked to indicate whether the statement should be included using a 3-point scale with 1 = *No*, 2 = *Maybe*, and 3 = *Yes* and how confident they were regarding the inclusion of an item (i.e., 1 = *Not sure*, 2 = *Sure*, and 3 = *sure*).

A **minimum of two out of three experts** agreed that a statement belonged to the instrument (where 3 = *yes*) and the mean confidence score should be greater than 2.0 (where 2 > *sure*) (Ho et al., 2017).

The experts were also asked to associate each of the **65 items with one of the 8 dimensions and indicate how confident** they were that their selection was related to the specific content domain.



- The rating scales and criteria for domain validity were the same as the item validity criteria. As a result, **two items were revised**, and **one item was moved to a different content domain**.
- Thus, **65 items were retained in the instrument and classified into the 8 original dimensions**.
- The **six** volunteer students were subsequently invited to verify the item and domain validity based on the experts' classification. The same procedures and regulations were adopted.
- As a result, **no modifications** were required for the items.

## *Response Format*

This scale **included three negative and three** positive agreement responses with identical scores (i.e., strongly disagree = 1, mostly disagree = 2, slightly disagree = 3, moderately agree = 4, mostly agree = 5, and strongly agree = 6).

The use of positively packed rating scales are known to generate discrimination in the context of social desirability (DeVellis, 2003; Brown, 2004; Lam & Klockars, 1982; Song & Chen, 2012; Ho et al., 2017).

## Data Analysis

- Both statistical and empirical techniques were used to select the items.
- The 65 items were subjected to descriptive and frequency analyses.
- Using SPSS 20, the research team examined the data quality in terms of frequency distribution and item discrimination.
- An exploratory factor analysis (EFA) with maximum likelihood extraction and direct oblimin rotation was adopted to investigate the structure of quality PE and define a set of factors that accounted for the common variance among the items.
- These items were subsequently evaluated by their loading on each factor.
- The second phase of the analysis was conducted to confirm the different subscales and the structure of the 65 items.
- A reliability analysis (Cronbach's alpha) was performed to determine the contribution of each item to its respective factor.
- When items were deemed to be statistically equivalent, the authors were asked to determine which items to retain and place under the appropriate categories to reflect their close conceptual meaning.

Table 1 Factor loadings based on a pattern matrix and communalities ( $h^2$ ) of the 48 items retained following an EFA

Sl No	Items description	Loading	M	SD	h
<b>FACTOR 1: Skill Development and Bodily Awareness (SDBA)</b>					
Item 51	Enhance their physical skills.	.806	4.66	1.10	0.70
Item 55	Enhance students' knowledge of sport related terms.	.796	4.42	1.19	0.70
Item 54	Provide students with chances in taking part in different physical activities.	.782	4.58	1.16	0.72
Item 53	Enhance students' knowledge in different activities.	.715	4.48	1.17	0.70
Item 58	Give students chances to learn and interact with classmates	.668	4.66	1.12	0.54
Item 57	Teach students how important activity is to the process of growth.	.596	4.54	1.16	0.63
Item 50	Help students to understand how their bodies work.	.578	4.38	1.14	0.63
Item 45	Help students to develop a habit in attending sport activities after school and to use their spare time in sport wisely.	.538	4.47	1.20	0.64
<b>FACTOR 2: Facilities and Norms in Physical Education (FNPE)</b>					
Item 6	School should have safe and suitable environment for physical education lesson.	.806	5.59	0.87	0.64
Item 4	School should have safe and suitable equipment's for physical education lesson.	.802	5.67	0.77	0.62
Item 5	School should have safe and suitable facilities for physical education lesson.	.786	5.68	0.75	0.59
Item 12	Students should be given opportunities for active learning in physical education lesson.	.780	5.46	0.87	0.63
Item 10	Positive sport related attitudes and values should form a major focus in learning.	.752	5.37	0.91	0.61
Item 9	Health knowledge should be regarded as one of the major areas of learning.	.738	5.41	0.90	0.56
Item 8	Different types of physical activities and associated knowledge should form the content through which young people learn.	.715	5.26	1.02	0.56
Item 11	The teaching and learning of physical education should be fun and enjoyable.	.712	5.4	0.97	0.50
Item 3	Physical education should be a compulsory subject in school for all children.	.700	5.56	0.90	0.51
Item 13	Extension physical activity opportunities after-school or extra-curricular / co-curricular activities are essential components in helping students to extend their learning experiences in sport and physical activities.	.677	5.26	0.98	0.49
Item 7	Teacher should be qualified to teach physical education.	.675	5.4	1.00	0.48
Item 2	Physical Education should be accessible to all children, whatever their ability/disability, sex, age, cultural, race/ethnicity, religious, social or economic background.	.667	5.49	0.87	0.46
Item 1	Physical Education is the most effective means of equipping children with the skills, attitudes, values, knowledge and understanding for lifelong participation in physical activity and sport.	.544	5.22	1.06	0.34



FACTOR 3: Quality Teaching of Physical Education (QTPE)					
Item 26	Learn and develop basic skills of different physical and sport activities.	-.680	4.68	1.15	0.67
Item 24	Demonstrate the basic understanding of the importance of physical activities and health.	-.674	4.42	1.26	0.68
Item 25	Communicate ideas, feelings effectively with others.	-.671	4.34	1.21	0.65
Item 22	Basic motor skills within the context of appropriate physical activities of low organization.	-.662	4.39	1.25	0.66
Item 28	Demonstrate basic skills in decision making, communication, etc..	-.631	4.37	1.21	0.71
Item 27	At middle class level, developing appropriate health and fitness understanding that includes setting and achieving personal goals for healthy living.	-.631	4.53	1.17	.720
FACTOR 4: Plans for Feasibility and Accessibility of Physical Education (PFAPE)					
Item 60	There are frequent international collaborative plans between institutes in preparing QPES.	.899	3.64	1.41	0.89
Item 59	There are frequent inter-states collaborative plans between institutes in preparing QPES.	.728	3.8	1.39	0.72
FACTOR 5: Social Norms and Cultural Practice (SNCP)					
Item 64	Religious culture is an issue in contributing the development of unequal learning opportunity in our country.	.860	3.12	1.65	0.76
Item 63	Gender is an issue in contributing the development of unequal learning opportunities in our country.	.808	3.47	1.58	0.64
Item 65	Economy is an issue in contributing the development of unequal learning opportunity in our country.	.669	3.61	1.68	0.51





FACTOR 6: Governmental Input for Physical Education (GIPE)					
Item 19	Support research to improve the effectiveness and quality of physical education.	.850	4.15	1.32	0.72
Item 21	Recognize the distinctive role of PE as part of a balanced education system for the realization of human potential, healthy, health and well-being of all citizens.	.795	4.23	1.29	0.68
Item 20	Work with international financial institutions to ensure physical education is included as part of their aid programs in education.	.740	3.82	1.43	0.66
Item 17	Recognize that good quality physical education depends on well-qualified educators and thus priority is provided for training of qualified personnel even when other resources are in short of supply.	.678	4.28	1.3	0.49
Item 14	Implement policies for physical education as human right issue for all children.	.523	4.2	1.33	0.38
FACTOR 7: Cognitive Skill Development (CSD)					
Item 39	Help students to develop their critical thinking skills.	-.804	4.19	1.25	0.77
Item 40	Enhance students' ability in problem solving.	-.756	4.29	1.21	0.75
Item 42	Raise students' innovative thinking.	-.689	4.17	1.27	0.75
Item 44	Raise students' independent thoughts.	-.580	4.36	1.17	0.64
Item 38	Help students to develop socially acceptable moral thinking and conduct.	-.561	4.48	1.16	0.65
FACTOR 8: Habituated Behavior in Physical Activities (HBPA)					
Item 35	Demonstrate suitable decisions on actions for maintaining healthy living.	-.740	4.53	1.19	0.80
Item 34	Demonstrate a habit of regular exercises.	-.709	4.54	1.23	0.79
Item 36	Understand the relationship between physical and sport activities and personal and social development.	-.612	4.49	1.2	0.73
Item 37	Take up suitable responsibilities to serve sports clubs or other related activities in school or community.	-.595	4.41	1.24	0.65
Item 33	Develop advanced proficiency in different physical and sport activities.	-.511	4.59	1.18	0.65
Item 32	Develop necessary skills of participation in and out-of-school programs available within the community and which have potential for life long involvement and participation	-.507	4.52	1.20	0.60



