THE RELATIONSHIP OF SAFETY MANAGEMENT PRACTICE TOWARD SAFETY BEHAVIOR AMONG UUM STUDENT ATHLETES

MOHD AIZUL FIRDAUS MUSA

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MOHD AIZUL FIRDAUS MUSA

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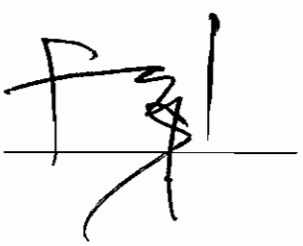

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ABSTRACT

The safety management practice has positive impact with safety behavior. In recent years, the accidents and injury caused by participating in the sports activities were increasing rapidly. Moreover, the rising numbers of accident rate in the environment of sports and recreation can bring the negative influence on the sports industry. Therefore, this study was intended to identify the relationship of safety management practice with safety behavior among the student athletes in Universiti Utara Malaysia (UUM). The respondent in this study were athletes who had been actively using the facilities in the UUM Sports Centre. Self-administrative questionnaires had been used in this study which involve 120 respondents. As the result, the correlation and regression revealed that safety management practice were positively and significantly related with safety behaviour. Hence, a lots of efforts, commitments, resources, enforcements and enhancements need to be done by the management in order to improve the quality of safety management practice and make the safety behavior as a culture in the UUM Sports Centre.

Key words: safety management practice, safety behavior, student athletes.

ABSTRAK

Amalan pengurusan keselamatan mempunyai kesan positif terhadap tingkah laku keselamatan. Kebelakangan ini, kemalangan dan kecederaan yang disebabkan oleh penyertaan di dalam aktiviti sukan meningkat dengan mendadak. Peningkatan kadar kemalangan dalam persekitaran sukan dan rekreasi ini boleh membawa pengaruh yang negatif terhadap industri sukan. Tujuan kajian ini dijalankan adalah untuk mengenal pasti hubungan di antara amalan pengurusan keselamatan dengan tingkah laku keselamatan di kalangan atlet pelajar di Universiti Utara Malaysia (UUM). Responden di dalam kajian ini terdiri daripada atlet - atlet yang aktif menggunakan kemudahan di Pusat Sukan UUM. Soal selidik penilaian kendiri telah digunakan di dalam kajian ini yang melibatkan 120 responden. Melalui ujian korelasi dan regresi bagi kajian ini, ianya telah mendedahkan bahawa amalan pengurusan keselamatan dengan tingkah laku keselamatan saling berhubung secara positif dan signifikan. Justeru, banyak usaha, komitmen, sumber, penguatkuasaan dan penambahbaikan perlu dilakukan oleh pihak pengurusan untuk meningkatkan kualiti amalan pengurusan keselamatan dan menjadikan tingkah laku keselamatan sebagai budaya di Pusat Sukan UUM.

Kata kunci: Amalan pengurusan keselamatan, tingkah laku keselamatan, atlet pelajar.

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LIST OF ABBREVIATION

RQ	Research Question
UUM	Universiti Utara Malaysia
NSP	National Sports Policy
SDPIHE	Sports Development Policy of Institutions of Higher Education
IHE	Institutions of Higher Education
MOHE	Ministry of Higher Education
SUKUUM	Sukan Universiti Utara Malaysia
SUKOL	Sukan Kolej
MASUM	Majlis Sukan Universiti Malaysia
IMT-GT	Indonesia Malaysia Thailand – Growth Triangle Varsity Carnival
SUKIPT	Sukan Institusi Pendidikan Tinggi
NIRSA	National Intramural Recreational Sports Association's
SME	Small and Medium Enterprise
OSHA	Occupational Safety and Health Act 1994
SPSS	Statistical Package for Social Sciences
SOP	Standard Operating Procedure

CHAPTER 1

INTRODUCTION

1.1 Introduction

The National Sports Policy is a comprehensive sports policy for everyone. It comprises both the high performance and mass sport which has been formulated based on the justification that such activities will form an integral part of the overall development efforts by the government that directed towards the entire population. Sport should earn the same acknowledgement, respect and support as documented in the other basic social programs such as education, transportation, housing, and health services in order to enable the government to achieve the national development, unity and continued stability (National Sports Policy, 1988).

In addition, sport can also be defined as a medium that plays an important role in order to promote healthy competition, goodness, resilience, understanding, and at the same time, develop the physical and moral qualities, by providing a conducive platform for integration of the various ethnic groups into a united nation, as well as enhancing the national prestige. Furthermore, sports also have been proved to possess huge beneficial effects on the individuals, the society and also the nation.

High performance sports referred to the competitive sports organized at the national or international level where the winners were determined by the rules and regulations of the International Federation and Olympic Committee. Mass sports on the other hand, referred to the sports and physical recreation activities, which may be performed spontaneously or organized on the purpose of encouraging a greater participation rather

than for competition at the national or international level (National Sports Policy, 2nd edition, February 2003).

Institute of higher education Sports Development Policy (2009) stated that the National Sports Policy (NSP) has mapped two existing main roles of the Institute of Higher Learning, which can be divided into encouraging students to participate actively in sports activities and at the same time, providing opportunities for the athletes to study at the university. Both of these roles were accountable in providing the guidelines as an effort to balance the coordination and persistency of the academic performance and achievement in sports in the universities. Sports are essential in the institute of higher education level as it can generate a new generation of professionals who are able to give a significant contribution to the development of the national character, produce a matured generation, and still possess the excellent basic education as well as physical endurance and mental strength.

In addition to that, as the National Sports Policy has been acknowledging the importance of sports among the citizens of higher education institute, a specific policy must be established with the goal of making learning as a catalyst for the country's sporting excellence and creating the sports culture in the institute of higher education towards strengthening the human capital and balancing the quality in the academics and sports. The Thinking Athletes is an intellectual vision of the new generation, built up in order to produce a generation that is able to perform in the field of sports and has all the good characteristics as an individual. It is targeted that at least 30% of the athletes that were born are the athletes produced by the institute of higher education.

Furthermore, The Thinking Athletes' goal is to create a phenomenon that sport can be a career that can guarantee the future of the sportsmen and was hoped that it would destroy the concept that learning is like a grave for the athletes to pursue while being active in sports. This policy also encourages the athletes to use the knowledge gained during their studies in the institute of higher education to enhance their sports performance to the highest levels of expertise and increased their marketability which will stand out when entering the job market.

Additionally, many universities had been given a large sum of money by the government to provide the new and improved sports amenities for the benefit of the student, but it is relatively not much information available on the factors that affected the number of students participated in the sporting events or activities on campus. The Universities need to do some research on their investment in upgrading the sporting facilities, whether it was done just to expand the varieties of sports amenities accessible to the students or really to meet the students' requirements. Most universities encourage their students to take part in the recreation activities during their spare time at the university by providing a large variety of sporting convenience that was made to meet the need of each participant. . Universities were often given the options for the students who are not keen in sporting activities by encouraging them to engage in other physical recreational activities (DJ Webber & A. Mearman, 2011).

Furthermore, DJ Webber and A. Mearman (2011) also stated that, there was still a debate on the factors that affected the number of students participated in the sporting activities although many universities have spent a huge amount of money to provide the sport amenities for their students to utilize and whether it is essential to have an

extensive range of sporting facilities to gain the interest of the students towards sports activities. Becker (1965) and Vickerman (1975) have supported the participation in sports is a combination of several extracted demands, namely the gears used, attires, membership of institutions, transport to the place of activity, and the cost of the facilities.

The rapid growth of influence in the sports and recreational activities has developed an improved sports and recreational services nationwide. In a program named 'Malaysia Cergas' which had been initiated by the former Prime Minister Tun Dr. Mahathir Mohamad in 1983, focused on the approach of the healthy lifestyle culture among Malaysians. The program has increased the improvement and creation of sports and recreational amenities in Malaysia, while at the same time exhilarate the sports and recreation services. The Ministry of Youth and Sports through its large funds and departments in every state have launched many initiatives to facilitate the development and cooperation in the sports and recreational activities. Various programs had been organized such as 'Malaysia Cergas', 'Fit Malaysia' and also some under the Rakan Muda programs and session which are associated with the sports arrangements.

In Malaysia every Saturday on the second week of October had been declared as the National Sports Day (Hari Sukan Negara) by the Sports and Youth Minister, Mr. Khairy Jamaluddin. This National Sports Day is part of a national agenda towards the vision of 2020 which aims to improve the Malaysians' health through a healthy lifestyle and enhances the productivity of Malaysian citizens. The National Sports Day is considered as the finale of the Fit Malaysia event which will be celebrated all over the nation with a mass sports activities. The minister also hoped that Malaysia can be a sporting nation

by encouraging the citizens to get actively involved in the sports activities (Berita Harian, 10 October 2015).

