

Implementation of Physical Education Programme in Malaysian Primary Schools

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ABSTRACT

This is a cross-sectional research focused on research evidences regarding the implementation of Physical Education (PE) programmes in Malaysian primary schools based on the perceptions of primary school PE teachers. The sample consisted of 1276 teachers from 248 randomly sampled primary schools in Peninsular Malaysia. The survey instrument collected demographic data and four implementation dimensions (Teaching Ability, Administration of PE Programme, PE Class Distribution & Non-human Factor). Questionnaires were mailed to schools identified using the Ministry of Education Malaysia's master list and the response rate was 69%. The findings showed that there was a need to have specialist PE teachers as majority of the current teachers taught less than five PE periods per week and only 6.2% were PE majors. Independent sample t-tests conducted on teaching ability revealed that male teachers were more capable than female teachers in knowledge, managing and teaching sport and fitness activities and, detect and correct students' errors.

On administration of PE programme, male teachers agreed more than female teachers that administrators organized in-house training, discussed PE teaching assignment, discussed factors affecting PE teaching, and observed PE teaching. As regards to class distribution, male PE teachers agreed more than female teachers that administrators had discussion with them before PE teaching assignment and assignment was based on interest and qualification. T-test results also revealed that there were no differences on perception of non-human factor statements.

ARTICLE INFO

Article history:

Received: 6 May 2019

Accepted: 31 October 2019

Published: 30 December 2019

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It is recommended that further research on solving PE human resource problems be undertaken. Specifically, greater attention should be given to in-house training and monitoring of the implementation of PE programmes.

Keywords: Administration of PE programme, non-human factor, PE class distribution, physical education, teaching ability

INTRODUCTION

Physical Education (PE) programme continues to contribute to the total growth and development of all children, primarily through movement (Pangrazi & Brusseau, 2014). Through its safe, supervised, and structured programmes, PE has fulfilled the need of children to acquire knowledge and engage in active behaviours, thus making them active and healthy (SHAPE, 2016). Effective PE programmes provide children with essential know-how to develop physically active lifestyles (Institute of Medicine [IOM], 2013). Consequently, these result in two major outcomes of PE, which are the cultivation of physical health and lifelong behaviours (Pangrazi & Brusseau, 2014).

When the 'UN International Year of Sport and Physical Education' has been proclaimed by UNESCO in 2015 (UNESCO, 2015), governments all over the world have recognized PE as a holistic subject. Despite the benefits and awareness, PE policy implementations have not been

consistent among countries and Quality Physical Education (QPE) has not been implemented. Wee (2017) had outlined various strategies for QPE in Malaysia which among others included continuous efforts in improving the curriculum content of PE and teaching methods, ensuring adequate supply of PE teachers, monitoring quality teaching in PE, as well as providing adequate facilities, equipment and resources. Similarly, The Final Report of the World-wide PE Survey (UNESCO Final Report, 2013) had previously reported that to ensure teaching quality, PE teachers must be qualified and supported with administrative personnel and finance, adequate teaching resources, equipment and facilities, proper government policies and strong community partnerships.

As a non-examination subject, PE did not receive adequate attention from the Ministry of Education Malaysia. Numerous negative reports were published which identified elements such as unqualified teachers (Aboshkair et al., 2012; Chong & Salamuddin, 2010; Wee, 2013), inadequate facilities and equipment (Chong & Salamuddin, 2010; Syed Ali et al., 2014), and insufficient staff training programmes (Chong & Salamuddin, 2010; Wee, 2013). In addition, Wee (2013) reported that PE had often been replaced by other more valuable subjects.

Taking into account the short coming in implementing PE programme and its negative impacts on the health of primary school children, it is essential to investigate the PE programme in Malaysian primary schools.

Conceptually, the implementation of the PE programme in primary school revolves around the four dimensions as shown in Figure 1.

The conceptual framework for the implementation of the PE programme is based on two factors that are human factors (administration of the PE programme, teaching ability and PE class distribution) and non-human factors. These two factors were noted by Malaysian researchers Siow and Wong (1983), Ahmad (1989), and Ahmad (1992) to be important factors in the implementation of the school curriculum and by Wee (2001) for the implementation of PE curriculum in the Malaysian context.