Scree Plot

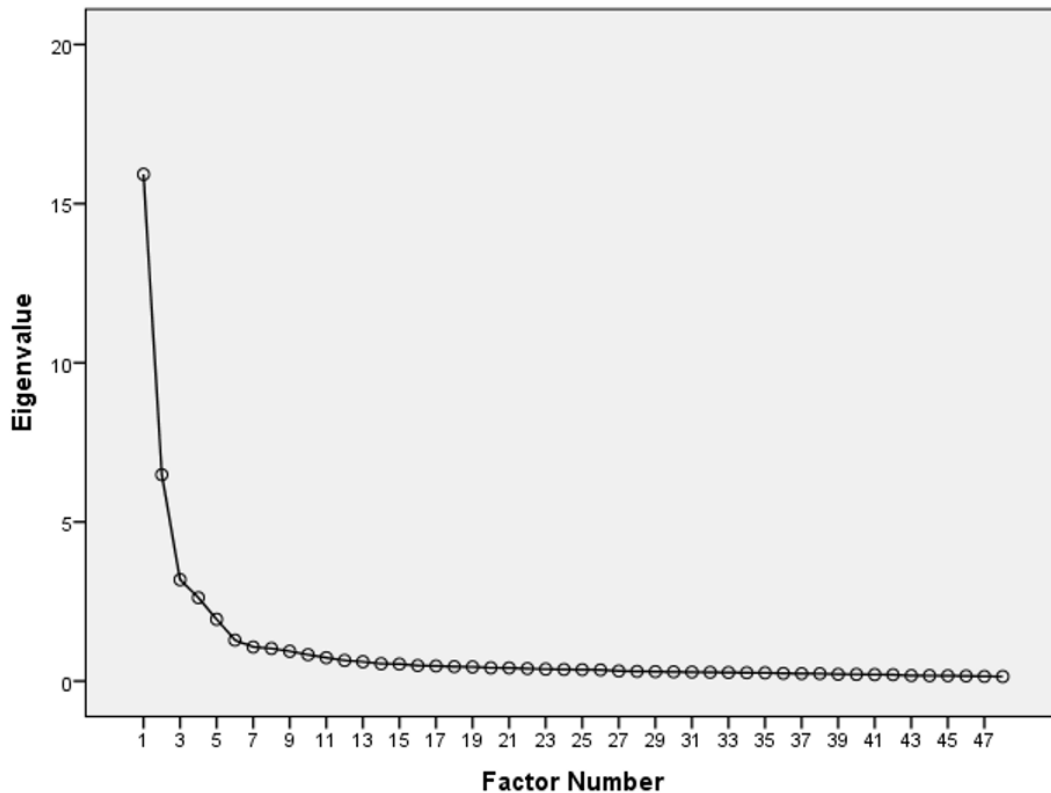




Table 2 Inter-factor correlation, Cronbach's alpha and descriptive statistics for QPE

Factor	1	2	3	4	5	6	7	8	Alpha $\alpha$	Mean $\pm$ SD	No of Items
1- SDBA	1.000	.248*	-.393	.375*	.053	.386*	-.671*	-.403*	.935	36.23 $\pm$ 7.70	8
2- FNPE		1.000	-.160*	.102*	-.063	.151*	-.159*	-.174*	.932	70.83 $\pm$ 8.89	13
3- QTPE			1.000	-.146	-.026	-.343*	.318*	.541*	.923	26.75 $\pm$ 6.18	6
4- PFAPE				1.000	.164*	.452*	-.419*	-.274*	.884	7.44 $\pm$ 2.65	2
5- SNCP					1.000	.187*	-.145*	-.045	.825	10.21 $\pm$ 4.23	3
6- GIPE						1.000	-.420*	-.262*	.859	20.70 $\pm$ 5.35	5
7- CSD							1.000	.416*	.920	21.51 $\pm$ 5.29	5
8- HBPA								1.000	.933	27.10 $\pm$ 6.29	6
Extraction Method: Maximum Likelihood.											48
Rotation Method: Oblimin with Kaiser Normalization.											



Table 3 Gender-based descriptive and professional status information of participants

Country	Gender		Status			Total
	Male	Female	Master Final Students	School Teacher	University Teachers	
India	174	208	82	89	211	382
Macau	122	73	98	54	43	195
<b>Total</b>	<b>296</b>	<b>281</b>	<b>180</b>	<b>143</b>	<b>254</b>	<b>577</b>



Table 4 Model fit indexes for the data collected using QPES

Model <sub>H</sub>	
N	577
$\chi^2$	3128.297
CMIN	3128.297
df	1052
CMIN/DF	2.974
CFI	.903
NFI	.861
TLI	.896
PCFI	.842
RMSEA	.058

**Legend:** Model H =the hypothesized model. N=sample size. CMIN=minimum discrepancy. DF=degrees of freedom. CFI=comparative fit index. NFI=normed fit index. RMSEA=root mean square error of approximation.



Table 5 Test-retest correlation of the samples from India and Macau

Factors	Extracted Sub-factors	Test-Retest Reliability (India)		Test-Retest Reliability (Macau)	
		Reliability	Mean $\pm$ SD	Reliability	Mean $\pm$ SD
No.		Reliability	Mean $\pm$ SD	Reliability	Mean $\pm$ SD
Factor 1	Skill Development and Bodily Awareness (SDBA)	$\alpha = .807$	$89.49 \pm 4.09$	$\alpha = .864$	$88.66 \pm 5.01$
Factor 2	Facilities and Norms in Physical Education (FNPE)	$\alpha = .818$	$130.45 \pm 11.41$	$\alpha = .851$	$123.05 \pm 13.14$
Factor 3	Quality Teaching of Physical Education (QTPE)	$\alpha = .806$	$60.67 \pm 6.55$	$\alpha = .865$	$60.02 \pm 6.49$
Factor 4	Plans for Feasibility and Accessibility of Physical Education (PFAPE)	$\alpha = .808$	$18.41 \pm 3.21$	$\alpha = .786$	$18.83 \pm 2.85$
Factor 5	Social Norms and Cultural Practice (SNCP)	$\alpha = .796$	$30.28 \pm 4.10$	$\alpha = .837$	$31.02 \pm 3.26$
Factor 6	Governmental Input for Physical Education (GIPE)	$\alpha = .900$	$49.52 \pm 7.67$	$\alpha = .846$	$52.41 \pm 6.27$
Factor 7	Cognitive Skill Development (CSD)	$\alpha = .812$	$47.00 \pm 6.49$	$\alpha = .799$	$49.97 \pm 4.39$
Factor 8	Habituated Behavior in Physical Activities (HBPA)	$\alpha = .832$	$58.05 \pm 7.61$	$\alpha = .932$	$60.25 \pm 6.79$





# The GIQPE Study – the overall work and performances of QPE in continents and cities

*Klaudia Kukurová*





## Demographical Information

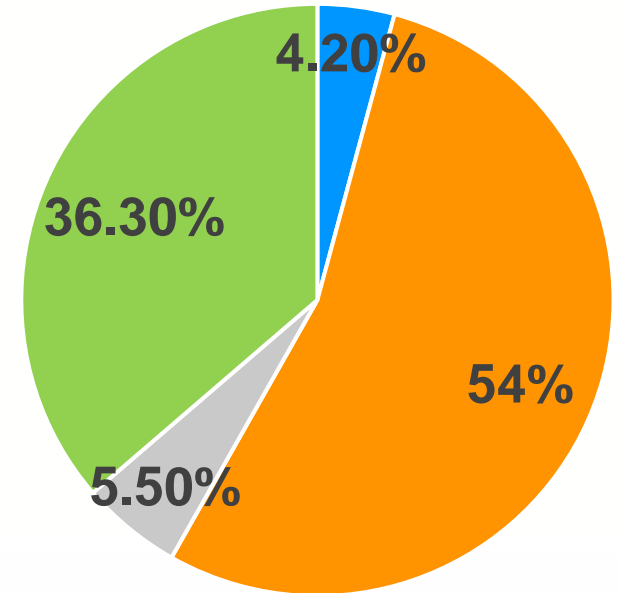
- Gender
- Work position (primary school, secondary school and others)
- Years of work experience
- School system
- Economy income country