Hence, Fit Malaysia also had been initiated by the minister to bring Malaysia from the sports loving nation to the sporting nation. It reflected the total transformation of the Malaysians' lifestyles. On top of that, the Fit Malaysia approach is focused more on the community centric, where the activities no need to be done in the sports facility with some specific equipment, but much easier to learn and can be done anytime and anywhere, either alone or in group. It is also not very time consuming or costly. Fit Malaysia has five core bases that can be divided into health, unity, community, inclusive and sports talent. It does not only promote healthy lifestyle, but more on inspiring friends and family to spend their precious time together, relaxing and doing healthy activities (Gerakan Fit Malaysia, habinovasi.mampu.gov.my/laporan_inovasi/1404-gerakan-fitmalaysia.pdf).

Zakaria, J. et. al. (2016) stated that the effect of the 'Malaysia Cergas' program was the building and upgrading of various infrastructure and facilities made prior to the local requirements. Among the effects were the establishment of the open concept sports and recreational amenities such as artificial wall climbing, volleyball courts, skateboarding arenas, BMX stunt courts and many more. The indoor facilities namely the gymnasium, badminton courts and others have also been established. All those facilities were very costly, high maintenance and required the high quality safety features especially for the high risk activity components such as the artificial wall climbing, kayak equipment, climbing gears, etc. Carelessness and drawback while carrying out these activities will

be resulted in major accidents that can actually be prevented and alert not only by the users but also by the provider.

1.2 Background of the Study

1.2.1 Sports Development Program

The Sports Development Programme was aimed to develop a competitive and excellence and holistic students mostly in the higher learning institutions. The Sports Development Policy of Institutions of Higher Education (SDPIHE) was launched to accomplish the following objectives (Institute of higher education Sports Development Policy, 2009): -

i. Making Institutions of Higher Education (IHE) as stimulant for the excellency in the national sports
ii. Generating a sport culture in the Institutions of Higher Education which aimed to produce a well-balanced, all-rounded human capital that shines not only academically, but also in sports.
iii. Developing at least 30% of national athletes who are among the 'Thinking Athletes' graduated from the Institutions of Higher Education.

1.2.2 Seven (7) Clusters

The Ministry of Higher Education (MOHE) aims about 30% of national athletes will be the product of the higher learning institution. The implementation of this policy will assure that the outline and execution of the sports development agenda in the Institutions of Higher Education is performing in a more

comprehensive and systematic manners by concentrating on these seven (7) clusters (Institute of higher education Sports Development Policy, 2009):

i. Sports Acculturation Programme
ii. Sports Infrastructure Development Programme
iii. Centre for Sports Excellence Development Programme
iv. Scheme for Sports Excellence, Welfare, Incentives and Research
v. Athlete Academic Development Programme
vi. Promotion and Career Network Programme
vii. Sports Education Development Programme in Institutions of Higher Education

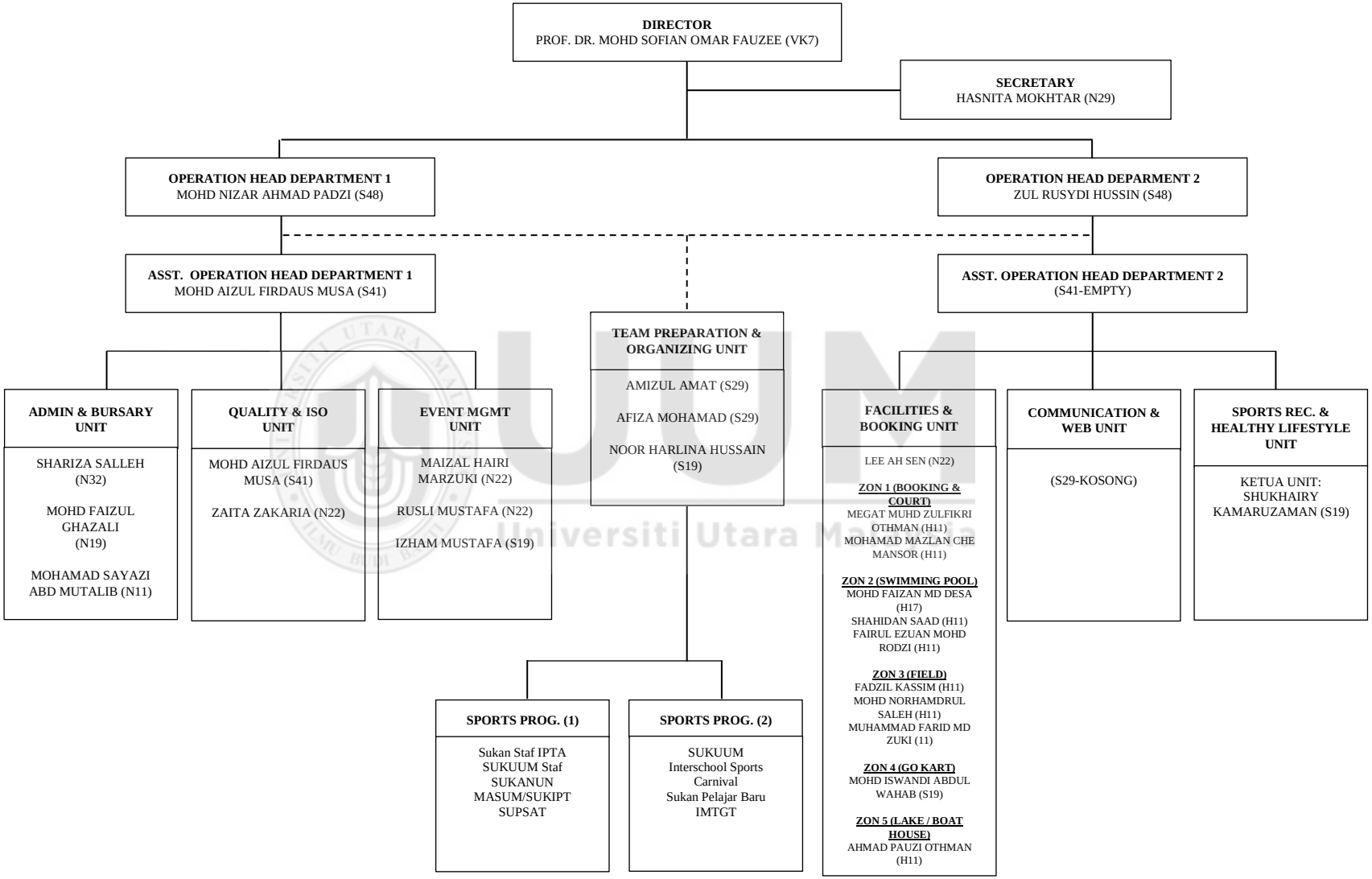
1.3 Organization Background

UUM Sports Unit began its operations since the inception on February 16, 1984 on a temporary campus in Tanah Merah, Jitra, Kedah Darul Aman. Later in 1991, the Sports Unit was moved to the main campus in Sintok. The operation of the Sports Unit was running smoothly with the fully finished facilities in the new campus. Starting from 2002, the Sports Unit was known as the Sports Centre due to its growing function until today.

UUM Sports Centre has become a popular venue for national and international sports events. It has the capability and capacity to provide the necessary sports hospitalities (in term of facilities and equipment) to cater all these events. UUM Sports Centre endorses the concept of 'Sports for All'. In order to instill the sports culture in UUM, the Sports Centre had initiated Inter DPP Sports Carnival (SUKUUM) and Inter College Sports (SUKOL). Furthermore, the Sports Centre also encourages training and

participation of sports events at high performance level as a preparation for national and international events such as – Inter Varsity (MASUM), IMT-GT, Higher Learning Sports Carnival (SUKIPT), etc.

SPORTS CENTRE ORGANIZATION CHART



1.3.1 UUM Sports Centre Vision

To be proactive and excellence in sports development and organization services.

1.3.2 UUM Sports Centre Mission

To produce a fit, excellence and competitive graduate to face the global human development world.