Research Problem

This study examined the implementation of primary school PE programme in Malaysia from the perception of PE teachers. UNESCO (2015) had reiterated that PE programmes were the most effective means of providing children with the skills, attitudes, values, knowledge and understanding for lifelong participation in society. Quality PE

programmes (planned, progressive, inclusive learning experiences) are the foundation for children’s lifelong engagement in physical activities and sports in providing children with psychomotor, cognitive social and emotional skills (afPE, 2008). Despite the positive values of PE programmes, its implementation in Malaysian primary schools is problematic.

Even though PE is a mandatory subject in Malaysian primary schools, its non-examination status has diminished its importance as compared to other subjects in a Malaysian school culture which focuses on examination (Wee, 2013). PE has been neglected in the school curriculum and replaced under various circumstances in school, as compared to subjects with more economic values (Chong & Salamuddin, 2010). Dewi Mohamed et al. (2017) used the Malaysian Educational Quality Standard checklists (Ministry of Education Malaysia [MOEM], 2010)(score scale of 1 to 6) to examine ‘leadership and vision’, ‘organizational management’, ‘management of curriculum, co- curriculum and sport, and

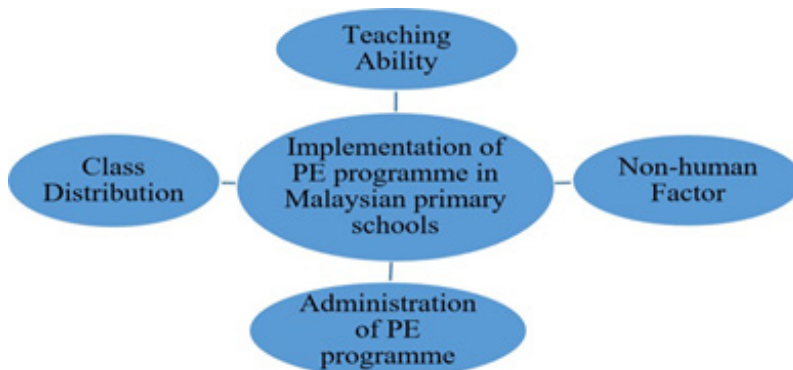


Figure 1. Conceptual model of the Implementation of PE programme in Malaysian primary schools

student affairs', 'learning and teaching', and 'students' achievement' in 111 Malaysian primary schools and reported that 83.9% of the schools implemented PE at an average level, 6.3% at low level and 8.9% at high level. Similarly, in a study of 310 PE teachers in 155 primary schools, Syed Ali et al. (2014) revealed 'insufficient PE facilities' (M=4.20), 'over crowded field during PE classes' (M=4.46), 'insufficient funding' (M=4.33) and 'inappropriate PE class schedules' (M=4.66) were among the constraints of implementing PE programmes.

The above-mentioned reports raised issues of implementation of Malaysian PE programme. And that warranted the examination of primary school PE programme.

Hypotheses

Below are the null hypotheses formulated for the current study:

1. There will be no significant difference in the mean teaching ability perception scores according to gender.
2. There will be no significant difference in the mean Administration of PE Programme perception scores according to gender.
3. There will be no significant difference in the mean perception scores on class distribution according to gender.
4. There will no significant difference

in the mean perception scores on non-human factors according to gender.

METHODS

This study is a survey research designed to obtain research evidence concerning the implementation of PE programme from all government-aided primary schools in Peninsular Malaysia.

Participants

A total of 1276 full-time PE teachers from 248 government-aided primary schools in Peninsular Malaysia participated in this study. Slightly more female participated in this study [female (50.2%, n=641), male (49.8%, n=635)]. Majority of PE teachers were young (76.8% below 40 years in age, n=980). Almost 94% (n=1197) of them were non-PE majors and 6% (n=79) was PE majors. Almost 71% (n=904) of the PE teachers taught <5 periods of PE per week but taught >16 periods per week for other subjects. Majority of them had never attended PE courses (89%, n=1136) and sport related courses (92%, n=1174) since becoming a teacher.

Procedures

Sampling. A sample of 358 government-aided primary schools which offered a standard national PE curriculum were randomly selected using stratified random sampling from 5138 schools listed in MOEM school registry. The schools were from the twelve states in the Peninsular

Malaysia. A total of 248 schools responded, which constituted a 69% response rate.