## Participants in GIQPE study

	City	Male	Female	Total
<b>Africa</b>	3	135	114	250
<b>Asia</b>	43	1679	1476	3196
<b>Europa</b>	11	180	147	327
<b>Latin America</b>	31	1256	700	2146
<b>Total</b>	88	3250	2437	5919

■ Africa ■ Asia ■ Europa ■ Latin America





## ASIA

Continent	Frequency	Percent	Valid Percent
Asia	84	2.6	2.6
Valid Macao	83	2.6	2.6
Beijing	92	2.9	2.9
Fuzhou	68	2.1	2.1
Dongguan	84	2.6	2.6
Weifang	75	2.3	2.3
Zaozhuang	95	3.0	3.0
Chengdu	152	4.8	4.8
Tianjin	84	2.6	2.6
Daqing	93	2.9	2.9
Changsha	43	1.3	1.3
Su zhou	81	2.5	2.5
Chamdo	79	2.5	2.5
Taipei	112	3.5	3.5
Tokyo	109	3.4	3.4
Hiroshima	80	2.5	2.5
Ho Chi Minh city	85	2.7	2.7
Butuan	100	3.1	3.1
Cagayan	87	2.7	2.7
Davao	100	3.1	3.1
Iligan	97	3.0	3.0
Marawi	89	2.8	2.8
Pagadian			

Continent	Frequency	Percent	Valid Percent
Bangkok	87	2.7	2.7
Soeul	80	2.5	2.5
Hong Kong	52	1.6	1.6
Shiraz	87	2.7	2.7
Rasht	87	2.7	2.7
Mashad	94	2.9	2.9
Tehran	87	2.7	2.7
Babylon	80	2.5	2.5
Baghdad	80	2.5	2.5
Basra	80	2.5	2.5
Nasiriyah	80	2.5	2.5
Budgam	5	.2	.2
Ganderbal	21	.7	.7
Kupwara	4	.1	.1
Srinagar	30	.9	.9
Langfang	69	2.2	2.2
Johor	20	.6	.6
Perak	20	.6	.6
Sabah	57	1.8	1.8
Selangor	50	1.6	1.6
Oman	54	1.7	1.7
Total	3196	100.0	100.0



**AFRICA** →

Continent			Frequency	Percent	Valid Percent
Africa	Valid	Abuja	90	36.0	36.0
		Toamasina	80	32.0	32.0
		Antananarivo	80	32.0	32.0
		Total	250	100.0	100.0

Continent			Frequency	Percent	Valid Percent
Europa	Valid	Bratislava	54	16.5	16.5
		→ Greece	22	6.7	6.7
		→ Prague	71	21.7	21.7
		→ Usti nad Labem	19	5.8	5.8
		→ Brno	9	2.8	2.8
		→ Northland Ireland	17	5.2	5.2
		→ Brasov	17	5.2	5.2
		→ Bacau	10	3.1	3.1
		→ Cluj-Napoca	31	9.5	9.5
		→ Barcelona	20	6.1	6.1
		Spain others	57	17.4	17.4
Total	327	100.0	100.0		

← **EUROPE**





## Latin America

Continent	Frequency	Percent	Valid Percent	Continent	Frequency	Percent	Valid Percent
Latin America	Valid						
	Juiz de Fora	67	3.1		San Fernando del Valle de Catamarca	80	3.7
	Nuevo Leon	545	25.4		Maracay	77	3.6
	Santiago	100	4.7		Valencia	80	3.7
→	Santo Domingo	42	2.0		San Fernando de Apure	50	2.3
	San Juan	84	3.9		Calabozo	50	2.3
	Guatemala	82	3.8		Margarita Island	84	3.9
→	San Jose	29	1.4		Santiago (CH)	85	4.0
	Bogota	87	4.1	→	Maringa	8	.4
→	Ambato	17	.8		Havana	62	2.9
→	Cuenca	15	.7		Granma	55	2.6
→	Esmeraldas	29	1.4		Cali	53	2.5
→	Guayaquil	5	.2	→	Ibagué	24	1.1
→	Ibarra	18	.8	→	Other cities (Colombia)	28	1.3
→	Portoviejo	9	.4		Total	2146	100.0
→	Quito	200	9.3				
→	Riobamba	7	.3				
	Santo Domingo de los Tsachilos (EC)	74	3.4				



## GIQPE – Order of dimensions among continent

Africa		Asia		Europa		Latin America	
SDBA	5.81±1.9	FNPE	6.98±2.1	FNPE	6.95±1.5	QTPE	7.30±2.0
CSD	5.61±2.1	SDBA	6.87±2.2	QTPE	6.58±1.7	HBPA	7.10±2.2
HBPA	5.41±2.5	QTPE	6.76±2.3	SDBA	6.40±1.7	SDBA	6.98±2.0
QTPE	5.27±2.2	HBPA	6.66±2.3	HBPA	6.01±1.9	FNPE	6.89±1.8
FNPE	5.15±1.7	CSD	6.60±2.3	CSD	5.88±2.0	CSD	6.86±2.3
GIPE	4.39±2.2	SNCP	6.57±2.4	SNCP	5.70±2.0	SNCP	6.18±2.5
PFAPE	4.28±2.4	GIPE	6.40±2.3	GIPE	5.16±1.9	GIPE	6.13±2.6
SNCP	4.00±2.3	PFAPE	6.30±2.6	PFAPE	4.56±2.3	PFAPE	5.35±3.1
GIQPE	5.17±1.9	GIQPE	6.74±2.1	GIQPE	6.24±1.6	GIQPE	6.79±2.0

**SDBA** – Skill Development and Bodily Awareness

**FNPE** – Facilities and Norms in Physical Education

**QTPE** – Quality Teaching of Physical Education

**PFAPE** – Plans for Feasibility And Accessibility of Physical Education

**SNCP** – Social Norms and Cultural Practise

**GIPE** – Governmental Input for Physical education

**CSD** – Cognitive Skill Development

**HBPA** – Habituated Behaviour in Physical Activities



## GIQPE – Cities Orders





City	Mean	Rank
Weifang	8.70	1
Suzhou*	8.68	2
Langfang	8.57	3
Granma	8.56	4
Monterrey	8.32	5
Dongguan	8.27	6
Havana	8.11	7
Zaozhuang	8.05	8
Beijing	7.94	9
Fuzhou	7.88	10
Chengdu	7.83	11
Galabo	7.83	11
Taipei	7.78	13
Tianjin	7.73	14
Daqing	7.67	15
City of Davao	7.67	16
City of Pagadian	7.61	17
Changsha	7.59	18
City of Cagayan de Oro	7.54	19
Ho Chi Minh city	7.44	20
Bangkok	7.43	21
City of Butuan	7.41	22
Kota Kinabalu	7.38	23
Santiago D.R.	7.37	24
City of Iligan	7.33	25
Margarita Island	7.32	26
Ipoh*	7.09	27
Macao	7.04	28
Chamdo	6.98	29



City	Mean	Rank
Shah Alam	6.86	30
San Jose*	6.80	31
Johor Bahru*	6.79	32
Brasov*	6.77	33
San Juan	6.76	34
Brno*	6.72	35
Ganderbal*	6.67	36
Ambato*	6.60	36
San Fernando del Valle	6.60	37
Prague	6.60	37
Tokyo	6.57	40
Hong Kong	6.55	41
Santo Domingo EC.	6.54	42
Ibague	6.53	43
Cuidad de Guatemala	6.50	44
Spain (others)	6.50	44
Portoviejo*	6.49	46
Islamic city of Marawi	6.46	47
Cluj-Napoca*	6.44	48
Barcelona*	6.38	49
Santo Domingo D.R.*	6.27	50
Usti nad Labem*	6.24	51
Hiroshima	6.17	52
Bogota	6.15	53
Maringa*	5.99	54
Cali	5.98	55
Bangor*	5.96	56
Cuenca*	5.94	57
Bacau*	5.93	58