1.3.3 UUM Sports Centre Objectives

i. To plan the development and enhancement of sports program in order to attract more involvement among students and staff.
ii. To provide service related to organizing, sports management and be the advisor of the sports activities
iii. Manage and maintain the sports facilities and equipment
iv. To promote fit and healthy lifestyle to the students and staffs

1.3.4 Sports Development Program

The Sports Development Programme aimed to produce excellence and competitive students. The Sports Development Policy of Institutions of Higher Education (SDPIHE) was launched to achieve the following objectives: -

i. Promoting Institutions of Higher Education (IHE) as catalysts for excellence in national sports
ii. Creating a sports culture in the Institutions of Higher Education which aimed to produce a well-balanced, all-rounded human capital that excels not only academically, but also in sports

iii. Producing at least 30% of national athletes who are among the 'Thinking Athletes' which graduates from the Institutions of Higher Education.

On the other hand, UUM Sports Centre also offers a wide range of sports activities and facilities to cater the needs of almost 30,000 students and 4,000 staff members. List of activities involved are football, badminton, tennis, archery, netball, table tennis, go kart, wall climbing, basketball, field hockey, squash, swimming, volleyball, athletics, handball, softball, sepak takraw, lawn ball, chess, martial art, sauna, rugby, bicycle, frisbee, petanque, canoeing and floor ball and more.

1.4 Problem Statement

In recent years, the accidents and injury caused by participating in the sports activities were rapidly increasing. The risk management serves as a key factor that has the implications and can influence the security status which can result in injuries. The rising numbers of accident rate in the environment of sports and recreation can bring the negative influence on the industry. This universal trend is starting to give an impact on the business which can contribute towards the bleak of this corporation as a result of demand deficiency in any coordinated activities (Mulrooney, A.L. and Farmer, P.J., 1998).

According to Zakaria, J. et. al. (2016), sports and recreation activities are often vulnerable to multiple security concerns, throughout the activities or afterwards. The effective routines could be practiced to prevent mishaps which can bring harms to the players. Therefore, the risk management practices are the crucial aspect in the

operational of the sports organization or recreation activities. On top of that, each activity planned must be organized and the provided facilities must be checked thoroughly to ensure that they are safe and incidents-free to prevent injuries, whether directly or indirectly. In order to ensure the augmentation in sports and recreation activities, we must have educated, proficient, and certified personnel that will be in charge to suggest diversified products and services to the society.

The rising problems associated with the safety and injury issues were contributed by numerous aspects in the risk management practices such as negligence of the instruments, awfully aged facilities, incapable trainers, non-related coaches and insufficient proper medical facilities (Noe, R.A., 2009). The common plot in Malaysia today is that the issues associated with the routine of risk management have become a responsibility and argument associated with the injuries are being reported freely by the media. The high prevalence of accidents highlighted in the sports programs has attracted many negatives confusion. These negative impressions have bothered the parents and guardians and they will feel heavy hearted to give their permission to their children to be actively involved in sports and recreational activities as the fear of the exposure to injury were increased by the reports. (Mohamed, M.,Fauzee, M.S.O, Soon, L.T., Jusoh, Z. and Zainudin, R.J.A., 2006).

Based on the interview with the Director of UUM Sports Centre, Prof. Dr. Mohd Sofian Omar Fauzee, he did mentioned that the awareness on the safety related behavior among the students in UUM was still low, which is around 30% - 40%. Due to this factor, he suggested that a study on the safety related behavior survey must be conducted in order to determine the indicators from the UUM's student athletes regarding this issue.

Moreover, based on the statistics of facilities utilization in the Sports Centre (2017) showed that almost 48,490 students had used the facilities at the Sports Centre. There were a few incidents occurred within that year such as the minor crash in the go kart track, minor injury on the field and in the gymnasium and many more. To date, there was no study or survey that has been conducted regarding the UUM Sports Centre since its establishment. Therefore, by conducting this survey, the results, recommendations and findings obtained hopefully will provide the useful information on the safety management practice and safety related behavior among the student athletes in UUM.

1.5 Research Objectives

The major objective of this research is to study the safety management practice in UUM Sports Centre and its relationship with safety related behavior. Therefore the objectives which have been formulated were:

1.5.1 To identify the safety management practice among the student athletes in UUM.

1.5.2 To determine the safety related behavior among the student athletes in UUM.

1.5.3 To figure out the relationship between safety management practice and safety related behavior among student athletes in UUM.

1.6 Research Questions

The research questions are the foundational core of this research which will be emphasized on the study, in order to determine the methodology and exhibit all the steps of inquiring, analyzing and reporting. The purpose of this research is to investigate the relationship between safety management practice and safety related behavior among

the student athletes in Universiti Utara Malaysia (UUM). This research was conducted to investigate the behavior of UUM student athletes regarding the safety management practice during their exercise or training session. Therefore, from the independent variable and dependent variable, the research questions (RQs) that have been developed in this study are:

1.6.1 What is the level of safety management practice among student athletes in UUM?

1.6.2 What is the safety related behavior among student athletes in UUM?

1.6.3 Is there any relationship between safety management practice and safety related behavior among UUM student athletes?

1.7 Significance of the Study

This study is intended to collect viable data from the related respondents to identify the root causes related to safety management practices and safety related behavior. The results and findings from this study which consists of six safety management practices will aid the organization in order to comprehend the employees' views with regard to the commitment of the management, security training, athletes' engagement in safety, safety correspondents and feedbacks, safety regulations and measures and safety publicity policies which are currently being applied in the organization.

Moreover the results of the study will also specify practical information with regards to the safety management related issues among student athletes and areas of improvement and actions plans required for the continuous enhancement, extended progression and further development on the safety management of this UUM Sports Centre as a whole. Furthermore, the safety related behavior findings from this study will be able to guide

the management in reducing the accident rates, personal injuries and material loss and also improving the working environment which in turn improves the student athletes' participation and compliance towards safety in the organization itself.

The outcomes and findings of this study will then provide valued information associated to the safety management practices and safety behavior of this organization and can be used as a reference point for forthcoming safety development program and action for improvement so that the organization can enhance the efficiency and effectiveness of their staffs and athletes by reducing incidents, accidents and more.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This literature review deliberates on the safety management practices, safety related behavior and other empirical study that elaborates the relationship of safety management practices towards the safety related behavior.

2.2 Safety Management Practices

According to Vinodkumar and Bhasi (2010), the safety management practices are the approaches, plans of action, procedures and exercises put into actions and accompanied by the board of an organization to ensure the security of their staffs. An excellent safety management routine will definitely guarantee and benefit the organization to attain and improve robust procedures for promotion and job assignments, best practices of safety communication amongst athletes, athletes' participation, higher importance for safety matters in meetings, systematic accident investigations, regular safety inspections and others.

While the society has acknowledged the need of improved recreational facilities in order to develop the overall quality of life in the student community, there were still some issues regarding the college aged students that are still lacking adequate amount of physical exercises reported. The level of physical activity deteriorates from high school to college, with the sequence of activities in the college communities are generally lacking in improving their health and fitness (Kilpatrick, Hebert and Bartholomew, 2005). Furthermore, the report from NIRSA (2004) had stated that only 38% of college students took part in the regular energetic activities while only 20%

engaged in intermediate activities. It is also estimated that up to 50% of the college students did not really utilize their student recreation centers.

It is quite critical to know that almost half of these college students were reportedly cutback their physical activities after graduating. A lot of students were already inactive upon entering college and the levels of physical activities were further deteriorating during their college years (Caspersen, Pereira & Curran, 2000). Sedentary behavior is associated with the higher risk of fatality due to the development of chronic disease as well as depression and anxiety-related problems (Camacho, Roberts, Lazarus, Kaplan & Cohen, 1991).

The administrators, directors and managers must be alert of the aspects associated with the utilization of fitness and recreation facilities inside the universities environment in order to enhance the efficiency of these on campus fitness and recreation centers. It is crucial to establish an adequate campus facility complete with health and wellness programs to ensure the efficient enrollment and confinement of their students as well as improving their overall health and wellness. This wellness program can be used as a foundation for the students to build up their healthy behaviors during student years, which may be resulted in the continuous habits that can be instilled in their personal and professional lives after graduating (Castle et. al., 2015).

Becker (1965) and Vickerman (1975) has reported that the engagement in sports is a combination of good habits which involves several extracted requirements such as gears, attires, membership of organization, transport, and the cost of the activity. The sports and recreational corporation in Malaysia required a proper administration

practice, standards, and positive risk management routines. The country's economic performance can be enhanced with the advancement of the constructive aspects in the course of sports and recreational so that it can obliquely give a compelling effect on the nation's sports and tourism industry. As concluded by Sharp et. al. (2010), safety is considered as a core value in the organization which supported the facilities and services to consumers.

Regarding to Abdullah, J. (2014), well-managed and systematic services of sports and recreation will help reducing the individual's security associated risks. A number of studies carried out in the course of risk management have explained that the significance of positive risk management routines in avoiding the risk of mishaps on the players and individuals. Moreover, the studies associated to risk management in sports and recreational activities are still lacking in this country (Mohamed, M., Fauzee, M.S.O., Soon, L.T., Jusoh, Z. and Zainudin, R.J.A., 2006).