Instrumentation. The instrument consisted of two sections. Section A: Personal Data. The items relate to gender, age group, field of specialization, teaching work load, in-house training programme, PE and sport courses attended. Section B: Implementation of PE programme [IOPEP] (Wee, 2001). The survey instrument used in this study consisted of four implementation dimensions. The items in this section related to Teaching Ability (9 items, $\alpha = 0.8737$), Administration of PE Programme (7 items, $\alpha = 0.8669$), PE Class Distribution (5 items, $\alpha = 0.8047$), and Non-human factors (6 items, $\alpha = 0.7433$).

Data Collection and Analysis

Data in this research were collected through mail survey. PE teachers completed questionnaires on paper and returned them via their schools. Items on the 'administration of PE programme' and 'PE teaching duty allocation' were assessed using a 5-point Likert Scales: Almost Always (5), Frequently (4), Occasionally (3), Rarely (2), Almost Never (1). Items of 'teaching ability' and 'non-human factors' were measured through Likert scale of Strongly Agree (5), Agree (4), Undecided (3), Disagree (2), Strongly Disagree (1). Descriptive statistics such as means, standard deviations, percentages were used to report the data from the questionnaire. Four independent t-tests were administered to determine whether differences existed in the perception

mean scores with 'Teaching Ability', 'Administration of PE Programme', 'PE Class Distribution', and 'Non-human Factor' as dependent variables and gender as independent variable. All t-tests were conducted using IBM SPSS for Windows (ver.21) with 0.05 significance level.

RESULTS AND INTERPRETATIONS

The examination of the implementation of PE programme focused on four critical factors that influenced its implementation which were 'Teaching Ability', 'Administration of PE Programme', 'PE Class Distribution', and 'Non-human Factor'.

Teaching Ability and Inadequacy of Specialist PE Teachers

Teaching ability was assessed through nine statements as shown in Table 1. The PE teachers agreed ('*strongly agreed*' and '*agreed*') that they could manage their class (85.2%), could teach sport skills (60.9%), could manage fitness class (62.4%), 65.1% could detect and 60.1% could correct students' weaknesses. However, only 55.9% agreed that they had knowledge to teach PE, and only 8.9% 'can teach gymnastic skills'. More importantly they felt the need to attend PE courses (66%), and in-house exposure (76.3%) before handling the subject.

Inferential statistics revealed that there were no significant gender differences in terms of the need to attend PE courses ($t(1274) = 0.79$; $p = 0.43$) and in-house exposure before teaching PE ($t(1274) = 0.19$; $p = 0.84$).

T-test analyses of the mean scores for perception of ability to teach PE showed that male and female PE teachers differed significantly in their perceptions of their ability to teach PE in six aspects of 'I am equipped with PE pedagogical knowledge' ($t(1274)=4.61$; $p=0.01$), 'I can handle my students during PE class' ($t(1274)=2.23$; $p=0.03$), 'I can teach sports skills' ($t=5.39$; $p=0.01$), 'I can manage fitness activities' ($t(1274)=2.81$; $p=0.01$), 'I can detect my students' weaknesses' ($t(1274)=3.55$; $p=0.01$), and 'I can correct my students' weaknesses' ($t(1274)=3.95$; $p=0.01$). Mean scores showed that male teachers perceived themselves as more capable than female teachers in the six aspects. Both male and female teachers ($M_{\text{male}} = 2.41$, $M_{\text{female}} = 2.30$) expressed reservations on teaching of gymnastic.

Administration of PE Programme

Data in Table 2 showed 54.4% of the administrators 'frequently' and 'always' presumed that PE was essential. This presumption was supported by the fact that only 36.2% of the administrators 'frequently' and 'always' had discussion with teachers before assigning them to teach PE. Similarly, it was noted that 73.1% of administrators 'never', 'rarely' and 'occasionally' deliberated about factors affecting the teaching and learning of PE with teachers. In addition, PE had inferior position among the school subjects; 84.7% of administrators 'never', 'rarely' and 'occasionally' plan in-house training programme for staff.