City	Mean	Rank
Quito	5.93	58
Riobamba*	5.90	60
Esmeraldas*	5.89	61
Bratislava	5.86	62
Toamasina	5.85	63
Seoul	5.83	64
Maracay	5.58	65
Nasiriyah	5.55	66
Muscat	5.52	67
San Fernando de Apure	5.52	68
Abuja	5.44	68
Basra	5.44	69
Colombia (others)	5.38	71
Ibarra*	5.31	72
Guayaquil*	5.25	73
Santiago CH.	5.18	74
Juiz de Fora	5.04	75
Budgam*	5.03	76
Baghdad	4.82	77
Athens*	4.68	78
Shiraz	4.50	79
Tehran	4.35	80
Rasht	4.21	81
Antananarivo	4.19	82
Srinagar*	4.09	83
Babylon	4.02	84
Mashhad	3.90	85
Valencia	3.45	86
Kupwara*	2.10	87

 Low Income  
 Lower-middle Income  
 Upper-middle Income  
 High Income





## GIQPE – Gender

- SDBA – Skill Development and Bodily Awareness
- FNPE – Facilities and Norms in Physical Education
- QTPE – Quality Teaching of Physical Education
- PFAPPE – Plans for Feasibility And Accessibility of Physical Education
- SNCP – Social Norms and Cultural Practise
- GIPE – Governmental Input for Physical education
- CSD – Cognitive Skill Development
- HBPA – Habituated Behaviour in Physical Activities

		SDBA	FNPE	QTPE	PFAPPE	SNCP	GIPE	CSD	HBPA	GIQPE
Asia	Male	6.80	6.93	6.71	6.18	6.50	6.36	6.54	6.61	<b>6.69</b>
	Female	6.95	7.04	6.82	6.43	6.65	6.44	6.66	6.71	<b>6.81</b>
	P-value	.059	.121	.188	<b>.008</b>	.084	.350	.144	.238	<b>.113</b>
Latin America	Male	7.00	6.93	7.35	5.50	6.14	6.18	6.90	7.14	<b>6.83</b>
	Female	6.83	6.76	7.15	5.29	6.01	6.05	6.75	6.98	<b>6.67</b>
	P-value	.082	.063	<b>.026</b>	.177	.297	.300	.220	.119	<b>.086</b>



## GIQPE – Work Positions

- SDBA – Skill Development and Bodily Awareness
- FNPE – Facilities and Norms in Physical Education
- QTPE – Quality Teaching of Physical Education
- PFAPPE – Plans for Feasibility And Accessibility of Physical Education
- SNCP – Social Norms and Cultural Practise
- GIPE – Governmental Input for Physical education
- CSD – Cognitive Skill Development
- HBPA – Habituated Behaviour in Physical Activities

	N	SDBA	FNPE	QTPE	PFAPPE	SNCP	GIPE	CSD	HBPA	GIQPE
<b>Primary Teacher</b>	2014	7.03	7.01	7.03	5.96	6.46	6.37	6.78	6.94	6.84
<b>Secondary Teacher</b>	2100	6.84	6.87	6.91	5.67	6.22	6.11	6.63	6.72	6.66
<b>Others</b>	1454	6.61	6.76	6.65	5.87	6.18	6.03	6.35	6.51	6.50
<b>p-value</b>		.000	.001	.000	.004	.001	.000	.000	.000	.000





# Fuzzy set Analysis of Sports Policy Configuration on the Development of Quality Physical Education in 16 Countries

*Cherry Min Liu*



## Research Methods

- Qualitative Comparative Analysis, QCA and Questionnaire Survey Method, QS
- QCA was used to analyze the policy configuration paths of different countries in promoting the development of high-quality physical education for adolescents.
- Based on Set Theory and Boolean, the method compares and assigns values to the data of different cases, and finds out the causal relationship between the condition variables and the result variables, which is called "configuration".
- **Result variables:** the results of 8 dimensions from *Survey on the Global Index of Quality Physical Education Development*
- **Condition variables:** AT, IT, SHT, CT, RT<sup>[1][2]</sup>

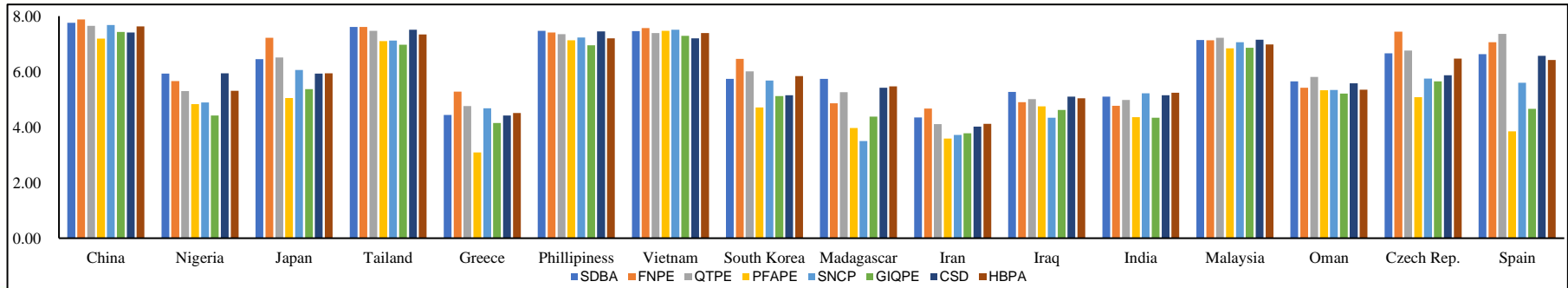
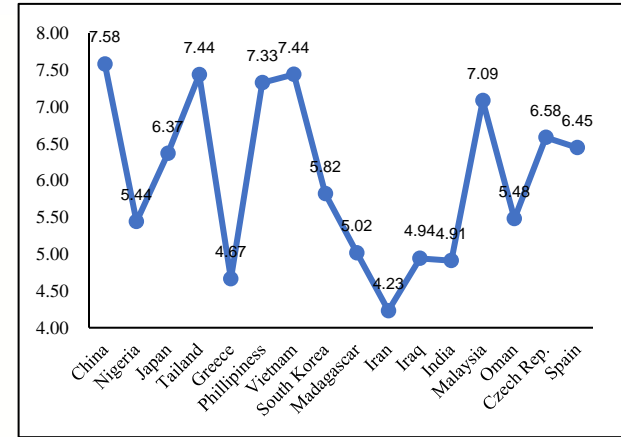
[1]SCHNEIDER A I, INGRAM H(1990).

[2]MCDONNELL L M, ELMORE R F(1987).



## Research Samples on 16 Countries

Country	Sample Size	Country	Sample Size
China	1629	Madagascar	160
Nigeria	90	Iran	355
Japan	221	Iraq	320
Tailand	87	India	60
Greece	22	Malaysia	147
Phillipiness	558	Oman	54
Vietnam	80	Czech Rep.	99
South Korea	80	Spain	77
Total	N = 4039		





## Research Results

- The incentive serves as the necessary condition to hinder the development of high-quality physical education.
- The configuration path of sports policy analysis can be the good tool in providing heuristic understanding for the development of different national policies on quality physical education.



21<sup>st</sup> Biennial Conference of ISCPES - 2021

# Regional differences in QPE development over mainland China

*Jessi Jiaxi Hu*



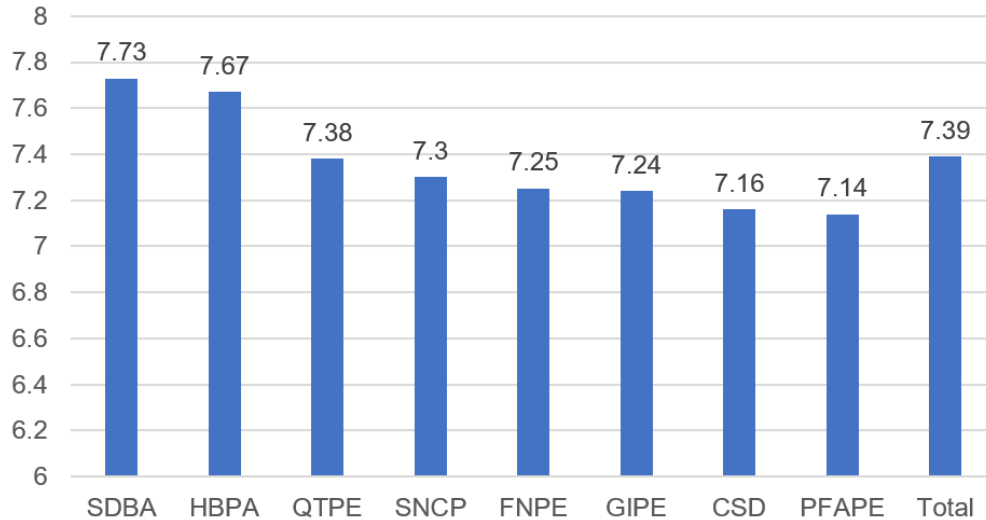
## Basic information of participants

Administrative Division	Population	N	Male	Female
North China	169.25 (12.06%)	56 (12.8%)	35 (62.50%)	21 (37.50%)
Northeast China	101.02 (7.20%)	31 (7.10%)	23 (74.19%)	8 (25.81%)
East China	419.64 (29.91%)	129 (29.5%)	83 (62.50%)	46 (62.50%)
South Central China	406.93 (29.00%)	124 (28.4%)	75 (60.48%)	49 (39.52%)
Southwest China	203.63 (14.51%)	62 (14.20%)	36 (58.06%)	26 (41.94%)
Northwest China	102.63 (7.31%)	35 (8.00%)	24 (68.57%)	11 (31.43%)