Through the research conducted by Mohamed et. al. (2006), the sports and recreational areas were among the venues that have the high frequency of accidents and injuries. The feeling of self-consciousness and awareness on the physical health of body parts were also contributing the factors that influenced the community to get actively involved in the sports and recreational activities. Hence, the security standards of individuals varied from one another and can be relied upon the current situation and environment. The arguments related to risk administration routines and security measures has been generally considered as the problem involving the public interest, either in the services, sports and recreation industry due to the deficiency of awareness on the management which is always affected the behavior of some individuals in the

community who have lower concerns on the safety features which can develop harms or mishaps. Furthermore, a few government agencies under the Ministry of Human Resources such as National Institutes of Occupational Safety and Health (NIOSH) and the Social Security Organization (SOCSO) has been actively organizing programs, campaigns, conferences, supervision, and consultation on the importance of safety (Zakaria, J. et. al., 2016).

Safety referred as a condition that is clear from hazards in the surrounding of a person. It is a state where the position will not induce any hazard of either an accidents, injuries or deaths (Rafiin, M.A., 2005). According to an article by A. Donaldson, R. Forero, C. F. Finch and T. Hill (2003), sports injuries in Australia are the critical issues in the public health and act an important argument for the citizens to not participate in the physical activities internationally. Sports injuries have contributed to a significant expense that overload the wounded players and affected the wider society. In some cases, 1 in 17 Australians have experienced some kinds of wounds associated to sports every year, and the cost of those injuries have approximately reached one billion Australian dollars yearly (Egger, G., 1991). It is likely that 70% of the players in the popular winter community sports ranks in Australia have experienced an injury or more over a two season period (Finch, C.F. et. al., 2003).

Injuries can happen during championship / games and training / routines. Nevertheless, most researches have failed to report the injury risk during training. Between the 46% (elite soccer) and 99% (elite rugby union), injuries may strike the players during matches / competition while between 1% (elite rugby union) and 39% (various competition levels of soccer) the injuries may take place throughout training, relying

on the sport, the level of championship, and the interpretation of injury used in the study.

Furthermore the activities carried out during training are generally different in the form nature and intensity from those attempted in the competition. The goal of training is usually to build up stamina, skills, and game plans, at half or less than complete momentum, with the limited or absence of opposition and minimal body contact. In the contrary, the competition is often carried out at full pace, with the presence of opposition and approved body contact within the rules of the game. This is particularly applicable to rugby union, rugby league, and soccer where most injuries were developed during physical touch (A. Donaldson et. al., 2003).

Moreover, a study conducted by A. Donaldson et. al. (2003) has also identified other reasons on why the community clubs paid less attention to the safety at training compared to matches as it may be due to the establishment of the international, national, and regional governing bodies specifically for most sports which practiced the compulsory safety procedures for guiding body permitted competitions. It is uncommon for the governing constitutions to practice the safety procedures connected to training. It is also notable that the regional associations, either straight forwardly or through a proxy such as a judge or referee were ensuring the implementation of the safety practices during championships, while the individual clubs are commonly responsible for the safety practices during trainings.

Many factors have been identified to reduce the risk or probability of an athlete to get injured throughout training or matches in the sports and recreational physical activities.

These so called risk factors were commonly associated with the subjective characteristics and behaviors, such as age, gender, ability, utilization of protective gears, position played, and game plans; which can also be the sport or game features, such as rank of competitions, playing area, and weather (Meeuwisse WH, 1994).

From Will G. Hopkins, Stephen W. Marshall, Kenneth L. Quarrie and Patria A. Hume (2007) concluded that risks can be advantageous as they answered an important question that appeal to an athlete, trainer or parent of a young athlete: what is the possibility of the injuries that the athlete will get by participating in a specific sport for this season? The risk refers to the average probability of harms that can strike an athlete. As compared to any of these statistics, some athletes might expose to a different uncertainty, such as by being extremely flexible. Risks generally intensify with time: the risk of injury throughout 10 games will be higher compared to the risk of wound experience in one game. Thus, it is crucial to regularly state the time period for each risk.

A number of studies have been done over the years in assessing the participation rates of the general population and selected groups of individuals in specific sports and physical activities, as well as how people spend their leisure time. Many of these studies are concerned with leisure and life satisfaction across age groups and factors contributing to various levels of satisfaction and perceived benefits in a broad range of activities and settings (Brown & Frankel, 1993; Lumpkin and Halstead, 1995; Proescher, 1996). The benefits range from sense of simple enjoyment of the activity to the specific effects that active involvement, perceived competence in an activity, and socialization have on psychological well-being and self-esteem (Sonstroem, Harlow &

Josephs, 1994). Stress (Aldana, Sutton & Jacobson, 1996), motivation and barriers to involvement (Frederick, Morrison and Manning, 1996; Hasbrook, 1986) and perceived physical competence and exercise prediction (Wankel, Mummery, Stephens and Craig, 1991).

Many research done have suggested that the recreation programs can contribute towards the enhancement of the participators' thought of contentment, skills obtained , and decision making abilities which include other benefits associated to leadership enhancement, communication abilities, stress handlings, and resilience of diversified cultures (Bryant, Banta and Bradley, 1995). Involvement in sports has more positive impacts on the attitudes and feelings towards sports in females compared to males (Frederick et. al., 1996). There were also some differences in gender regarding of motivational orientation and distinguished purposes of sport (Unger and Johnson, 1995). Behavioral involvement in sport has a greater impact on the psychological wellness of females, whereas the males will show a great impact on the affective or emotional involvement (Frederick et. al., 1996). Gender differences can also be clearly seen in motivational orientations for exercise devotion where females will show more intrinsic motivation such as skills enhancement, while males will be more extrinsically motivated, for instance, in body appearance (Wankel and Berger, 1990).

Sports programs, facilities and services have different meanings and interpretations depending on the setting in which they operate (Bucher and Krotee, 1993). Recreational sports facilities are defined as the sports facilities on campus in which recreational sports programs and services take place. Recreational sports programs are defined as informal and formal cooperative / competitive, sports and physical activities offered to

undergraduate students in a higher education setting for the sake of participation, fun, fitness, social interaction and learning (Eitzen and Sage, 1989).

The leisure and recreation activities contributed towards healthy lifestyles to those who have been participating in such activities. In Malaysia, camping, mountain climbing or hiking, scuba diving and jungle tracking were considered as the popular recreational activities among Malaysians. Approximately most of the higher institutions have their own recreation clubs which organized and provided the students with various programs such as yearly camping program. It is not particularly for adults but also opened to the youths. There were abundance of discussions on the recreation programs lately. The hindrance in leisure activities that prevent the people interested from participating was due to and order of public and psychological factors as well as ones referring to the strategies and frameworks of the services provided (Godbey, 1989).

Outdoor recreations were defined as advantages as some of the benefits are practical for youths, for an instance, to keep them off from risks on the boulevards and providing them safer surroundings to communicate with their companions, and spend their free time wisely without getting into troubles. However, the restrictions were one of the factors that can contribute towards the deficiency of some activities. Whittington (2006) had stated that the females in the previous years have been involved in several recreational programs. However, it was still insufficient as the women still considered themselves as second-rate compared to the men's programs. It is assumed that a lot of work needed to be done in order to enhance the women's participations in the recreational activities. The recreation activities that concentrated on the female

students' development can provide more opportunities for them to protect themselves contrary to the social stereotypes and at the same time, develop positive gender identity.

In accordance to Henderson and Bialeschki (1995), the sports and outdoor recreation in the past have been declared as an indication of empowerment for women. Thus, the females joining the sports and outdoor leisure activities tend to feel good about themselves. Fortunately in this present-day, the recreational activities have emerge and diversified for the better. The ladies nowadays can savor various fields of sports and recreational activities (Cahn, 1994). In the universities, recreation programs were restricted to men only but, has also has been open up to female students. However, not many of them were aware of the benefits of participating in the recreation programs. Most female students were more attracted to other activities such as shopping or just staying at home and glued to the television instead of joining the recreational activities provided. In addition, the Malaysian females paid more attention to their skin condition and choose to avoid anything that can harm their skin (Azlan, Mohd. Syukran and Farhana, 2010).