On facilities for PE, PE teachers perceived that 56.2% of administrators 'frequently' and 'always' allocated adequate funding for PE facilities. Almost 68% of

Table 1
Teachers' perception on their ability to teach Physical Education

Statements	Percentage Agreement					M	SD
	SA	A	U	D	SD		
I am equipped with PE pedagogical knowledge.	3.8	52.1	25.7	14.7	3.7	3.4	0.91
I can handle my students during PE class.	16.0	69.2	11.9	2.8	0.1	4.0	0.64
I can teach sports skills.	6.0	54.9	29.1	8.6	1.5	3.6	0.79
I can teach gymnastic skills.	0.9	8.0	38.7	29.9	22.5	2.4	0.94
I can manage fitness activities.	5.7	56.7	27.9	7.7	2.0	3.6	0.80
I can detect my students' weaknesses.	5.7	59.4	28.5	5.7	0.7	3.6	0.71
I can correct my students' weaknesses.	5.4	54.7	33.6	5.4	1.0	3.6	0.72
I need training prior to teaching PE subject.	22.5	43.5	19.0	12.1	2.9	3.7	1.0
I need PE experience through In-house Training Programme.	23.7	52.6	14.2	7.7	1.7	3.9	0.91

Notes :SA = Strongly Agree; A = Agree; U = Undecided; D = Disagree; SD = Strongly Disagree

Table 2

Teachers' perception on the administration of PE programme

Statements	Occurrence in Percentage					M	SD
	<i>N</i>	<i>RLY</i>	<i>OLY</i>	<i>FLY</i>	<i>AL</i>		
Administrators consult teachers before assigning them to teach PE.	17.9	16.1	29.7	24.7	11.5	3.0	1.3
Administrators presume that PE is essential.	3.9	12.5	29.1	35.3	19.1	3.5	1.1
Administrators permit PE subjects to be replaced with other subjects.	33.3	23.5	28.2	11.4	3.5	2.3	1.1
Administrators observe PE teaching	7.6	16.1	44.1	26.2	6.0	3.1	0.98
Administrators allocate adequate funding for PE facilities	1.3	12.5	29.9	43.7	12.5	3.5	0.91
Administrators plan In-house Training Programme for PE.	23.0	26.2	35.5	12.6	2.7	2.5	1.1
Administrators deliberate about factors affecting the teaching and learning of PE with teachers.	11.5	22.3	39.3	21.3	5.6	2.9	1.1

Notes : *N* = Never; *RLY* = Rarely; *OLY* = Occasionally; *FLY* = Frequently; *AL* = Always

the administrators 'never', 'rarely' and 'occasionally' observed teachers teaching PE.

Independent t-test results showed male teachers agreed more than female teachers that administrators planned in-house training ($t(1274)=3.39$; $p=0.001$; $M_{\text{male}} = 2.56$, $M_{\text{female}} = 2.36$), They also perceived that administrators discussed PE teaching assignment ($t(1274)=3.68$; $p=0.001$, $M_{\text{male}}= 3.09$, $M_{\text{female}} = 2.83$), deliberated factors affecting PE teaching ($t(1274)=2.57$; $p=0.01$; $M_{\text{male}} = 2.95$, $M_{\text{female}} = 2.80$), and observed PE teaching ($t(1274)=3.07$; $p=0.002$, $M_{\text{male}} = 3.15$, $M_{\text{female}}=2.99$). In addition, male teachers reported that administrators permitted PE subjects to be replaced with other subjects ($t(1274)=2.10$; $p=0.036$, $M_{\text{male}} = 2.35$, $M_{\text{female}} = 2.22$).

PE Class Distribution: Consultation Practice among Administrators

The analyses on five statements in Table 3 revealed that there was a lack of consultation of teachers. Administrators did not discuss PE teaching assignment with teachers (64% responded as 'never', 'rarely' and 'occasionally'). Almost 76% of PE teachers acknowledged that they had no prior knowledge about being assigned PE classes by administrators and that PE classes were assigned to them without basing on PE qualification (71% responded 'never', 'rarely' and 'occasionally') and without considering their interest to teach PE (71 % responded as 'never', 'rarely' and 'occasionally').