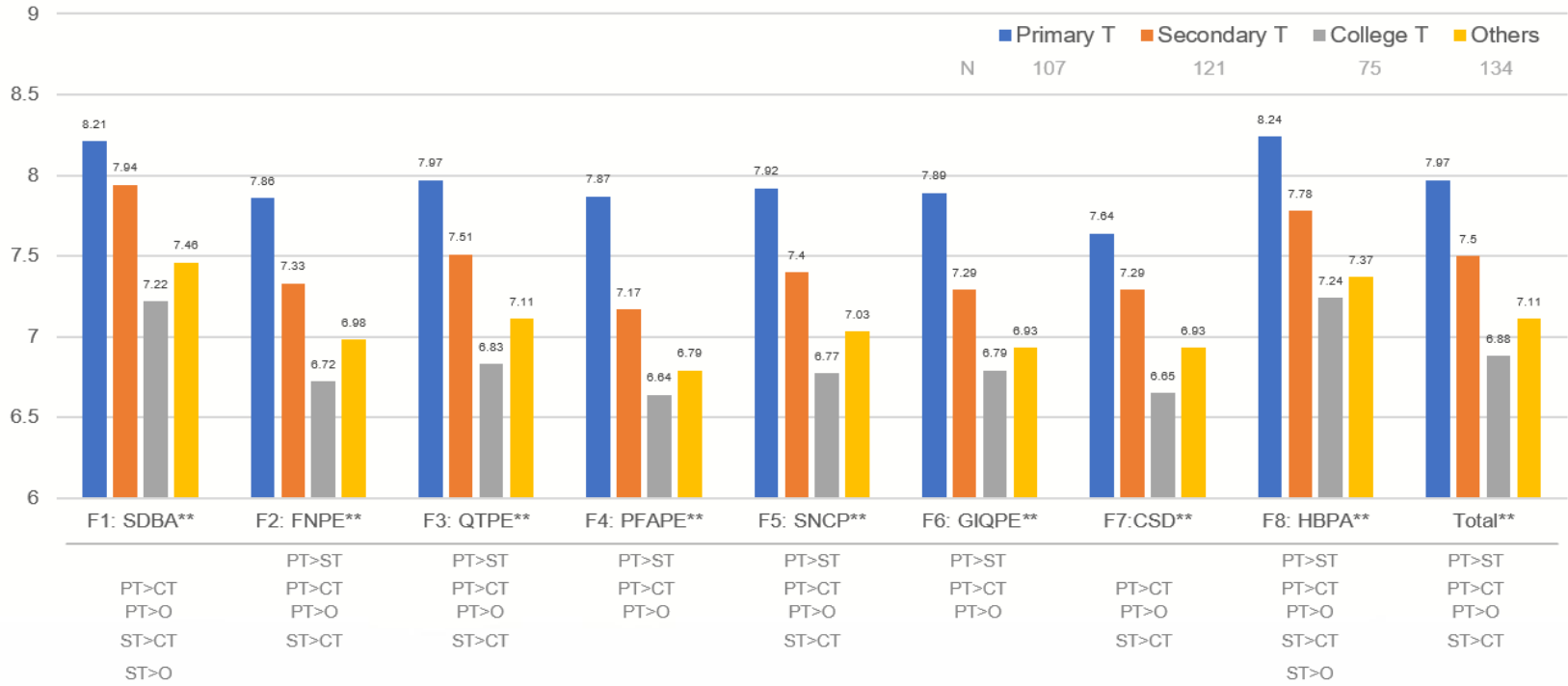
Means of dimensions



Dimensions		
F1:	SDBA	Skill development and bodily awareness
F2:	FNPE	Facilities and norms in physical education
F3:	QTPE	Quality teaching of physical education
F4:	PFAPE	Plans for feasibility and accessibility of physical education
F5:	SNCP	Social norms and cultural practice
F6:	GIPE	Governmental input for physical education
F7:	CSD	Cognitive skill development
F8:	HBPA	Habituated behaviour in physical activities