In other studies, Noyes (1996) who concluded the best accessible standard for measuring student satisfaction such as participation amounts, or the overall recruitment joining in the division's programs or utilizing its amenities in either formal or unofficial approach. In addition, a study conducted by the National Intramural Recreational Sports Association's (NIRSA) on the excellence and significance of recreational sports gears which relies on the detailed statistics as a means of evaluating the outcome of recreational sports programs on the participants, as well as their of satisfactions' rates (NIRSA,2004).

Joshua Castle et. al. (2015) have stated that although the society has acknowledged the requirements for improved recreational amenities in enhancing the essential value of life in the student bodies, it is disclosed that the college aged students are not achieving a sufficient sum of physical activities. Kilpatrick, Hebert and Bartholomew (2005) explained that the amount of physical activity will decrease over time, from high school to college, and the sequence activities in the college communities are mainly inadequate in enhancing their well-being and strength. In particular, only 38% of college students were taking part in the common active activities while only 20% of them were engaged in the common moderate activities. It was estimated that up to 50% of the college students have never been utilizing their student recreation centers (SRC) (NIRSA, 2004).

For the college students in particular, physical activities will defend them contrary to detrimental weight gain, and also acts a way to cope with effects of the stressed college life and early avoidance against forthcoming chronic disease. In order to improve the efficiency of the on-campus fitness and recreation centers, the managements, directors and managers must be alert of factors associated with fitness and recreation center utilization within the college environment. For this particular discussion, it is crucial for the fitness and recreation centers' managements at all colleges and universities to apply on campus facilities complete with sufficient health and wellness programs in order to ensure effective enrollment and confinement of their students as well as effective overall health and wellness development. The facility will act as a platform for the students to develop hearty habits during their college years, so they can maintain them in their private and experienced lives after graduating (Castle et. al., 2015).

Developing the students' wellness has been a main objective for the colleges and universities over the past several decades. In a study by Bryant, J.A, Banta, T.W and Bradley, J.L (1995), it was recorded that 30% of the initial recruitment outcomes were a result of the overall quality of the campus recreational amenities. Another factor can be used are the Adequacy or inadequacy of facilities, as well as the factor of usage or non-usage.

Drummond and Lenes (1997) took a broader look at the fitness industry and factors for initial involvement and sustained participation. Eight reasons for joining had been identified including the socialization, intrinsic and extrinsic motivation, aquatic related facilities, recreational facilities, resistance equipment, aerobic equipment and amenities. In addition the convenience of exercise facilities is significantly associated with the physical activity. This approved the impression that students who live on campus will have the advantages compared to the students living off campus.

2.3 Management Commitment

Management commitment reflected the sincerity of the management towards the safety-related issues, which can be seen through the attention and support given in implementing the safety related programs and projects in the organization (Hsu, S.H., Lee, C.C., Wu, M.C and Takano, 2008). This statement is valid when the management is committed toward the safety issue, it will definitely be more proactive and efficient in identifying, managing, and controlling hazards that probably lead to accidents. According to Yule, S., Flin, R. and Murdy, A. (2006), when the employees noticed that the management is dedicated towards their safety, they will tend to take safety matters more seriously, thus leading to an overall reduction in accident and injury rates.

2.4 Safety Training

Safety training was designed to prevent and control accident by briefing the employees and users on the importance of devotion towards the safety rules and procedures (Diaz Cabrera, D., Hernandez Fernaud, E. and Isla Diaz, R., 2007). According to Vinodkumar, M.N. and Bhasi, M. (2010) effective safety training is very important to the success of the OSH programs as it will lead to the enhancement of behavioral skills, related knowledge, and/or attitudes, and at the same time, stimulate the awareness of predicting accidents, especially for the new employees.

2.5 Athletes' Involvement

According to Stranks (1994), workers' safety attitude can be created by standard of associated groups. It can also be guided by individual motivation. For the purpose of this research, the relationship is related more to the athletes' involvement. The higher levels of the athletes' motivation towards safety can be obtained by the degree of their participations in the safety-related activities. In the safety literature, the workers' involvement is defined as a behavior-based technique which associated with individuals or groups in a higher conversation flow and the decision making process within an organization (Vredenburgh, A.G., 2002). So, according to Vrendeburgh A.G (2002), since the student athletes' were the ones who executed the work tasks and activities, they will be the best source of information for the purpose of safety improvements in this research.

2.6 Safety Communication and Feedback

Safety correspondent and feedback was acknowledged as an efficient means of improving safety performance in organizations (Kines P., Andersen L.P, Spangenberg,

S., Mikkelsen, K.L, Dyreborg J. and Zohar D., 2010). Distribution of information through various communication media, such as safety meetings, regular personal contacts, and sign posts, etc. on safety rules and regulations can act as a reminder to the employees on the need to be conscious about their safety and work safely (Hopkins A., 2002). On the contrary, according to Vinodkumar and Bhasi (2010), safety transmission and feedback should be a two-way communication instead of a total approach in order to maintain its effectiveness. People or users should be inspired to give their feedbacks on the safety-related issues to the management and provide suggestions along the way in order to improve the safety and working process of the activities towards a safer working environment.

2.7 Safety Rules and Procedures

A number of researchers have concluded that the organization must practice a solid safety culture that implemented the safety rules and procedure in order to achieve a high standard of safety development in the workplace. An effective safety management is crucial in maintaining the intercommunication between the system and people. Thus, human factor contributes a significant role towards the safety performance. Safety rules and procedures can be specified to the point to which an organization builds an apparent vision , responsibilities and goals, starts up the ideal characteristics of the employees, and create safety security system to amend the workers' safety habits (Lu, C.S and Yang, 2011). Even though employers have the legitimate duty to fulfill (Hopkins A., 2002), the OSH Act 1994 is lacking the information on how the employers should implement it. Therefore, in order to help the employees understand the safety rules and procedures which will be abided by them, the management should interact with them in a language that the employees can easily understand. This is due to the

findings that concluded the safety rules and procedures can influence the workers' safety behavior.

2.8 Safety Promotion Policies

Safety promotion policies are the policies targeted to assure the existence and preservation of the conditions that were essentials in achieving and sustaining an optimal level of safety (Welander G., Svanstrom L. and Ekman R., 2007). The studies which described the safety reported by employees play an important role in the prevention of accident at work (Chen C.P, and Lai, 2004; Barach P., and Small S.D, 2000). The implementation of safety publicity policies demonstrated not only the commitment from the managements toward safety, but also signified the proactive attitude toward the safety itself. Indeed, those studies have demonstrated the positive contribution of safety promotions and policies toward reducing accidents and injuries during activities.

2.9 Safety Related Behavior

A research done by Jones and George (1998) had concluded that the quality of relationship among the team members will generate the engagements among members in behaviors that will result in a certain amount of calculated risks and deviations. It means that the strong support in the nature of the teams can act to a safety net for the employees to allow them to develop the change in behaviors within their jobs. Safety behavior can be seen as close and open conducts that were accepted by the individual to reduce the formidable outcomes and maintain an impression of safety. According to Seo & Hill (2005) distinguished safety trend is the best indicator of unsafe work behavior. Communication is one of the elements of safety climate and thus can also act

as an indicator of safety behavior. Specifically, safety communication is explained by Cigularov et. al. (2010) as a factor that has an important fundamental effect on the safety behavior and physical suffering. Safety behavior can be contained in two types of behavior according to Neal et. al. (2000) which are the safety participation and safety compliance.

2.9.1 Safety Participation

According to Vroom and Jago (1988) participation refers to "taking part". Such participation can adopt multiple forms: direct or indirect; formal or informal; and performed alone or shared. In the current research, safety participation refers to all activities that do not straightforwardly influence the personal safety of an individual, but still commit to an environment that supports safety. These can include the activities such as joining the voluntary safety activities, helping coworkers with safety-related issues and attending safety meetings (Neal and Griffin, 2006). Safety participation has a great voluntary value that goes above the actual duty of that particular individual within an organization (Clarke and Ward, 2006). In addition, Neal et. al. (2000) concluded that if the employees took part in the safety activities, the awareness and motivation on safety can be increased.

2.9.2 Safety Compliance

Compliance can occur when an individual was adapted to the external influence as he or she wishes to get a positive reaction from the other person or group. Apart from that, the identification and internalization which is one of the basics elements that involved the psychological relationship with an

organization can be achieved. The term safety compliance refers to, according to Neal and Griffin (2000), 'the basic activities that need to be carried out by individuals to retain the workplace safety'. Examples of these behaviors are adhering to the standard working procedures and putting on the personal safety equipment. The perspectives towards the regulations conformity is an ethical issue for most organizations (Lundgren and McMackin, 2009), while for some organizations the issue of balancing the needs of the organization with those of the employees were more alarming. Hence, Hayes et. al. (1998) had found that people whom regarded their job as safe, complied with safety behaviors at work more frequently compared to those who did not. This indicates that safety compliance is important for organizations. The behavior of employees often differs from the intention, if it comes to safety related issues. It often is not the safety behavior of the worker itself, but the noncompliance of safety procedures and refusal to participate in activities that could improve safety of others. Therefore the noncompliance of safety behavior cannot directly affect the worker but also the surroundings and colleagues (Neal et. al., 2000).

