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Students' Knowledge of Risk Management Practices in Sport

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ABSTRACT

Vocational education and extra-curricular activities such as sport are important in life. The transformation of vocational education has been attracting more students into this stream. Sport activities in vocational and technical colleges are co-curricular activities and require coaches to be skilled in sound risk management to ensure that they are safe and free of risk for participants. Professional sport is authorised by the public to make judgements in preparing and ensuring safe sport environments due to the nature of their specialised knowledge and training. The development of students' knowledge of risk management practices will help students to identify potential risk factors in sport, and to prevent, control and minimise the risk of accident and injury. This research aims to develop college students' knowledge of the practice of risk management in sport (DCSK-PRMS). This study is a survey, and involved a total of 120 respondents who were students of the College of Teacher Education (CTE) trained as sport coaches in vocational and technical colleges. The instrument used was a questionnaire and data were analysed using the Rasch Measurement Model to measure the implementation of four analyses for the purpose of examining the functionality of the items. The findings of the pilot study showed the reliability of the individual, while the Cronbach's Alpha reliability was 0.92 (very good) and the reliability was 0.72, indicating a good level. The findings show that the DCSK-PRMS is at a high level and is the dominant element in the supervision and training of sport activities.

Keywords: Development of knowledge of sport risk management practices, Rasch Measurement Model, vocational and technical colleges

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INTRODUCTION

Vocational education and extra-curricular activities such as sport are important in

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life (Hashim, 2016). The transformation of vocational education has been attracting more students into the vocational stream. Sport activities also contribute to good education and knowledge (Hishan, 2016; Zuber, 2003). Sport activities in vocational and technical colleges are co-curricular activities that require coaches to be aware of sound risk management to ensure that they are safe and free of risk for students (Australian Skill Quality Authority, 2015).

In educational institutions, including vocational and technical colleges in Malaysia, there teachers, coaches and sport administrators do not have a standard model to develop college students' knowledge of the practice of risk management in sport (DCSK-PRMS). Such a standard model would help to create zero risk in sport, in addition to increasing community involvement in sport. The Ministry of Education should plan the development of knowledge of risk management practices to ensure the safety of all facilities and equipment as well as the needs of sport activities (Esa & Mustaffa, 2015). Educational institutions, including vocational and technical colleges in Malaysia and colleges of special education, are guided by professional circulars, which are issued when the need arises (Ministry of Education [MOE], 2012). Therefore, coaches only build risk management models based on their creativity, knowledge, skills and professional experience. Circulars stress the importance of safety regulations in the field, on the court and in the pool (Esa & Mustaffa, 2015; Hassan, 2014; Surat Pekeliling Ikhtisas [SPI], 1988, 2000). In addition, some general aspects of security such as safety, partners, security tools and regions (Nord & Moore, 2008), which are issues that are important, need to be addressed to ensure a safe working environment to prevent accidents resulting in injury (Bafirman, 2014; Daroji & Chia, 2012; Rund, 2008). As there is no DCSK-SRMP model for use in Malaysia, the researchers conducted this research to produce one.

BACKGROUND

A coach is a significant factor in influencing athletic performance (Harter, 1981; Weiss, Ebbeck, & McAuley, 1990). Harter's theory (1981) explains that in knowledge development practice coaches identify significant risk is an element of performance in student development behaviour. Students who receive either consistent or inconsistent positive feedback from coaches will develop competence and ability to improve their athletic performance (Harter, 1981). This means that a coach who competently performs DCSK-PRMS can improve athletic performance in sport, and vice versa. These findings are supported by Esa, Padil and Hassan (2015), Hassan (2014), Smith, Smoll and Hunt (1979), Sander (1981) and Weiss (1987), who all state that the behaviour of the coach affects students' cognitive perception and attitude towards competition in sport.

According Esa and Mustaffa (2016), steps taken towards legal action against teachers is an element that has seeped into the field of education in Malaysia. As there is no risk management model, the

parent or student often claims in court that teachers were negligent and failed to carry out a precautionary measure. In one case involving negligent supervision of students, the student was blinded in the left eye during a game of hockey and in another, a student drowned (Esa & Mustaffa, 2015). In yet another case, the teachers failed to examine the rope during an abseiling activity, and this led to a student to suffering a foot fracture (Institut Pendidikan Guru Kementerian Pendidikan Malaysia [IPGKPM], 2011). According to Ang (2007) and Zuber (2003), the community, including teachers, still lacks clarity about aspects of risk management and security, which are extremely important and should always come first.

