

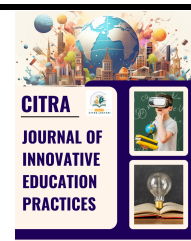


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# Best Practices of Physical Education Major Training Teachers on Risk Physical Education

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ARTICLE INFO	ABSTRACT
<p><b>Article history:</b> Received 17 February 2025 Received in revised form 11 March 2025 Accepted 15 April 2025 Available online 1 Jun 2025</p> <p><b>Keywords:</b> Risk management; knowledge; skills; trainee teachers</p>	<p>Physical Education is a subject that involves high risk from the aspect of injury and safety because it involves physical activity and an environment that poses a high risk to students if not managed well. Therefore, important risk management practices are mastered by Physical Education major trainee teachers to achieve a safe environment. This study was conducted to identify the best practices from the aspects of knowledge and skill of Physical Education Major trainee teachers regarding risk management in physical education. The study respondents comprised 92 trainee teachers majoring in Physical Education in the Southern Zone. This study uses a quantitative approach with a questionnaire as a research instrument. The data of this study was analyzed descriptively. The analysis found that the knowledge level was very high, with a score of <math>M = 4.41</math>, and <math>SP = 0.264</math>. The mean score value for skill level is <math>M = 4.40</math>, <math>SP = 0.301</math>. Suggestions for improvement are also presented in this study. The results of this study can impact certain parties in empowering risk management practices among trainee teachers of Physical Education majors.</p>

## 1. Introduction

Every student in Malaysia deserves the opportunity to pursue Physical Education. Physical Education and sports activities are always exposed to risks. Risk refers to the possibility of threats or disasters occurring that may disrupt the smooth flow of activities, thereby hindering the achievement of an organization's vision, mission, objectives, and goals by Din Ayub [1]. A risk is an event that has the potential to cause negative impacts on a particular party. Risk management is a systematic and continuous process of identifying, assessing, managing, and reducing the risks of accidents and injuries by Pirontha Kalaiselvan and Megat Ahmad Kamaluddin Megat Daud [2] and Fatimah [11]. Risk management is an issue that frequently arises because it involves personal safety and can lead to accidents with negative consequences. The goal of the National Education Philosophy is to produce well-rounded individuals in terms of intellect, spirituality, emotions, physical fitness, and social well-being (JERIS) by Nursuhaila Mohamad Zaini and Tajul Arifin Muhamad [3]. Physical Education is a

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subject that requires students to follow physical activities comprehensively and always face the risk of accidents and injuries, until now there is no risk management module in schools. Physical Education teachers are only guided by general safe school guidelines by Fatimah[11] and Mohd Najib [17]. Risk management is very important in planning and managing an activity to ensure the safety of students and teachers must also be competent in managing risks by Mohd Najib [17]. Therefore, Physical Education major trainee teachers need to be competent in risk management to enable them to manage and carry out physical activities that are planned and free from any form of risk.

### 1.1 Problem Statement

Physical Education provides students with various engaging physical activities while enhancing their potential, talents, confidence, physical skills, mental health, and overall well-being. However, safety and risk management in Physical Education have become controversial issues among parents and society. Cases of safety risks affecting students, leading to injuries and accidents, have been reported. This is partly due to teachers' lack of awareness of hazardous environments for students by Podstawski Robert *et al.*, [4]. According to Marinah Awang and Norhazwani Suyanto [5], accidents, injuries, and even fatalities among students continue to occur, both inside and outside school premises. As a result, safety risks have caused parents to worry about involving their children in recreational and sports activities due to concerns about potential injuries by Muhammad Syakir Sulaiman *et al.*, [6]. This situation significantly impacts Physical Education teachers. Teachers need to be competent in managing risks to increase parents' confidence in allowing their children to participate in Physical Education activities. Robust risk management will enhance the organization's name and confidence in the organization's level of security.