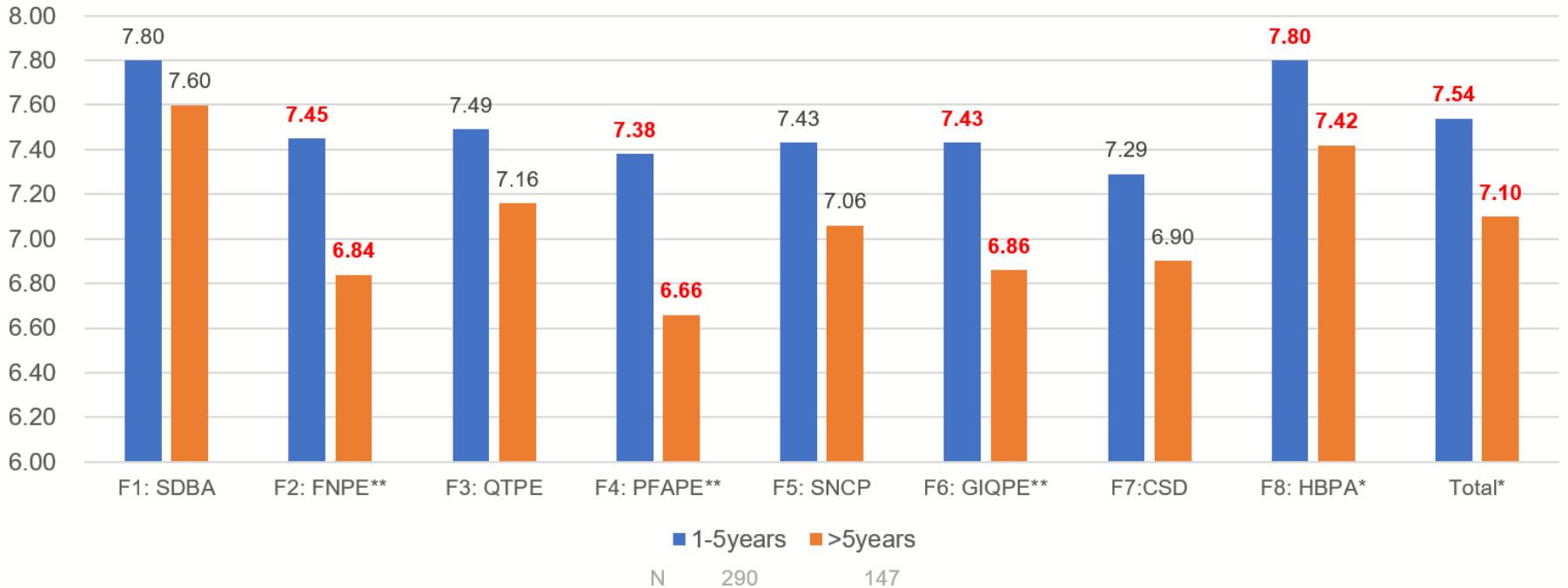


## Teaching Positions & Perception in QPE development



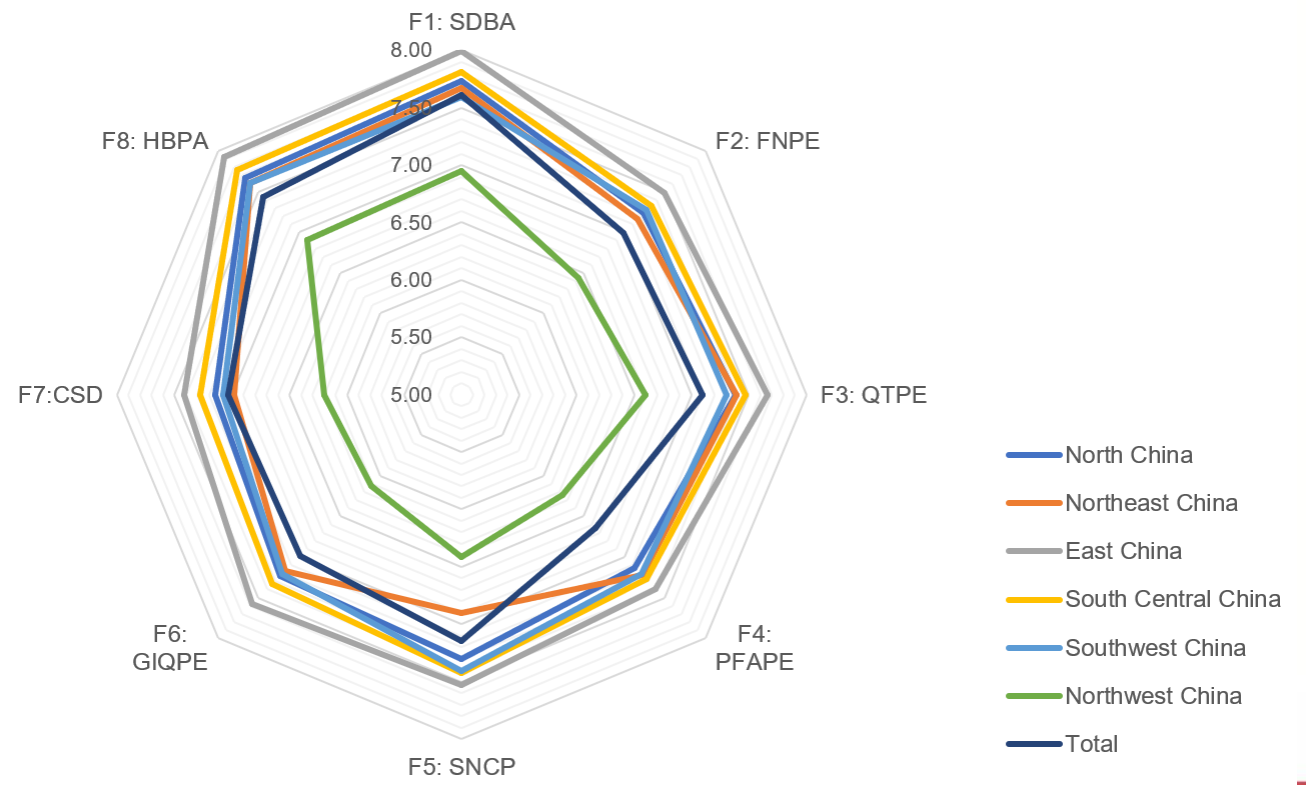


## Years of Work Experience & QPE development





# Regional Analysis on QPE development





# Cities Comparison of QPE development in Mindanao (Philippines)

*Jennie Yang Yang Xie*

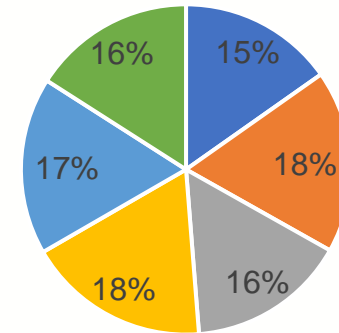
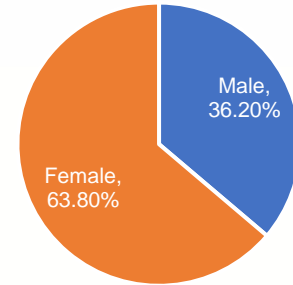


## Participants:

558 PE professionals from six cities of Mindanao have participated, (202 M/356 F)

*Frequency analysis of males and females among city and years of work experience*

	Male (n+%)	Female (n+%)	Total (n+%)
<b>City</b>			
City of Butuan	27 (13.4%)	58 (16.3%)	85 (15.2%)
City of Cagayan de Oro	50 (24.8%)	50 (14%)	100 (17.9%)
City of Davao	37 (18.3%)	50 (14%)	87 (15.6%)
City of Iligan	34 (16.8%)	66 (18.5%)	100 (17.9%)
Islamic City of Marawi	33 (16.3%)	64 (18%)	97 (17.4%)
City of Pagadian	21 (10.4%)	68 (19.1%)	89 (15.9%)
<b>Years of work experiences</b>			
1- 5 years	109 (54%)	166 (46.6%)	275 (49.3%)
6 – 10 years	46 (22.8%)	76 (21.3%)	122 (21.9%)
11 – 20 years	32 (15.8%)	63 (17.7%)	95 (17.0%)
21 years and above	13 (6.4%)	49 (13.8%)	62 (11.1 %)



- Butuan
- Cagayan de Oro
- Davao
- Iligan
- Marawi
- Pagandian

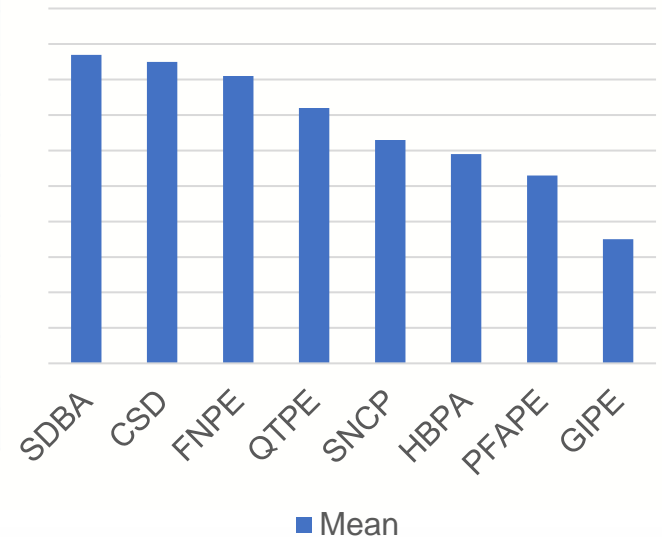




## Research Findings:

*Descriptive statistics and Cronbach alpha of dimensions and overall QPE based on the data of overall sample.*

	Mean	SD	95% IC for Mean		Median	α
			Lower	Upper		
<b>SDBA</b>	7.47	1.41	7.35	7.59	7.63	.930
<b>CSD</b>	7.45	1.47	7.33	7.57	7.60	.911
<b>FNPE</b>	7.41	1.36	7.30	7.53	7.64	.932
<b>QTPE</b>	7.32	1.55	7.19	7.45	7.50	.919
<b>SNCP</b>	7.23	1.59	7.10	7.36	7.33	.812
<b>HBPA</b>	7.19	1.61	7.06	7.33	7.50	.938
<b>PEAPE</b>	7.13	1.85	6.98	7.29	7.50	.828
<b>GIPE</b>	6.95	1.66	6.81	7.08	7.20	.874
<b>QPE</b>	7.32	1.42	7.20	7.44	7.57	.981

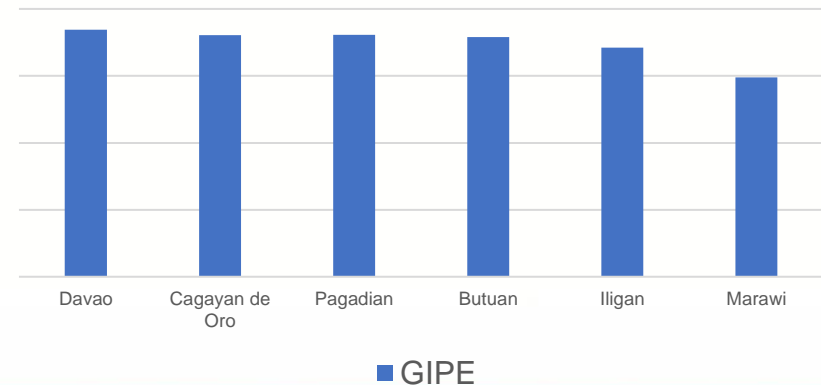


\*95% IC – Interval of Confidence for mean; α – Cronbach alpha;