According to Hassan (2014), Bafirman (2014) and Rothe (2009), the model design is the development of risk management knowledge and methods to prevent accidents and injuries as well as to protect individuals as it can be used to serve as a guideline in the present and the future. The design focusses on the aspects of prevention, protection and security of schools that are free from negative elements, such as injury during sport programmes. Most risk management models are concerned with risk management in buildings, transport, the environment and business (MOE, 2012; MOE, 2002). However, risk management is not emphasised in sport. According to Thye (2010) and Rund (2008), the schools' management and the Department of Education, representing employers, have general responsibility for ensuring the safety and welfare of teachers and support staff as well as for protecting the students and visitors.

PURPOSE OF THE STUDY

The study was conducted for the DCSK-PRMS in a College for Teacher Education (CTE) that training sport coaches for vocational and technical colleges. Training involves supervision, training and sport activities.

OBJECTIVES

This research aimed to achieve the following objectives:

i. To develop a model for college students to develop their knowledge of the Practice of Risk Management in Sport in Malaysian CTEs where they are trained as sport coaches for vocational and technical colleges.

ii. To identify the dominant factors for the development of college students' knowledge of the Practice of Risk Management in Sport.

iii. To identify the reliability of the DCSK-PRMS.

Conceptual Framework

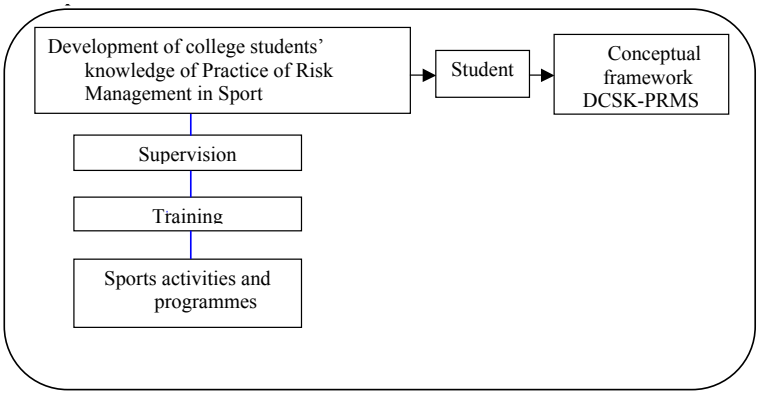

Figure 1. Conceptual framework

METHODOLOGY

This study is a survey, undertaken after identifying the research problem and defining the objectives and scope of the study. The instrument used was a questionnaire and a pilot study data analysis using the Rasch Measurement Model for the purpose of carrying out four diagnosis functionality checks on the items. In the pilot study the researcher used all the samples (purposeful sampling) as recommended by Jones (2009). The Cronbach's Alpha reliability and trustworthiness of individuals was 0.92 (very good) and the reliability was 0.72, indicating a good level. The actual study was conducted once the results of the pilot study were analysed. This study was a survey, and a total of 120 respondents were surveyed. They were from a CTE that trained sport coaches for vocational and technical colleges. The respondents comprised 67 males and 53 females. When the results were obtained, the researchers determined the dominant factors based on the analysis of the data using the Rasch Measurement Model.

RESULTS, DISCUSSION AND CONCLUSION

The main objective of this work was to develop a guide for college students' knowledge in the Practice of Risk Management in Sport for Malaysian CTEs that train sports coaches for vocational and technical colleges, and to identify the dominant factors for the development of college students' knowledge in the Practice of Risk Management in Sport.

Table 1
Overall implementation of DCSK-PSRM

Label	DCSK-PRMS	Mean	Level
SP	Supervision	4.27	High
TP	Training	4.32	High
SAP	Sport activities and programme	4.33	High

Based on the overall analysis of the DCSK-SRM, Table 1 shows that the respondents' approval was at a high level. Table 2 shows that the level of supervision of the implementation of DCSK-PSRM received the highest approval level. The findings are in line with Robinson (2012), who explained that risk is always present in activities and sport programmes i.e. no sport programme or physical education activity can really avoid accidents. Therefore, there should be systematic supervision of college students in developing knowledge by personnel who have risk management training to minimise risks and risk-related charges. Bafirman (2014), Robinson (2012), Hassan (2014) and Stephen and James (2012) explained that it was the responsibility of coaches and administrators to develop college students' knowledge in the implementation of systematic supervision in sport and physical education programmes. According to Bezdicek (2009) and Baker, Connaughton, Zhang and Spengler (2007), although the organisation may have an emergency action plan, the administrator needs to develop college students' knowledge in ensuring this plan is adopted and should provide training such as conducting emergency simulations. The study found that managers of sport facilities have inadequate training in developing students' knowledge, while studies of college students ound that more than half of the respondents had never received proper training in handling cases of risk management. In developing the knowledge of college students, instructors must always be with the participants, and may not leave them during the activity. Were coaches to leave the participants, in the event of an injury during their absence, they could be sued.