2.10 Empirical Studies on Safety Management Practices Towards Safety Related Behavior

There are various studies regarding of safety management practice which is related to safety behavior had been conducted by many scholars such as Vinodkumar and Bhasi (2010), Depasquale and Geller (1999). The safety management practice which is fully supported by the workers will develop a good safe workplace environment (Vinodkumar and Bhasi, 2010). Moreover, Depasquale and Geller (1999) stated that an organization which has a low rate of workplace accidents was due to several

contributing factors which were the involvement of management in occupational safety and health programs, new recruits safety training, continuous safety training for existing employees and effective safety communication between the hierarchies of the employers as well as the employees.

For an empirical study which is related to safety behavior, a study which was conducted by Subramaniam, C. et. al. (2016) among manufacturing SMEs in Malaysia, Jaffry et. al. (2016) studied the risk management routines practices towards the enhancements of sport and recreational movements in Malaysia and worldwide from more than 20 studies that were published from the search engine and databases from 2005 to 2016, the findings showed that knowledge, work site experiences, communication, legislation can be concluded including the safety management practice and inspection of the equipment has a strong relationship with safety behavior.

2.11 Summary

In this study, six aspects of domains or independent variable which have been discussed earlier namely the management commitment, safety training, athletes' involvement, safety correspondent and feedback, safety regulations and routines, safety promotion policies and the relationship with safety behavior will act as the dependent variable. The next chapter will be discussing on the methodology adapted in conducting the study for the safety behavior in details.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This chapter will discuss the methodology that was used in this study including the hypothesis development, research design, description of the population and sample, survey instruments development, pilot test and analyse on the data collected.

3.2 Hypotheses Development

3.2.1 Safety Management Practice and Safety Behaviour

Vinodkumar & Bhasi (2010) had mentioned that within the safety management practice there are policies, strategies and activities that implemented by the management in any organisation because it is mainly and focused for the safety of the employees. By practising the safety management practice comprehensively in the organization it could bring positive impact to their employees' safety and control the hazards in workplace (Labodova, 2004). Apart from improving the working condition in the workplace, it is also believed that it will influence the employees' attitude and behaviours related to safety hence alleviate the accident at the workplace.

3.3 Research Design

The most important aspect of this research are the types of investigation, the framework of the study, the unit of analysis used will be discussed in this chapter. In this study, there will be a discussion on human related factors, which are; safety management practice, safety motivation, employees' competency and compliance safety behaviour. These factors will determine whether the prevention initiatives are successfully

practiced in the workplace. In this study, the research process will be focusing on the problem, reviewing relevant literatures, planning a research design, designing a sample, collecting data, analysing data, deciding the conclusions, and preparing report (Zikmund, 2003).

At the same time, this study will be adopting the quantitative research design as it is significantly applicable in this study. Based on the research carried out by Creswell (2003) which is based on the quantitative, cross-sectional and survey method due to its economical design and effective completion in data collection. There is no manipulation and it is a non-contrived study. For the purpose of this study, it was carried out in the course where the individuals were answering the questions according to their own experiences.

3.4 Operational Definition

In this study, operation definition of the related variables is explained as follow:-

3.4.1 Safety Management Practice

Safety management is a practice, role and function that applied by the responsible party in preserving the safety condition at workplace. According to Vinodkumar & Bhasi (2010), it consists of policies, strategies, procedures and activities adopted and followed by the organization in order to achieve safety for all employees.

3.4.2 Safety Behaviour

Based on the Occupational Safety and Health Act (OSHA) 1994, safety compliance is an obligation for all the organizations to provide safety

environment for their employees and workplace. In this study, compliance safety behaviour reflects either safe or unsafe work behaviour at the workplace (Hayes, 1998).

3.4.3 Conceptual Framework

Conceptual model is a theoretical structure of theories, principles and regulations that integrate all the ideas that makes up an extensive concept. Furthermore it can navigate research by providing a visual description of the theoretical constructs and variables of interest. Designing a conceptual model began with reviewing comprehensive literatures, searching for peer-reviewed journal articles, books/monographs, conference papers, and other related references.

The study conducted by Vinodkumar and Bhasi (2010) was used as a main reference and become the foundation in developing the conceptual framework for this research. They had developed three variables which are safety management practices (independent variable), determination of safety performance (mediator) and components of safety performance (dependent variable). In addition, the safety management practices can influence the development of safety environment in organization as concluded by them and there were some efforts to identify certain safety management practices which could determine safety performance. Figure 3.1 exhibits the conceptual framework which was developed by Vinodkumar and Bhasi (2010).

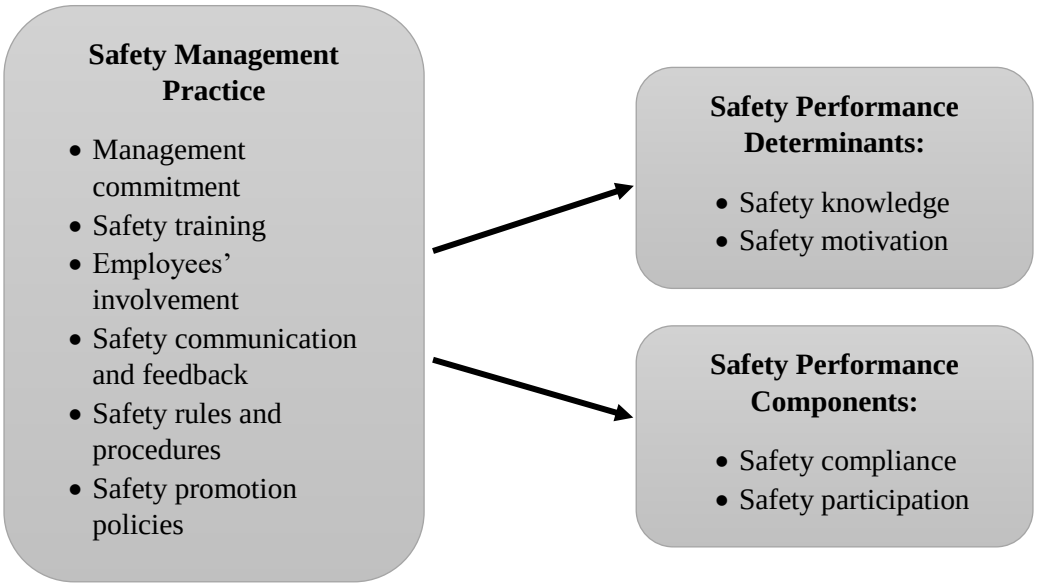


Figure 3.1: Model tested by Vinodkumar and Bhasi (2010)

For this research, a conceptual framework that has two variables namely safety management practice as independent variable and safety behavior as dependent variable. The conceptual framework for this study is as Figure 3.2 below:

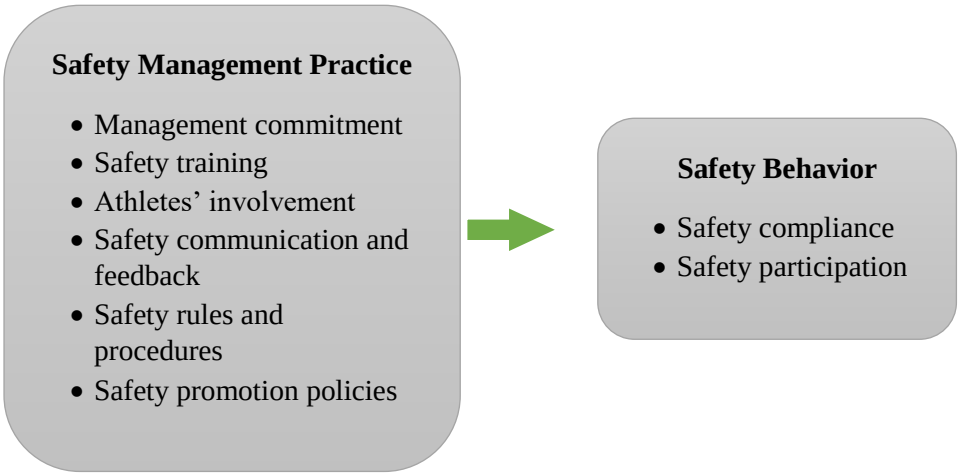


Figure 3.2: Research Conceptual Framework

3.5 Instrument Development

In this study, quantitative approach was implemented in the data collection, which includes the survey conducted through questionnaires. Applied quantitative approach was used in collecting data for this study as it is more relevant due to the economical design in data collection (Creswell, 2003; Anderson, Sweeney, &Williams, 2000). In completing this study, questionnaire method is adopted in data collection and it is the most common method in collecting data (Sekaran et. al., 2013). There are two instruments applied to fulfil the objective of research which are the compliance safety behaviour and safety management practice.

