



EFFECTIVE LEARNING ENVIRONMENTS IN PHYSICAL EDUCATION

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Abstract

Background. Physical education (PE) has been acknowledged as important by scholars all across the world. As a result, they have been looking for techniques to improve PE teaching and learning. There are various ways that may be used to improve PE teaching and learning. The most effective way identified in the research, however, is the classroom management approach. Furthermore, because the learning atmosphere in the classroom is inappropriate, PE teachers have been unable to regulate the class and handle students' discipline problems.

Study purpose. As a result, the goal of this study is to explore the impact of classroom management practices on the learning environment.

Materials and methods. The Classroom Management Methods questionnaire and the Self-Evaluation of Teaching Effectiveness in PE questionnaire were used to collect data from 359 instructors in a high school in Indonesia.

Results. The findings demonstrated that preventative and corrective techniques have a considerable impact on the learning environment. Meanwhile, the supporting approach has no discernible effect on the learning environment. These findings can help school administrators, such as the principal and PE teacher, choose suitable classroom management strategies to deal with misconduct.

Conclusions. As a result, improving and sustaining a good learning environment in high schools also supports the teaching and learning process, hence increasing students' learning efficiency.

Keywords: classroom management, physical education, learning environment.

Introduction

Physical education (PE) is widely recognized and accepted across the world. This is due to the abundance of scientific research demonstrating that PE benefits pupils (Bevans et al., 2010; Botagariyev et al., 2016; Dyson, 2014). Recognizing the growing trends in research in this sector, Indonesia has been actively seeking methods to develop PE teaching and learning process to be more effective, which includes arranging classroom atmosphere to positive learning environment as well as approaches to managing misbehavior in classroom to enhance the teaching and learning process, which will increase students' learning (Beazidou et al., 2013; Bertills et al., 2018; Wilson, 2018). According to Botagariyev et al. (2016) classroom management in PE class should not only focus on placing chairs or tables in the square room, but

also on avoiding students' misconduct, helping students on the correct road, and dealing with difficulties that develop in the classroom.

Teachers can use a variety of tactics in the classroom to change and regulate students' conduct, such as preventative approaches, which are proactive measures for preventing students' unpleasant behavior. According to Larson, et al (2018), preventative tactics should be used before an issue arises to prevent the unforeseen problem and foster positive conduct in the classroom. A teacher who is not prevention-oriented, on the other hand, will be liable for producing student disciplinary issues in the classroom (Gareis & Grant, 2014). Furthermore, supporting measures are used to aid pupils in regaining control and getting back on track.

According to Chacon-Cuberos et al., (2020), supportive practices in the classroom are significant elements for student learning and progress. Furthermore, supporting tactics are those that assist students in re-energizing the class and effectively motivating them. Meanwhile, if the instructor did

not find preventative and supportive methods relevant in regulating specific behaviors of the students, there are additional ways such as corrective approaches to fix the students' behavior. Previous studies revealed that using punishment in PE class was the most effective correction strategy.

According to Yarmak et al. (2017), punishment should be used in the classroom to reduce undesirable behaviour. Similarly, Tekindal et al. (2017) states that punishment can either increase or lessen kids' problems in the classroom. As a result, either preventative, supporting, or corrective tactics impact classroom management practices. On the other side, Rahimi & Karkami (2015) demonstrated that a PE instructor may fail to manage a classroom because he is unable to supervise classrooms and students' discipline conduct.

Recently, academics have drawn attention to the importance of managing and keeping a positive learning environment in the classroom since it promotes and maintains a positive learning environment that assures support for students, which leads to dedication to their class. Lopes et al. (2017) discovered that when students are in an adequate and safe learning environment, they feel at ease, trustworthy, and motivated to study. On the other hand, if they encounter a dangerous atmosphere, such as classrooms with broken windows and tables and chairs that are falling apart, they lose interest in the subject (Larson et al., 2018). As a result, the classroom setting is important in generating a conducive learning environment.

According to Osborne et al. (2016) classroom organization is an important component in the learning environment since it aids the entire teaching and learning process. This is consistent with Hannah (2013) claim that if a classroom is not managed properly, it hinders learning progress or does not provide a healthy learning environment. Unfortunately, very few empirical evidences have been discovered that investigate the influence of classroom management practices on learning environment among Indonesia high school teachers. Thus, in order to build successful PE teachers and enhance the efficiency of students' learning in Indonesia, empirical research into the influence of classroom management techniques toward learning environment in PE class is required.

The purpose of this study was to investigate at the classroom management practices in PE class regarding the learning environment among high school teachers in Indonesia. The study will also focus on characteristics of classroom management techniques in numerous aspects, including preventative strategies, supporting strategies, and corrective strategies toward learning environment, to have a better understanding.

Materials and methods

Design

The quantitative research approach is used in this investigation. In order to meet the aims, the instrument utilized in this study contains two questionnaires for data collection.