### 1.2 Literature Review

The risk of injury, accident and death has occurred during school activities due to negligence and incompetent teachers risk management by Mohd Najib, H., [17]; Awang and Norhazwani, S., [5]. The issue of teachers being incompetent in risk management, negligence, not prioritizing safety is the cause of injuries and accidents. According to Mohd Najib, H., [17]; Jaffry *et al.*, [19], Fatimah.M., [11]. This issue causes the quality of Physical Education and school sports to deteriorate. In the view of some sports coaches, accidents are inevitable during physical activity because they are part of a movement that generally has its own risks according to Porsanger and Sandsete [15]. Therefore, anyone who is physically active should be aware of the risks. This is supported by Lisa Porsanger [20], based on her research, she opined that in implementing Physical Education programs in schools, it is the teacher's job to identify, evaluate, manage, risk and safety and in parallel with learning pedagogy is quite difficult. This is because, in carrying out physical activities, risk management must be important in line with the risks of planned physical activities. This is so that various untoward incidents such as injuries and accidents occur due to not giving importance to the risk management aspect in planning and implementing activities by LI, B., [21]. Risks cannot be eliminated but can be prevented through competent teachers and the implementation of efficient and steady risk management practices.

### 1.3 Research Objective and Questions

The following research objectives have been outlined: 1. To Identify the level of knowledge of Physical Education major trainee teachers regarding risk management in Physical Education. 2. To identify the level of skills among Physical Education major trainee teachers in risk management for Physical Education. To address these objectives, the study aims to answer the following research questions: 1. What is the level of knowledge among Physical Education major trainee teachers regarding risk management in Physical Education? 2. What are the dominant skills of Physical Education major trainee teachers in risk management for Physical Education?

## 2. Methodology

This study uses a quantitative approach. According to Miles *et al.*, [7], Pirontha Kalaiselvan and Megat Ahmad Kamaluddin Megat Daud [2] and Creswell [18], qualitative research methodology provides tools for researchers to study complex phenomena in the context of their studies. This study uses a review study approach involving educator students from several teacher education institutes who train teachers in the field of physical education major. To obtain the required data, the researchers conducted a simple random sampling. For this purpose, the researcher has distributed a questionnaire instrument to a total of 92 educator students. Prior to conducting the study, this questionnaire instrument was tested for the validity and reliability of each item. After testing, the researchers found that the alpha value of the cronbach instrument was 0.95. According to Bond and Fox [22] the cronbach alpha value of 0.9-1.0 is at an excellent and effective stage with a high level of consistency. Therefore, this instrument can be used for study purposes and can measure each construct found in this study. The selected research instrument is a questionnaire designed to measure respondents' responses. The questionnaire was structured based on the required information, including the number and content of items. The researcher developed the instrument by modifying existing instruments from Pirontha Kalaiselvan & Megat Ahmad Kamaluddin Megat Daud [2], Soon Singh A/L Bikar Singh *et al.*, [8], Nasiyatun Ummah Nasir *et al.*, [9], Suzlina Hilwani Baharuddin & Jamaludin Badusah [10], and Fatimah Mustaffa [11] to align with the research objectives

## 3. Findings and Discussion

### 3.1 Analysis of Physical Education Major Trainee Teachers' Knowledge Level In Risk Management

A descriptive analysis was conducted, involving frequency, percentage, mean, standard deviation, and level categorization, to determine Physical Education major trainee teachers knowledge of risk management in Physical Education. The results of the descriptive analysis are presented in the table below:

**Table 1**

### Result of descriptive analysis

Bil	Items	Mean (M)	Standard Deviation (SP)	Level
1.	I am knowledgeable in the concept of risk management in Physical Education	4.43	0.541	Very High
2.	I am well versed in risk management procedures and policies.	4.24	0.521	Very High
3.	I am knowledgeable in managing activities to avoid the occurrence of risks.	4.55	0.562	Very High
4.	I am knowledgeable in understanding the importance of risk management.	4.40	0.556	Very High
5.	I am knowledgeable in identifying risks well.	4.58	0.519	Very High
6.	I am knowledgeable in exposure from the aspect of skill in risk management.	4.25	0.483	Very High
7.	I am knowledgeable in handling a risk (knowing what to do) in the event of any accident.	4.36	0.566	Very High
8.	I am knowledgeable in applying risk management principles.	4.30	0.550	Very High
9.	I am knowledgeable in applying risk management principles.	4.55	0.542	Very High
10.	I am knowledgeable in ensuring that the activity site is in a safe condition before, during and after the activity.	4.45	0.500	Very High
<b>Overall</b>		<b>4.41</b>	<b>0.264</b>	<b>Very High</b>

Table 1 above shows the results of the level of knowledge of Physical Education major trainee teachers on risk management. The results of this data were obtained through the selection of five-point Likert scale answers. Referring to the data above, it was found that all ten items were at a very high level. Item 5 "I am knowledgeable in identifying risks well" recorded the highest mean score (4.58) with a standard deviation of (0.519). This shows that trainee teachers are able to apply risk management in PdP sessions which is very important in achieving the success of a planned activity by Ahmad Fadly Abdul Rahman [12]. In addition, the second highest mean was recorded by item 3, namely "I am knowledgeable in managing activities to avoid the occurrence of risks" and item 9 "I am knowledgeable in applying risk management principles" recorded the same mean, namely (4.55) with a standard deviation of 0.562 and 0.542 respectively. Item 10 "I am knowledgeable in ensuring that the activity site is in a safe condition before, during and after the activity" recorded the third highest mean (4.45) with a standard deviation of (0.500). Item 1 is the fourth highest item "I am knowledgeable in the concept of risk management in Physical Education" which recorded a mean value of (4.43) with a standard deviation of (0.541). Next, item 4 "I am knowledgeable in understanding the importance of risk management" recorded a mean (4.40) with a standard deviation of (0.556). Item 7 "I am knowledgeable in using a first aid kit in the event of any risk of injury" and item 8 "I am knowledgeable in handling a risk (knowing what to do) in the event of any accident" recorded mean values of 4.36 and 4.30 with standard deviations of 0.566 and 0.550 respectively. Item 6 "I am knowledgeable in the exposure of skills in managing risks" recorded a mean value of (4.25) with a standard deviation of (0.483). Finally, item 2 "I am clearly knowledgeable about risk management procedures and policies" recorded the lowest mean value of (4.24) with a standard deviation of (0.521). Overall, the findings show that the level of knowledge of trainee teachers is at a very encouraging level, where trainee teachers are knowledgeable about various forms of risk and risk management. This finding is supported by the study by Zuraida Kamaruddin and Zaidi Isa [13],

which also shows that the results found that the level of knowledge, attitude, awareness and effectiveness of risk management implementation is at a very good level. According to Yang Yang [14], mastery of risk management is capable of reducing and preventing injuries caused by negligence in the implementation of activities so that students can participate in all physical activities safely. 3.2 Analysis of the Dominant Skill Levels of Physical Education Major Trainee Teachers on Risk Management in Physical Education A descriptive analysis involving frequency, percentage, mean, standard deviation and level was used to identify the skill levels of Physical Education major trainee teachers on risk management in Physical Education. The results of the descriptive analysis are summarized in the table below:

**Table 2**  
Result of descriptive analysis

Bil	Items	Mean (M)	Standard Deviation (SP)	Level
1.	I have the maturity of judgment in managing risks appropriately.	4.36	0.505	Very High
2.	I have specific skills related to the activities being conducted.	4.37	0.588	Very High
3.	I am skilled in planning activities that are appropriate for the age, mental and physical condition of the students.	4.46	0.563	Very High
4.	I am skilled in ensuring that risky equipment (javelins, bullets, goal posts, etc.)	4.48	0.564	Very High
5.	I am skilled at ensuring that safety measures are followed when involving high-risk activities.	4.24	0.542	Very High
6.	I am skilled in planning activities according to the ability of each student.	4.39	0.573	Very High
7.	I am skilled in handling all forms of risks well.	4.34	0.634	Very High
8.	I am skilled at making advance preparations in planning risky activities.	4.47	0.583	Very High
9.	I am skilled in distinguishing between minor and severe/serious injuries.	4.47	0.564	Very High
10.	I am skilled in performing first aid and CPR.	4.40	0.575	Very High
<b>Overall</b>		<b>4.40</b>	<b>0.301</b>	<b>Very High</b>