In this study, three sections were developed in the questionnaires with the specific questions to be answered by the respondents and used to test the hypotheses. In section A, demographic questions were included. Thereafter, section B measured safety management practice (33 elements), section C measured compliance safety behavior (12 elements). All items were measured using 5-point Likert scale and ranged from "1-strongly disagree" to "5-strongly agree".

At the same time, the questionnaire was also translated into Bahasa Malaysia by translator, later on after it was finalized by the supervisor for any anomalies that might be found. After it had been edited, the questionnaire was re-sent to another translator and was translated back into English to assure the consistency in language to the possible extent.

3.5.1 Safety Management Practice

There are six dimensions in safety management practice: management commitment (8 elements), safety training (5 elements), athlete's involvement (5 elements), safety communication and feedback (5 elements), safety rules and procedures (5 elements) and safety promotion policies (5 elements) and all of them have their own elements:

3.5.1.1 Management Commitment

Management commitment was adopted from Cheyne et. al. (1998), the elements are:

i. Safety is considered as high priority by the management
ii. Safety rules and procedures are adhered closely by the management
iii. Fixative action is always taken when the management is informed about unsafe practice
iv. In the Sports Centre, officers show no interest in the safety of the athletes
v. The management believe safety to be fairly important as services
vi. Students athletes do not involve in the Occupational Safety and Health meetings
vii. I feel that management is willing to compromise on safety for improving the services
viii. When near miss accident are reported, the management acts quickly to solve the problems

3.5.1.2 Safety Training

Safety training was adopted from Cox & Cheyne (2000) and its elements are:

i. The Sports Centre gives comprehensive training to their athletes on workplace health and safety issues
ii. Newly athletes are trained adequately to learn safety rules and procedures
iii. Safety issues are given high priority in training programs
iv. The management encourages the athletes to attend safety-training programs
v. Safety training given to me is adequate to enable to me to assess hazards during exercise / training

3.5.1.3 Athletes' Involvement

Athletes' involvement was adopted from Coyle et. al. (1995):

i. Management always honors opinion from athletes before making final decisions on safety related matters.
ii. The management has Safety and Health Committees consisting of representatives from management and athletes
iii. The management promotes athletes involvement in safety related matters.
iv. The management consults with athletes regularly about workplace safety and health issues.
v. Athletes do not sincerely participate in identifying safety and health problems.

3.5.1.4 Safety Communication and Feedback

Safety communication and feedback was adopted from Flin et. al. (2000) and its elements were:

i. The Sports Centre does not have a hazard reporting system in which users can correspond hazard information before it occurs

ii. The management operates an open door policy on safety and health issues

iii. There is sufficient opportunity to discuss and deal with safety and health issues in the meetings

iv. The target and goals for safety performance in the Sports Centre are not clearly explained to the users

v. There is an open interaction on the occupational safety and health issues in the Sports Centre

3.5.1.5 Safety Rules and Procedures

Safety rules and procedures was adopted from Glendon & Litherland (2001) and its elements are:

i. The safety rules and procedures followed in the Sports Centre are sufficient to prevent incidents from occurring

ii. The facilities which are provided by the Occupational Safety and Health Committee are inadequate to meet the needs of the organization

iii. The Sports Centre management always tries to enforce safe training procedures

iv. Safety inspections are carried out frequently

v. The safety procedures and practices in this organization are useful and effective

3.5.1.6 Safety Promotion Policies

Safety promotion policies was adopted from Neal et. al. (2000) and its elements are:

i. In the Sports Centre, safe conduct during training is considered as a positive factor for continuous training

ii. In the Sports Centre, athletes are rewarded for reporting any hazards (thanked, cash or other rewards, recognition in newsletter, etc.)

iii. In the Sports Centre, Occupational Safety and Health week celebration and other safety promotional activities arranged by the management can be effective in creating safety awareness among the athletes

iv. There is a presence of a healthy competition among the athletes on the awareness of finding out and reporting any unsafe conditions and acts during training

v. The management tend to be unhappy and sometimes feel offended when athletes find out and report the unsafe conditions and acts in the unit

3.5.2 Safety Behavior

There are seven (7) elements that were being measured in the safety compliance and five (5) more in the safety participation developed by Hayes et. al. (1998) used in this study. Those will be used to assess the respondents for the safety behavior.

3.5.2.1 Safety Compliance

i. I use all necessary safety equipment to do exercise / training
ii. I carry out my exercise / training in a safe manner
iii. I follow the correct safety rules and procedures while carrying out exercise / training
iv. I ensure the highest levels of safety when I carry out my exercise / training
v. Occasionally due to lack of time, I deviate from the correct and safe procedures
vi. Occasionally due to over familiarity with the facilities / activity, I deviate from correct and safe procedures
vii. It is more practical to follow all safety rules and procedures while doing the exercise / training

3.5.2.2 Safety Participation

i. I help my friend when they are exercising / training under risky or hazardous conditions
ii. I always point out to the management if any safety related matters were noticed in the Sports Centre
iii. I put extra effort to improve the safety of the facilities usage

iv. I voluntarily carry out any tasks or activities that can help to improve athlete / customer safety

v. I encourage my friend to exercise / training safely

3.6 Sampling Design

The respondent in this study were insured individuals (athletes) who had been actively using the facilities in the UUM Sports Centre. Annually, UUM will participate in the sports event held by MASUM (Majlis Sukan Universiti Malaysia). The range of athletes that UUM will send in the tournament vary from 100 to 150 athletes, depends on the sport events offered by the current host. By referring to the Krejcie and Morgan (1970) guidelines, the number of sample could be determined and the sample size chose for this study was 120.

In this study, a random sampling had been carried out for data collection. The random sampling will be used to identify the related respondent in each area. The best way to achieve valid conclusions is by using the random sampling as it is usually the most effective way without any bias (Sekaran et. al., 2013).

3.7 Pilot Test

To ensure that the questionnaires were understood, reliable and usable in collecting the data, pilot test was conducted on 7th November – 12th December, 2017 involving 70 respondents (insured individuals). According to Zikmund (2003), the pilot study is used as a guideline for a study and collected data from the definitive subjects of research project in a small scale acute sampling technique without accurate standard and it is necessary to identify the problem in instrument tools. 70 questionnaires had been

managed to hand over to the athletes who had / will represent UUM in the MASUM tournament and 60 completed questionnaires were returned. In other word, the respond rate for the pilot test is 85.7%. The purpose of the pilot test is to test the reliability of the measurement tools used in this study and analyse the feedbacks from respondent about the wording difficulties and the lay out questionnaire. Statistical Package for Social Sciences (SPSS) version 22.0 analysed the raw data from the pilot test for Social Sciences to produce the descriptive and reliability test.

In Table 3.1, the demographic profile shows that all the respondents were all Malaysian (100%), while majority of the respondents were male with 28.33 % from the total amount. Most of the respondents aged between 20 to 30 years old or 86.66 %. Majority of the respondents' education level were first degree with 88.33%. On top of that, most of the respondents usually used the facilities in the Sports Centre 1 to 2 times per week with 48.33%. The respondents reported that most of them experienced accidents during training 1 to 2 times with 43.33%. Furthermore, 60% of the respondents stated that they were never involved in any safety training done by the instructor at the Sports Centre.

Table 3.1: Demographic profile (n=60)

Items	Profile	Frequency	Percentage %
1 Nationality	Malaysian	60	100
2 Age	20 – 30	53	88.33
	31 – 40	7	11.66
3 Sex	Male	17	28.33
	Female	43	71.66
4 Level of Education	First Degree	53	88.33
	Master Degree	7	11.66

5 Frequency of using the facilities or equipment in Sports Centre	1– 2 times per week	29	48.33
	3– 4 times per week	22	36.66
	5– 7 times per week	6	10
	More than 7 times per week	3	5
6 Number of accidents experienced during training	1-2 times	26	43.33
	3-4 times	10	16.66
	More than 4 times	2	3.33
	None	22	36.66
7 Do you ever involve in any safety training done by the instructor at the Sports Centre	Yes	24	40
	No	36	60

The data also was done for the reliability test to test the instrumentation consistency. Cronbach Alpha value was used to identify the reliability of the scale in this study. The data then were analyzed by SPSS version 22 to calculate the Cronbach's Alpha coefficient for reliability test. The details of the Cronbach Alpha value results are shown in the Table 3.2 below.