Study participants

To gather data for this study, a questionnaire was administered in person. Physical Education instructors were

among those who responded. A total of 359 high school teachers from Indonesia were chosen to participate in the data gathering. All of the surveys were completed and returned, yielding a 100% response rate; 96.82 percent of the questions were complete (347 sets), while 3.18 percent had some missing data (12 sets). The response rate of the questionnaire in this study is shown in table 1.

Table 1: Questionnaire response rate

Response	Frequency	Percentage
Questionnaires were distributed.	359	100
Questionnaires returned	359	100
Questionnaire not returned	0	0
Questionnaires that are incomplete	0	0
Questionnaires that were returned	12	3.18
Questionnaires that were saved	347	96.82

Study organization

McCormark (1997) provided the classroom management techniques questionnaire (table 2). Meanwhile, Kyriridis et al. (2014) used the self-evaluation teaching effectiveness in Physical Education (SETEQ-PE) to gather data in the learning environment (table 3). Both questionnaire replies were graded on a five-point Likert scale: frequently (5), occasionally (4), infrequently (3), rarely (2), and never (1).

Table 2. Classroom Management Strategies Detail

No	Variables	Items
1	Preventive Strategies	Positive relationships
2		Effective communication
3		Active listening
4		Being genuine
5		Clear expectations
6		Clear directions
7		Effective movement management
8	Supportive Strategies	Praise and encouragement
9		Communicating understanding
10		Using logical consequences
11		Humors
12		Wittiness
13		Rules
14		Commands and orders
15		Proximity control
16		Desists
17		Contracts
18		Detention
19		Timeout/exclusion
20		Parent referrals

(Source: McCormark (1997))

Table 3. Learning Environment Detail

No	Items
1	Do you individualize your teaching so that each of your students improves emotionally and socially?
2	Do you individualize your teaching so that each of your students improves kinetically?
3	Do you individualize your teaching so that each of your students improves cognitively?
4	Is student safety (physical, emotional, social) guaranteed during your lesson?
5	Do you modify your lesson plan to ensure motivation, progress, and safety to students?

Source: Kyrgiridis et al (2014)

Statistical analysis

The data collected from those teachers was analyzed using two types of statistical software: Statistical Package for Social Sciences (SPSS) version 23 for preliminary data analysis and Partial Least Square-Structural Equation Modeling (PLS-SEM) version 3 for examining the formation of reflective measurement model and structural equation model.

Results

In order to evaluate a measurement model there are four processes to assess namely; examining individual item reliability, ascertaining internal consistency reliability, ascertaining convergent validity, and ascertaining discriminant validity.

Table 4. Frequency of Respondents

Profile	Factors	Frequency	Percentage
Gender	Male	242	67.5%
	Female	117	32.5%
Age	< 25	17	4.7%
	26-35	137	38.2%
	36-45	164	45.6%
	> 46	41	11.5%
Academic Bachelor's degree	PE	274	76.4%
	Sport sciences	64	17.7%
	Health Education	10	2.7%
	Elementary Education	11	3.2%
Teaching experience (years)	< 2	40	11.1%
	3-6	49	13.7
	7-10	116	32.4%
	11-14	78	21.5%
	>15	76	21.3%

The measurement model's results are shown in table 5; the composite reliability scores for the four constructs ranged from 0.759 to 0.857. According to Leguina (2015), the composite dependability value should be more than 0.7. The AVE ranged from 0.53 to 0.578. This is consistent with to Leguina (2015) recommendation for AVE, which should be

Table 5. Summary of Standardized Loading, Composite Reliability (CR), and Average Variance Extracted (AVE)

Constructs	Indicators	Loading	CR	AVE	Convergent validity
Preventive	cms1p	0.676	0.871	0.53	Yes
	cms4p	0.763			
	cms5p	0.723			
	cms6p	0.733			
	cms8p	0.721			
Supportive	cms9p	0.732	0.825	0.531	Yes
	cms10p	0.762			
	cms12p	0.783			
	cms13p	0.742			
	cms14p	0.673			
Corrective	cms15p	0.726	0.759	0.531	Yes
	cms18p	0.671			
	cms19p	0.743			
	cms20p	0.724			
	te21evm	0.812	0.857	0.578	Yes
Learning Environment	te22evm	0.839			
	te23evm	0.771			
	te24evm	0.625			
	te25evm	0.711			

at least 0.5 for each variable to be adequate. The current research items have loadings for indicators ranging from 0.625 to 0.839. According to Leguina (2015) proposed removing the loading for indicators with values less than 0.40. As a consequence, all of the results suggesting the model of this study met the needed requirements.

Table 6. The Fornell-Larcker Criterion Analysis

Indicators	Corrective	Learning Environment	Preventive	Supportive
Corrective	0.815			
Learning Environment	0.166	0.742		
Preventive	0.003	0.512	0.722	
Supportive	0.132	0.438	0.628	0.735

Table 6 shows that in the Fornell-Larcker measurement, the AVE square root values in the first order construct should be greater than the correlations among all the other variables (2016), as evidenced by the results showing that the AVE value is greater than the value of all the constructs below it.