## Research Findings:

- The national education budget had become the **top priority** in 2019, there is still a **gap** between the satisfaction of reality and the government's intention (DBM, 2019).
- Proposed national budget allocation in 2018, DepEd (including CHED) ranked first, while the budget for Physical Fitness and School Sport only accounted for **0.06%** of the total budget (DBM, 2017; Villanueva, 2017).
- The budget allocation for **physical fitness** worsened in the following year, and **school sports** even suffered a decline in 2019 (The Philippines News Agency, 2018).
- Metropolitan centre: Davao & Cagayan de Oro
- Regional centre: Butuan & Pagadian
- Sub-regional centre: Iligan & Marawi
- Size, population, functions,

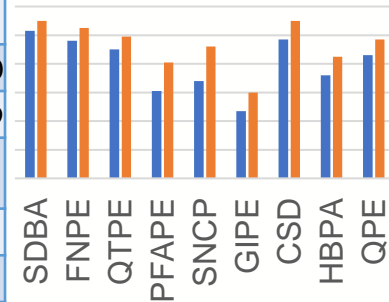




## Research Findings:

### Gender and Positions in the 8 Dimensions

	SDBA	FNPE	QTPE	PFAPF	SNCP	GIPE	CSD	HBPA	QPE
	M±SD	M±SD	M±SD	M±SD	M±SD	M±SD	M±SD	M±SD	M±SD
<b>Gender + Number</b>									
Male	7.43±1.49	7.36±1.43	7.30±1.66	7.01±1.93	7.08±1.75	6.87±1.78	7.37±1.61	7.12±1.50	7.26±1.50
Female	7.50±1.37	7.45±1.32	7.39±1.82	7.21±1.81	7.32±1.50	7.00±1.60	7.50±1.39	7.25±1.57	7.37±1.39
Mann-Whitney test	35396	35021.5	35833	33557.5	33588	35231.5	34826.5	34566.5	34952
Sign.	0.76	0.61	0.946	0.206	0.195	0.692	0.537	0.447	0.583
r	0.01	0.02	0	0.05	0.05	0.02	0.03	0.03	0.02



### Position + Number

Primary teacher	7.50±1.13	7.41±1.17	7.33±1.35	7.32±1.55	7.30±1.36	7.06±1.39	7.47±1.25	7.26±1.35	7.36±1.19
Secondary teacher	7.51±1.57	7.38±1.48	7.33±1.62	7.09±1.95	7.26±1.70	6.88±1.79	7.51±1.49	7.19±1.71	7.32±1.53
Others	7.40±1.53	7.47±1.43	7.31±1.72	6.95±2.06	7.12±1.73	6.90±1.81	7.36±1.71	7.13±1.79	7.29±1.55
Kruskal-Wallis test	1.47	1.87	0.78	0.7	0.41	0.2	0.96	0.1	0.39
Sign.	0.478	0.393	0.678	0.703	0.813	0.903	0.617	0.949	0.823
$\eta^2$	0.01	0	0	0	0	0	0	0	0

■ Male ■ Female



## Research Findings:

### Work Experiences and School Types in 8 Dimensions

	SDBA	FNPE	QTPE	PFAPF	SNCP	GIPE	CSD	HBPA	QPE
	M±SD	M±SD	M±SD	M±SD	M±SD	M±SD	M±SD	M±SD	M±SD
<b>Years of work experience + Number</b>									
<b>1 – 5 years</b>	7.49±1.45	7.47±1.41	7.44±1.98	7.22±1.86	7.27±1.65	7.06±1.69	7.47±1.50	7.23±1.65	7.38±1.48
<b>6 – 10 years</b>	7.40±1.28	7.29±1.22	7.19±1.44	6.93±1.70	7.10±1.45	6.72±1.51	7.40±1.32	7.06±1.49	7.20±1.25
<b>11 – 20 years</b>	7.53±1.43	7.44±1.32	7.32±1.54	7.13±1.85	7.35±1.56	6.93±1.69	7.51±1.46	7.24±1.62	7.35±1.41
<b>21 and above</b>	7.50±1.48	7.42±1.45	7.43±1.66	7.21±2.08	7.26±1.70	7.04±1.73	7.43±1.65	7.28±1.68	7.36±1.54
<b>Kruskal-Wallis test</b>	1.35	2.61	2.43	4.58	3.21	5.87	1.51	2.39	3
<b>Sign.</b>	0.718	0.455	0.489	0.205	0.361	0.118	0.681	0.495	0.392
<b><math>\eta^2</math></b>	0	0	0	0	0	0	0	0	0
<b>Type of educational system + Number</b>									
<b>Governmental</b>	7.53±1.40	7.46±1.36	7.42±1.81	7.21±1.81	7.31±1.58	6.98±1.67	7.52±1.43	7.29±1.57	7.38±1.42
<b>Private</b>	7.31±1.42	7.29±1.37	7.18±1.65	6.90±1.96	7.01±1.63	6.84±1.66	7.24±1.60	6.92±1.71	7.15±1.45
<b>Mann-Whitney test</b>	26866	27518	27779.5	26861.5	26444.5	28218.5	26987	25645	26770.5
<b>Sign.</b>	0.093	0.2	0.256	0.099	0.053	0.39	0.108	<b>0.016</b>	0.083
<b>r</b>	0.07	0.05	0.05	0.07	0.08	0.04	0.07	0.1	0.07