Independent t-test results revealed that male PE teachers agreed that administrators

had discussion with them before assigning them to teach PE, however female counterparts disagreed ($t(1273)=2.622$, $p=0.09$, $M_{\text{male}} = 3.01$, $M_{\text{female}} =2.82$). Similarly, male PE teachers agreed that administrators assigned PE class based on their interest as compared to female teachers ($t(1274)=8.880$, $p=0.001$, $M_{\text{male}} = 3.03$, $M_{\text{female}} =2.44$). In addition, male teachers (mean=2.97) agreed that PE classes were assigned to them based on their professional qualification as compared to females (mean=2.47) ($t(1274) =7.521$, $p=0.001$, $M_{\text{male}} = 2.97$, $M_{\text{female}} =2.47$). Female teachers perceived that administrators assigned PE classes to them without prior notice as compared to male teachers ($t(1274)=-2.508$, $p=0.012$, $M_{\text{male}} = 2.48$, $M_{\text{female}} =2.65$). Further, female

teachers felt that they were given PE classes to fulfil their teaching load ($t(1274)=-3.863$, $p=0.001$, $M_{\text{male}} = 3.05$, $M_{\text{female}} =3.32$).

Non-human Factor: The Edequacy of Resources (Facilities, Equipment and Financial Support) to Teach PE

Analyses of the statements in Table 4 showed that almost half of the PE teachers perceived that facilities (52.2%) and equipment (48.1%) for PE were inadequate. Only 42% of PE teachers agreed (*'strongly agreed'* and *'agreed'*) that financial allocation for PE was adequate. About one third of PE teachers concurred that library PE books were adequate (35.8%), suitable (36.5%) and about 30% of PE teachers perceived that there were ample national language PE reference books in the library.

Table 3

Teachers' perception on PE class distribution practice

Class Distribution Practice	Percentage Occurrence					M	SD
	<i>N</i>	<i>RLY</i>	<i>OLY</i>	<i>FLY</i>	<i>AL</i>		
Class assigned based on consultation with administrators.	18.9	16.0	29.4	26.1	9.6	2.9	1.2
Class given based on interest.	21.0	21.3	28.4	21.5	7.8	2.7	1.2
Class given based on Physical Education qualification.	21.4	21.3	28.4	22.1	6.8	2.7	1.2
Class assigned without teacher's prior knowledge.	26.3	22.5	27.6	15.8	7.8	2.6	1.2
Class allocated to fulfil teaching workload.	13.4	14.2	29.9	25.3	17.2	3.2	1.3

Notes: N = Never; RLY = Rarely; OLY = Occasionally; FLY = Frequently; AL = Always

Table 4

Teachers' perception on non-human factors

Statements	Percentage Agreement					M	SD
	<i>SA</i>	<i>A</i>	<i>U</i>	<i>D</i>	<i>SD</i>		
There are sufficient PE facilities in the school.	4.7	47.5	22.3	23.5	2.0	3.3	0.95
Financial allocation for PE is adequate.	6.3	35.7	40.6	15.4	2.1	3.3	0.88
Equipment for PE class is adequate.	4.9	43.2	22.5	27.4	2.0	3.2	0.97
There are ample PE reference books in the school library.	3.0	32.8	33.4	26.9	3.9	3.0	0.93
PE reference books are suitable.	2.6	33.9	40.4	20.4	2.7	3.1	0.86
There are ample national language PE reference books in the library.	2.0	27.6	39.7	26.3	4.3	3.0	0.89

Notes: SA = Strongly Agree; A = Agree; U = Undecided; D = Disagree; SD = Strongly Disagree

Independent t-test results showed non-significant differences in all the six statements based on gender.

DISCUSSION

This research examined primary school PE programme in Malaysia. The results of the perception of PE implementation in Malaysia were compared with similar research in other countries for a global perspective.

Teaching Ability and Inadequacy of Specialist PE Teachers

Data analyses disclosed that only 6.2% of the teachers were qualified PE teachers. The shortage of PE teachers was aggravated by non-existence of PE specialist teachers as 71% of the PE teachers had a weekly teaching load of less than 5 periods.

The low percentage of PE majors teaching PE was not in accordance to the policy of MOEM (2016) where it was stated that PE teachers must be qualified in PE or having specialist training in PE. Similar situations were reported in other countries. In a study of the provision

of PE in 78 Singapore primary schools, McNeill et al. (2009) revealed that 84% of PE teachers were non-PE specialist with half of the schools having two or less PE specialists. Similarly, Ken (2008) reported 85% of the European countries surveyed employed generalist teachers to teach PE at the elementary level. Salleh and Darmawan (2013) in Malaysia and Weldon (2016) in Australia concurred that out-of-field teaching was common in schools. On the contrary, in Thailand, Amornsriwatanakul et al. (2016) reported that 60% of PE classes were taught by PE specialists.