The Heterotrait Monotrait criteria of correlation (HTMT) is shown in table 7, (HTMT). According to Hensel-

Table 7. The Heterotrait Monotrait (HTMT) Criterion

Indicators	Corrective	Learning Environment	Preventive	Supportive
Corrective	-			
Learning Environment	0.265	-		
Preventive	0.183	0.612	-	
Supportive	0.233	0.58	0.728	-

Table 8. PLS-SEM

Relationship	Std. Beta (b)	T Values	P Values	Finding
PS->learning environment	0.413	5.331	0.001	*significant
SS->learning environment	0.146	1.533	0.143	not significant
CS->learning environment	0.165	3.158	0.003	*significant

Note: *significant at $p < 0.05$

er et al. (2015), the HTMT value of correlation should not be greater than 0.85. The HTMT values in this study are less than 0.85.

Table 8 depicts the hypothesis evaluation using the bootstrapping PLS-SEM. The findings revealed a significant relationship between corrective strategies (CS) and learning environment ($b = 0.165$, $T = 3.158$, $P < 0.05$) and between preventative strategies and learning environment ($b = 0.413$, $T = 5.331$, $P < 0.05$). However, no relationship was discovered between support techniques and learning environment ($b = 0.146$, $T = 1.533$, $P > 0.05$).

Discussion

These findings provide empirical evidence for the current study's conclusion that there is a substantial relationship between classroom management practices and learning environment among high school teachers in Indonesia. These data show that preventative and corrective techniques contribute considerably and favorably to the learning environment among high school teachers in Indonesia, but supporting approaches have no significant influence on the learning environment.

The findings revealed a substantial relationship between preventative methods and learning environment among high school teachers in Indonesia. The possible cause of this effect is the respondents' teaching experience, which is evident from the demographics of the participants (see table 4). According to Ozben (2010), teachers with greater teaching experience can manage and establish a pleasant learning environment to reduce student misconduct. According to Kayani (2018), teaching experience is favorably associated to classroom management for reducing undesirable conduct. This is because teachers with greater teaching experience have different techniques to dealing with pupils' misconduct (Sprick, 2013).

Furthermore, the findings revealed a substantial relationship between corrective techniques and learning environment among high school teachers in Indonesia. These findings are consistent with the prior finding, which is connected to the instructors' experience. These findings are similar with the Lopez-Gonzalez et al. (2017). This is because those with extensive teaching and training experience may bring their knowledge to bear in managing their classrooms (Chu & Zhang, 2018; Ratten & Jones, 2018). As a result, it was proposed that the 40 of all responders be reduced to less than 11.1 percent in year terms.

Conclusions

Overall, the current study discovered that preventative and corrective measures have a considerable influence on the learning environment. On the other hand, supportive

techniques had no substantial effect on high school teachers in Indonesia. Yet, supportive approaches to the learning environment cannot be ignored; however, new techniques to assist the learning environment are required. As a result, this study can assist PE instructors understand how to choose classroom management approaches to tackle disobedience and to improve and maintain a healthy learning environment in high schools. The current study has several limitations because the data was obtained exclusively in the area of Indonesia.

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Conflict of interest

The authors declared no potential conflicts of interest.

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ЕФЕКТИВНІ НАВЧАЛЬНІ СЕРЕДОВИЩА У ФІЗИЧНОМУ ВИХОВАННІ

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Реферат. Стаття: 6 с., 8 табл., 1 рис., 26 джерел.

Історія питання. Фізичне виховання (ФВ) визнане важливим ученими в усьому світі. У цьому зв'язку вони шукали методи покращення викладання та навчання ФВ. Існують різні способи, які можна використовувати для покращення викладання та навчання ФВ. Однак найефективнішим способом, визначеним у процесі наукових досліджень, є підхід до управління роботою на уроці. Крім того, через неналежну навчальну атмосферу на уроці вчителі ФВ були не в змозі регулювати заняття та вирішувати проблеми з дисципліною учнів.

Мета дослідження. Таким чином, метою цього дослідження є вивчення впливу практичних підходів до управління роботою на уроці на навчальне середовище.

Матеріали та методи. Для збору даних було проведено опитування 359 вчителів старших класів середньої школи в Індонезії з використанням анкети «Методи управління роботою на уроці» та анкети «Самооцінка ефективності викладання на заняттях із ФВ».

Результати. Результати показали, що попереджувальні та коригувальні методи мають значний вплив на навчальне середовище. При цьому підтримувальний підхід не має помітного впливу на навчальне середовище. Ці результати можуть допомогти таким представникам шкільної адміністрації, як директор і вчитель ФВ, у виборі належних стратегій управління роботою на уроці для вирішення проблем із поганою поведінкою.

Висновки. Отже, покращення та підтримання належного навчального середовища в середніх школах також сприяє процесу викладання та навчання та, відповідно, підвищує ефективність навчання учнів.

Ключові слова: управління роботою на уроці, фізичне виховання, навчальне середовище.

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