## Research Findings:

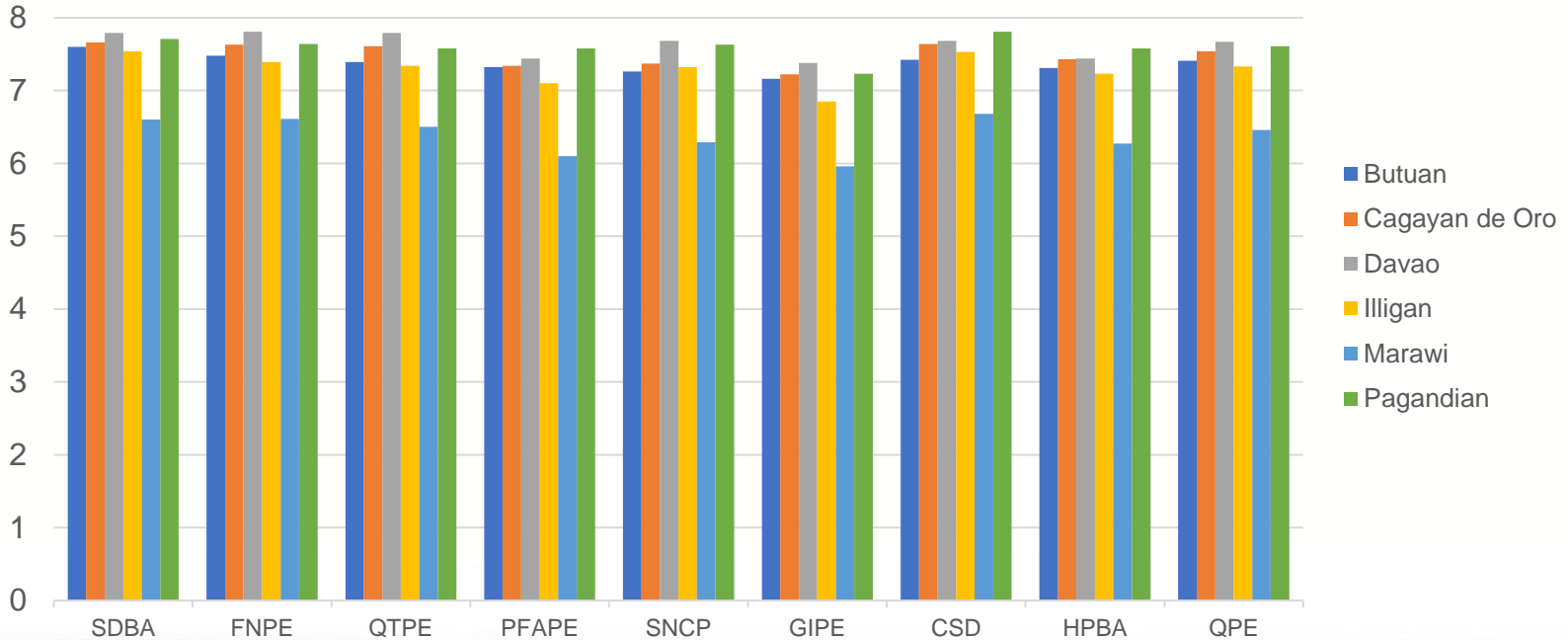
### Cities Comparison in 8 Dimensions

	SDBA	FNPE	QTPE	PFAPF	SNCP	GIPE	CSD	HBPA	QPE
	M±SD	M±SD	M±SD	M±SD	M±SD	M±SD	M±SD	M±SD	M±SD
City									
<b>Butuan</b>	7.60±1.04	7.48±1.05	7.39±1.32	7.32±1.41	7.26±1.51	7.16±1.31	7.42±1.12	7.31±1.34	7.41±1.12
<b>Cagayan De Oro</b>	7.66±1.46	7.63±1.38	7.61±1.58	7.34±1.82	7.37±1.62	7.22±1.56	7.64±1.45	7.43±1.59	7.54±1.43
<b>Davao</b>	7.79±1.29	7.81±1.30	7.79±2.61	7.44±1.64	7.60±1.58	7.38±1.63	7.68±1.64	7.44±1.53	7.67±1.43
<b>Iligan</b>	7.54±1.30	7.39±1.26	7.34±1.46	7.10±1.81	7.32±1.41	6.85±1.60	7.53±1.33	7.23±1.55	7.33±1.29
<b>Marawi</b>	6.60±1.65	6.61±1.53	6.50±1.73	6.10±2.40	6.29±1.77	5.96±1.96	6.68±1.68	6.27±1.85	6.46±1.64
<b>Pagadian</b>	7.71±1.29	7.64±1.25	7.58±1.33	7.58±1.40	7.63±1.28	7.23±1.39	7.81±1.29	7.58±1.41	7.61±1.26
<b>Kruskal-Wallis test</b>	39.95	45.17	34.08	25.25	41.69	41.12	38.55	35.99	43.05
<b>Sign</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b><math>\eta^2</math></b>	0.06	0.07	0.05	0.04	0.07	0.07	0.06	0.06	0.07



## Research Findings:

### 9 Comparisons of QPE among Cities







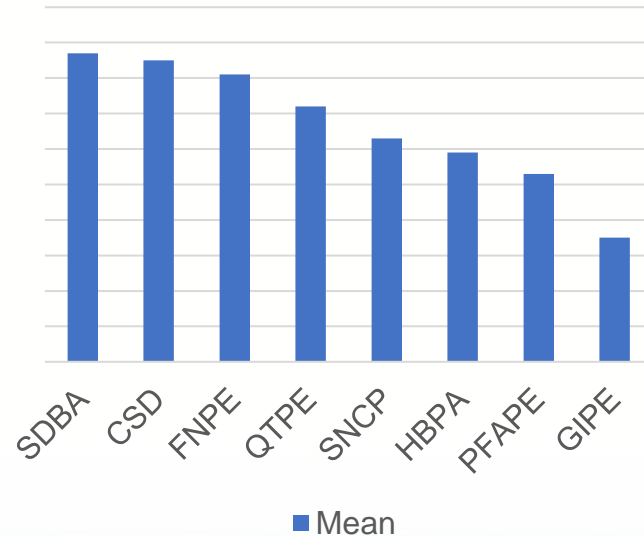
## Research Findings:

- Armed groups can easily involve this city in the shadow of conflict and instability (Bacani, 2005; Özerdem and Podder, 2012).
- Former Autonomous Region in Muslim Mindanao (ARMM) (where Marawi was a part of) is among the poorest provinces in the country (WBG, 2019)
- The most recent crisis was the **5 months** siege in May of **2017**, which displaced 0.36 million people and destroyed **95%** of the infrastructure in the main affected areas (WB, 2018).
- The conflict also disrupted Marawi City's education, resulting in the closure of **153** schools and 3 more in surrounding municipalities; schools that were annihilated in the most affected areas (Stange, 2018).
- These destructive consequences include attacks on schools (O'Malley, 2010), inhabitant displacement (Ferris and Winthrop, 2010), human capital loss (Buckland, 2005), and the influence on delivery and **quality of education** (Shields and Paulson, 2015).
- Condron and Roscigno (2003) and Nir and Kafle (2013) demonstrated that higher financial input in education can **reduce** the influence of unstable circumstances.
- Unstable situations contribute **more significantly** than the economic circumstances of countries when underscoring educational quality (Nir and Kafle, 2013).



## Research Findings:

- The National Economic and Development Authority (NEDA) formed the medium-term development strategies of the PDP 2017–2022.
- The central government has promulgated a series of policies to enhance basic **education quality**, promote **healthy lifestyle**, provide **accessible sporting culture for all**, and achieve **sustainable peace** (NEDA, 2021).
- The findings in the study echo the aforementioned policies as the dimensions of GIPE, HBPA, and PFAPE are the **lowest three**.
- **Delayed-release** of educational input is one of the reasons to affect education quality (NEDA, 2021).
- The WBG (2019) has indicated that the government does not have adequate capacities to **implement and follow through** legislation and policy for development, particularly at the **local level**.





## Summary:

- i) Sustainable peace against conflicts,
- ii) Sufficient budget input in PE,
- iii) Efficient governance of local governments

three crucial aspects that call for constant focus when addressing QPE development on Mindanao Island.

- PE professionals in Mindanao to express their voices toward local QPE development.
- The results shed light on the development of QPE on Mindanao Island, revealed the gap between anticipation and reality, and attempts to clarify the barriers that hinder QPE development
- Upper-middle evaluation (7.32) of the overall QPE within the current development of PE
- Indicated **positive** perspectives and attitudes



# QPE study – the Issues, Scenario and Future Strategies in Investigation

*Walter Ho*



## *There are connections ...*

- Developmental pattern and choice for QPE;
- Funding in PE has potential impact to QPE development;
- Economic development will have the effect in the overall development for PE;
- Gender is an issue;
- Differences by school types;
- Political stability is essential for smooth growth of QPE...



## *The GIQPE Study – The Current Status (as at 17 Dec 2021)*

**Research Tool Development** - Research Tool for Quality Physical Education (QPE) (in Review)  
QPE & professional voice from Asia, Europe & Latin America (in progress for review)

**Case Studies – QPE in** Madagascar (In View);  
Mindanao, Tokyo and Hiroshima & Mexico (in progress for review);  
Iraq, Ecuador & Czech (draft completed & in progress for final check);  
Macau, Zhuhai, Iran, Oman, Venezuela & Slovakia (in progress, ready in 2022)

**Regional / Cross-cities Analysis – QPE in** 4 cities analysis (Macau, HK, Taipei & Tianjin) (in Progress, ready in 2022)  
Countries analysis (Mindanao, Ho Chi Minh City, Bangkok and Malaysia) (in Progress, ready in 2022)  
Nigeria & Madagascar (in progress, ready in 2022)  
Greater Bay Area study (in progress, ready in 2022)

**Continental Studies – QPE in** Asian Continent (in progress for review);  
Middle East; South America, Central & Caribbean Region & Africa (in progress, ready in 2022)

**QPE & Cities Ranking – Draft ready in mid 2022**

**QPE in different economical zones & dimensional studies – In Planning**

**QPE – Issues and Concerns** - Feminist Movement and Professional Development (in progress for review)

**Data Collection** – Sichuan Province (China) / Zhuhai City (China) / Lusaka (Zimba) / South Africa (complete in early 2022)





This is just the beginning of the works in QPE study.

The initiatives in QPE study open the ways for us to make systematic investigation of physical education in countries / regions.

There is the possibilities to draw the profile for QPE development worldwide

That helps to identify our  
difficulties, strengths, barriers & possible strategies  
for success and improvement in having a good quality program for PE in schools

Would that be a wonderful thing for us to see the  
Quality Growth of PE for our Next Generation?



The next GIQPE research expects to be arranged in 2024

The questionnaire survey in 2024 includes items of following to learn the way in having good quality program for :

**gender equality,**  
**inclusion and**  
**flexibility for schools in meeting situation such lockdown**

**Your Help Please.**



21<sup>st</sup> Biennial Conference of ISCPES - 2021

**Thank you for listening!**