Numerous Malaysian researchers have reported that even though PE teachers insisted that they could handle their PE students (80% agreed; Wee, 2014), majority of them lacked adequate PE pedagogical knowledge (Chong & Salamuddin, 2010; Noreha & Juslimah, 2009; Wee, 2014), not equipped to teach game skills, and detect and correct student weaknesses (Wee, 2014).

Consequently, PE teachers avoid teaching artistic and rhythmic gymnastics skills (Chong & Salamuddin, 2010), taught only topics that were familiar and often referred to resources during teaching (Husaina et al., 2015).

On the findings of the superiority of male teachers over female counterparts in having knowledge to teach PE, could manage students and fitness activities, could teach sports skills, can detect and correct students' weaknesses, Wee (2014) found that male teachers perceived their teaching abilities to be higher than that of female teachers in all aspects of teaching abilities found in this study. In another study, Wee and Raj (2010) examined 60 males and 51 females PE teachers in Malaysian secondary schools and found that male teachers were more knowledgeable than female teachers. However, on the contrary, Kovac et al. (2008) surveyed 85 Slovenia PE teachers and reported that female teachers felt significantly more competent than their male counterparts in PE pedagogy, sports pedagogy, classroom management, organizing sport activities and assessment, evaluation and grading. The deficiency in teaching might be the result of the lack of prior professional experience (Alfrey et al., 2012). Primary school teachers felt that they needed to attend PE courses. This is supported by IOM (2013) that when teachers lack training and knowledge, they lack confidence in teaching. Similarly, in New Zealand, Gordon et al. (2013), and Petrie et al. (2013) reported that limited professional development opportunities

had impacted the delivery of PE in primary schools resulting in the lack of professional confidence of classroom teachers to teach PE (Dyson et al., 2016; Powell, 2015). On the contrary, Callcott et al. (2012) believed that generalist teachers had knowledge of students' needs and could provide security and psychological support in primary classroom, thus they were capable of providing developmentally appropriate, best-practice instruction in PE.

Administration of PE Programme

The research results showed that administrators did not consider PE important. Administrators did not often discuss PE teaching assignments, rarely deliberated on factors affecting the teaching and learning of PE with teachers. In addition, they did not plan in-house training programme, did not provide adequate financial support for PE facilities, and rarely observed the teaching of PE.

Chong and Salamuddin (2010) revealed that when exams were approaching, PE classes were used for other subjects such as mathematics and science to enable them to cover the required syllabi. This was previously documented by Wee (2009) that 73.7% of principals 'always' replaced PE classes with other subjects.

Research in other countries have also reported similar findings. In Brazil, 37% of PE teachers faced a lack of recognition in school and 54% had insufficient training (Osborne et al., 2016). Similarly, in Australia Jenkinson and Benson (2010) examined 115 PE teachers and reported that only 3

per cent of respondents reported that PE and sport education were the main priority within their school. Jing (2016) reported that PE teachers frequently expressed discontent about themselves not being seen as legitimate professionals and PE being labelled inferior. In Europe, Griggs (2012) reported that primary school PE had received less attention than secondary school PE.

On observation of PE teachers, Wee (2009) reported that only about 51% of principals 'frequently' and 'always' observed PE lessons, and 6% of them authorized their assistants to carry out their responsibilities. Similarly, PSIR (2007) revealed that only 18.5% of 46 schools performed the mandatory supervision at school level.

On the issue of administrators not taking the initiative to provide training to teachers, Wee (2009) assessed 290 secondary schools and found that only 14% of the principals planned in-house training programmes for unqualified PE teachers.

On the contrary, Strampel et al. (2014) surveyed 36 primary schools and 137 teachers in Ontario, Canada using a 5-point Likert scale revealed that staff and administration perceived that PE/Daily PA as important (mean=3.93), administrators supported PE/Daily PA at school (mean=3.84), and there was supervision on PE/Daily PA (mean=3.22).

PE Class Distribution: Consultation Practise among Administrators

This study revealed that there was a lack of consultation in workload assignment for teaching PE; teachers were assigned to teach

PE without considering their interest and qualification. Often, PE classes were given to fulfil total teaching loads.