Table 2
Analysis of the level of supervision of the implementation of DCSK-PSRM

No	Supervision	Mean	Level
1.	Provides a comprehensive risk management plan for all sport programmes	4.52	High
2.	Emergency support network to know when an incident occurs	4.19	High
3.	Be able to assess the health of participants before starting the activity	4.21	High
4.	Able to act in accordance with the standard emergency plan	4.23	High
5.	The ability to use various forms of supervision	4.31	High
6.	Know the limitations of each sport programme	4.25	High
7.	Know your own limitations	4.28	High
8.	Knowledgeable use of warning signs	4.30	High
9.	Capable of recording medical reports and injuries occurring during an activity	4.30	High
10.	Capable of supervising a team of sport programmes outside emergency phone numbers by collecting certain parties	4.31	High
11.	Reports health status before carrying out activities	4.34	High
12.	Each exercise is carried out only under the supervision of a coach	4.36	High
13.	Always uses a true instrument in the supervision of teachers	4.36	High

Table 3
Analysis of the level of training of the implementation of DCSK-PSRM

No.	Training	Mean	Level
1.	Knowledgeable in applying the principles of risk management	4.21	High
2.	Knowledgeable about the capabilities of the equipment selected for a particular activity	4.27	High
3.	Able to organise training programmes that can use local resources	4.32	High
4.	Ready to follow the annual security training workshop for a period of 6-8 hours	4.33	High
5.	Capable of providing safety education to participants	4.34	High
6.	Trained in managing risk	4.34	High
7.	In-service training unit (UST) should offer incentives to increase the willingness to manage risk	4.36	High

Table 3 shows that the level of training of the implementation of DCSK-PSRM received the highest approval level. Risk management training should be practised at least once a year. The individuals who should be involved in this practice include student trainers, consulting team doctors, students training in sport activities and programmes, school and institutional security staff, administrators, coaches and other relevant personnel as prescribed by Bafirman (2004), Bezdicek (2009) and Drezner, Courson, Roberts, Mosesso, Link and Maron (2007). This finding was also supported by Gettle (2009), Galbraith and Fouch (2007) and Clement (1988; 1998). They recognised the importance of education and training as a key contributor to the identification, evaluation and effective control of risk.

Lachapelle (2004) found that the coaches surveyed had not been given the opportunity to improve their safety practices and/or their organisations had failed to carry out safety briefings. Coaches should be provided risk management training to ensure effective supervision of activities/sport programmes. This is in line with Lachapelle (2004), who states that the organisation should establish a risk awareness and safety programme that ensures all players have the opportunity to achieve the same level of security.

Table 4
Analysis of the level of sports programme activities of the implementation of DCSK-PSRM

No.	Sport activity and programme	Mean	Level
1.	Risk management after an activity	4.27	High
2.	Proper warm-up practice under the supervision of coaches at least 15 minutes before activity	4.28	High
3.	Practice regimen complete with cooling of the body under the supervision of trainers for 15 minutes after activity	4.28	High
4.	The practice of allowing the players to rest and take a drink of water	4.33	High
5.	Capable of controlling the behaviour of players	4.33	High
6.	Skilled care tentative sport programme	4.43	High
7.	Able to evaluate the effectiveness of an exercise programme	4.43	High

Table 4 shows that the level of sport programmes and activities in the implementation of DCSK-PSRM received the highest approval level. Fuller (1999) explained that in the development of knowledge of college students, there should be laws/regulations that specify how the management and supervision of each sport and activity should be conducted. Beach (2003) explained that supervision should focus on the needs of the various levels of competition and the different groups of participants in each sport programme. Therefore, in every sport programme, there should be thorough training, supervision and standards, as stated by Martens, Gulikers and Bastiaens (2004). With the development of a model for developing college students' knowledge, careful supervision and efficient and effective risk management practices, a safe environment for activities and programmes can be created.

The researchers recommend that the development of the knowledge of college students as well as the supervision and training of sport programmes be made standard practice. Coaches would be more confident in carrying out supervision and training if they were given sound risk management training.

This study found that the DCSK-PRMS had a Cronbach's Alpha reliability and trustworthiness of individuals of 0.92 (very good) and a reliability of 0.72, indicating a good level. This suggests that the systematic development of knowledge of college students (DKCS-SRMP) needs to be formulated to ensure safety of all during sport programmes.

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