Descriptive analysis based on Table 2 shows, Overall, the dominant skill level of Physical Education major trainee teachers towards risk management in Physical Education obtained a very high score. It can be classified that all ten items are at the same level of interpretation, which is very high. Item 4 "I am skilled in ensuring that risky equipment (javelins, bullets, goal posts, etc.) is always under the teacher's supervision" recorded the highest mean score (4.48) with a standard deviation of (0.564). This finding is supported by Lisa Porsanger and Lief Inge Mangnuseen [15], who said that before becoming a real teacher, trainee teachers were applied with skills in managing risks. Furthermore, the second highest item was recorded by item 8 "I am skilled at making advance preparations in

planning risky activities” and item 9 “I am skilled in distinguishing between minor and severe/serious injuries” with a mean (4.47) with a standard deviation of 0.583 and 0.564 respectively. The third highest mean (4.46) was recorded by Item 3 “I am skilled in planning activities that are appropriate for the age, mental and physical condition of the students” with a standard deviation of 0.563. Item 10 “I am skilled in performing first aid and CPR” recorded a mean value of (4.40) with a standard deviation of (0.575). Item 6 “I am skilled in planning activities according to the ability of each student” recorded a mean value of (4.39) with a standard deviation of (0.573). Item 2 “I have specific skills related to the activities being conducted” recorded a value of (4.37) with a standard deviation of (0.588). Accordingly, item 1 “I have the maturity of judgment in managing risks appropriately” recorded a mean value of (4.36) with a standard deviation of (0.505). while, item 7 “I am skilled in handling all forms of risks well” recorded a mean value of (4.34) with a standard deviation of (0.634). Finally, item 5 “I am skilled in ensuring that safety measures are followed when involving high-risk activities” recorded the lowest mean score (4.24) with a standard deviation of (0.542). This is likely due to the lack of emphasis in training and comprehensive exposure regarding risk management. However, the mean value shows that the score is still at a very high level, which means that the level of skill of the trainee teachers in risk management is still in a very good and competent condition. This is supported by the study of Pirontha Kalaiselvan and Megat Ahmad Kamaluddin Megat Daud [2], which also states that the level of skill of teachers in risk management is very high, where participants are sensitive to risk management practices and are able to apply measures that can reduce risks. Based on the study of Md Rahaimi Rashid *et al.*, [16], it shows that risk management skills become an internal control through preventive and remedial actions to overcome problems and weaknesses encountered.

#### 4. Conclusions

In conclusion, this study shows that the level of knowledge and skills of trainee teachers majoring in Physical Education on risk management is very high, with strong capabilities in the aspects of monitoring risky equipment, planning appropriate activities, and first aid skills. This shows that the courses and training received by trainee teachers are effective in preparing them to face potentially dangerous situations in Physical Education. This study is important to various parties, especially the Malaysian Institute of Teacher Education to continue to improve and strengthen training in risk management among Physical Education teachers. Therefore, this study needs to be continued and implemented in more detail to assess more deeply the knowledge and skills of trainee teachers in Physical Education on risk management. Therefore, the researcher suggests that qualitative approaches such as interviews and observations can be used as research methods. This is to obtain more relevant and accurate data findings on risk management of trainee teachers in Physical Education. In addition, this method also helps the researcher to obtain a clearer picture of best practices in terms of knowledge and skills of trainee teachers in risk management. Therefore, it is hoped that this finding can help further improve safety in Physical Education and be a guide for further research in this field.

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