In Malaysia, Wee (2014) reported that only 28.4% of PE teachers agreed that they were frequently and always consulted by administrators before being assigned PE classes. About 9% of them perceived that they were given PE classes due to their interest. Almost 68% ('never' and 'rarely') of PE teachers emphasized that their assignment was given without considering their qualification. About half of the sample (46.3%) reported that they had no knowledge of PE teaching assignment. In fact, only 18.6% (responses as 'frequently' and 'always') of the respondents agreed that PE classes were given to teachers in order to fulfil the number of teaching periods required. In Brazil, PE assignment was given without teachers' knowledge because PE was treated as a marginalized subject in schools (Osborne et al., 2016).

Globally, the use of unqualified teachers to teach PE was not uncommon. In Singapore, McNeill et al. (2009) reported that 50% of the 78 schools surveyed had two or less PE specialists. In Australia, Lynch and Soukup (2017) revealed that 81% of principles/head teachers confirmed that classroom teachers were often solely responsible for the implementation of Health and PE in public schools. Similar situation existed in primary school in Ghana (Sofu & Asola, 2016).

Jenkinson and Benson (2010) examined teaching priority in Australian primary schools and found only 3% of respondents

perceived PE as the main priority within their school. Strampel et al. (2014) surveyed 36 primary schools and 137 teachers in Ontario, Canada and found that PE was not a high priority subjects as compared to other academic subjects.

Non-human Factor: The Adequacy of Resources (Facilities, Equipment and Financial Support) to teach PE

The results of this study showed teachers perceived books, equipment, facilities and financial allocation for PE were inadequate.

In Malaysia, Syed Ali et al. (2014) examined non-human factors in 155 primary schools involving 310 PE teachers. Seventy-seven percent of the teachers acknowledged shortage of PE equipment in their schools while 86% reported that damage equipment was unrestored or not replaced. These might be due to insufficient funding for PE (79% agreed) which was exacerbated by inappropriate usage of PE budget (81% agreed). They also revealed that outdoor facilities were narrow (83% agreed) and crowded (85% agreed).

Similar situation was reported by McNeill et al. (2009) in Singapore where 58% of PE teachers felt that PE facilities were inadequate. This is supported by Strampel et al. (2014) in Canada where outdoor and indoor facilities were not only inadequate but indoor facilities were often used for other events. Similarly, indoor gym for PE classes was used as a resource room or study room for other subjects (Kougioumtzis et al., 2011). The situations were clearly inferior when compared with European schools where around two-thirds

of the countries surveyed indicated the quality of facilities for teaching PE to be adequate to excellent (Ken, 2008).

CONCLUSION

This study shows that majority of the PE teachers perceived themselves to be able to manage their class, could teach sport skills as well as detect and correct students' weaknesses. However, almost half of the surveyed subjects acknowledged that they lacked PE pedagogical knowledge especially in the teaching of gymnastics. Male teachers perceived they were better than female teachers in those above-mentioned aspects except the teaching of gymnastics. Both male and female teachers echoed the need to attend PE courses and get exposure through in-house courses. The results suggest that specialist PE teachers are very much needed. Thus, leadership role and attitude toward PE of school administrators are important. However, the results of this study revealed that only about half of the administrators assumed PE to be important in the school curriculum. Majority of the administrators assigned teachers to teach PE without consultation, let alone taking into consideration teachers' interest and qualification. Administrators rarely had discussion on factors affecting teaching and learning of PE. In addition, they did not observe PE teaching and plan in-house training as required by the MOEM. They also did not provide adequate financial support for PE facilities as well. On non-human factors, PE teachers perceived that financial allocation was inadequate leading

to insufficient facilities, equipment and reference books. To overcome the above-mentioned issues, numerous proposals could be implemented by MOEM such as to conduct more PE in-house training programme and special courses to upskill non-PE majors and to enhance the performance of teachers who performed unsatisfactorily. While the implementation of PE at the school level depends on the vision of the school administrators, it is important that various stakeholders work together to advocate for quality PE programmes for all students in Malaysia.

ACKNOWLEDGEMENT

I would like to thank the Faculty of Applied Sciences, Tunku Abdul Rahman University College, Kuala Lumpur for providing the financial support, both for the conference fee and the publication fee.

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