Table 3.2: The tested instruments for reliability in the pilot test.

Variables	Number of items	Label	Cronbach Alpha Coefficient
Safety Management Practice	33	B1 to B33	.726
Safety Behavior	12	C34 to C45	.764
TOTAL	**45**		**.819**

3.8 Summary

In this study, the result were based on 60 questionnaires sample collected from the respondents to examine the safety behavior through safety management practice among student athletes who are actually involved in using the sports facilities and have the tendency to involve in accident. The internal consistency will be determined through the Cronbach's Alpha reliability test using SPSS version 22 software.

CHAPTER 4

RESULTS AND ANALYSIS

4.1 Introduction

In this chapter, the analysis of the study was conducted via reliability test, descriptive frequencies. Pearson correlation will be reported and explained in details. The descriptive frequencies involved the demographic measurement on nationality, age, sex, level of education, frequency of using the facilities or equipment in the Sports Centre, number of accidents experienced during training and involvement in any safety training done by the instructor at the Sports Centre. The results of the study will be explained in this chapter.

4.2 Response Rate

The selected questionnaires were distributed for 70 respondents and only 60 respondents had answered all the questionnaires. The factors which might affect the number of unreturned questionnaires were time constraint, lack of support by the respondents and others. In addition, during the analysis, a total amount of 6 items were recorded since they were negative statements in which the rating had to be changed from 1 to 5, 2 to 4, 3 to 3, 4 to 2 and 5 to 1, another important thing that can be noticed was that there was no item with null data. The questionnaires were distributed among the UUM student athletes for selected sports which were volleyball men and women team, softball women team, hockey men and women team, rowing team and netball team. All the questionnaires were collected back within a week.

4.3 Preliminary Analysis

Based on the demographic items provided inside the questionnaires which were classification of the nationality, age, sex, level of education, frequency of using the facilities or equipment in the Sports Centre, number of accidents experienced during training and involvement in any safety training done by the instructor at the Sports Centre were analyzed using descriptive frequency analysis.

4.4 Profile of Respondents

By using the descriptive frequency analysis, the respondents' profiles were analyzed. Table 4.1 presents the detailed descriptive statistics of the respondents' characteristics.

Table 4.1: Demographic characteristics of the respondents (n=120)

Items	Profile	Frequency	Percentage %
1 Nationality	Malaysian	119	99.16
	Non Malaysian	1	0.83
2 Age	20 – 30	110	91.66
	31 – 40	10	8.33
3 Sex	Male	31	25.83
	Female	89	74.16
4 Level of Education	First Degree	110	91.66
	Master Degree	10	8.33
5 Frequency of using the facilities or equipment in Sports Centre	1– 2 times per week	58	48.33
	3– 4 times per week	36	30
	5– 7 times per week	19	15.83
	More than 7 times per week	7	5.83
6 Number of accidents experienced during training	1-2 times	45	37.5
	3-4 times	12	10
	More than 4 times	4	3.33
	None	59	49.16

7 Do you ever involve in any safety training done by the instructor at the Sports Centre	Yes	48	40
	No	72	60

The first data that had been analyzed was the nationality of the respondents. The local Malaysian student athletes were the majority of the respondents with 99.16% in which the frequency were 119 respondents. Next is the age profile of the respondents. Most of the respondents were 18 to 25 years old which consists of 91.66% with the frequency of 110. The second biggest of age respondents were 26 to 30 years old in which it represented 8.33% with the frequency of 10.

Then by looking at the sex of the respondents, most of the respondents were female student athletes which represent 74.16% and the frequency was 89. This is normal because in UUM the percentage of female students is almost 76% more compared to the male students. The male student athletes represented 25.83% with the frequency 31.

The fourth profile of respondents was the level of education in which majority of the respondents had was first degree with the percentage of 91.66% and the frequency of 110. Meanwhile, 8.33% respondents had their master degree with frequency of 10. The fifth profile was the usage of facilities or equipment by the respondents in the Sports Centre. 48.33% which involved 58 respondents and majority of them went and used the Sports Centre facilities or equipment 1 to 2 times every week. 19 respondents (15.83%) often went to the Sports Centre 5 to 7 times every week. Then, 36 respondents with 30% percentage went to the Sports Centre 3 to 4 times every week. Lastly in this profile,

5.83% with frequency 7 respondents always went to the Sports Centre more than 7 times every week.

The next profile was the number of accidents experienced during training. 59 respondents with 49.16% were the majority of them who responded that they never experienced in any accidents during their training. The second biggest was 37.5% with the frequency of 45 responded that they experienced an accident 1 to 2 times during training. Then, 10% with the frequency of 12 responded that they experienced an accident 3 to 4 times during training. Lastly, 3.33% with the frequency of 4 responded that they had experienced more than 4 times accident during their training.

The final data in the demographic profile of the respondents was the involvement of the respondents in any safety training done by the instructor at the Sports Centre. 60% majority of the respondents stated that they had never been involved in any safety training by the Sports Centre. Meanwhile 40% with the frequency of 48 stated that they had involved in the safety training done by the instructor at the Sports Centre.

4.5 Reliability Analysis of Questionnaire Items

Based on the principle, a measurement procedure which is stable should come out with the results which are the same or approximately similar if the same individual and condition are used. Hence, reliability indicates the amount observed in the variance score against in the actual variance score. SPPS determines the performance of the items on the test measure the same construct or idea for the internal consistency reliability. For this research, the reliability coefficient called Cronbach's Alpha had been used (Cronbach, 1951). In addition, a Cronbach Alpha value of 0.70 and above indicates that

the internal consistency of the defined scale is strong. Furthermore, the Cronbach Alpha value which is 0.60 and above is considered significant. Table 4.2 shows the reliability test of the two variables in this study which are safety management practice and safety behavior. The Cronbach's Alpha value which was .909 indicates it had good internal consistency on the data reliability.

Table 4.2: The reliability test of all variables

Cronbach's Alpha Value	N of items
.909	45

In order to check the reliability further, the variables in the study were tested by the six dimensions of safety management practice and safety behavior.

Table 4.3: The reliability test of each variable

Variable	No. of Items	Cronbach's Alpha Value
Safety Management Practice	33	.886
Safety Behavior	12	.824
TOTAL		.909

The results of the Cronbach's Alpha value in Table 4.3 demonstrated by SPSS indicate that total value for all safety management practice variable was (α= .886) meanwhile total value for the safety behavior variable was (α = .824). As a result, total value for both variable was (α = .909).

4.6 Answering the Research Questions

In order to answer the first research question on the level of safety management practice among student athletes in Universiti Utara Malaysia (UUM), the mean statistics test was carried out in answering the question. The data had been analyzed by using SPSS program version 22 and the classification of mean is described as in the table 4.4.

Table 4.4: Classification of mean

Range of mean	Description
1.00 – 1.80	Very low
1.81 - 2.60	Low
2.61 – 3.40	Moderate
3.41 – 4.20	High
4.21 – 5.00	Very high

Source: Veloo & Rahman, 2012

Table 4.4 describes on the mean statistics of the Independent Variable as well as Dependent Variable for comparison. The data showed that the mean value between value safety management practice and safety behavior awareness were between 1.77 – 4.23. Therefore, safety behavior scored higher mean value at 4.23 as compared to 4.18 for safety management practice. Furthermore, the standard deviation score for safety management practice was .389 and safety behavior was .739.

Table 4.5: Mean statistics for safety management practice and safety behavior

Variable	N	Mean	Standard Deviation
Safety Management Practice	120	4.18	.389
Safety Behavior	120	4.23	.739

Next, in order to answer research question number two which is the level of safety related behavior among student athletes in Universiti Utara Malaysia, the results of mean statistic of safety related behavior is as showed in the Table 4.6 below.

Table 4.6: Mean statistics for safety related behavior

Variable	N	Mean	Standard Deviation
Safety Behavior	120	4.23	.739

The results indicated that safety related behavior had higher mean value of 4.23 (very high). These results proved that the respondents had good attitude and response towards safety related behavior during training in the Sports Centre. As the results stated, majority of the respondents had higher tendency to perform their routine training and exercise in a good and safe condition, follow the rules and regulations and always align with the Standard Operating Procedure (SOP).

Overall, the higher standard deviation score for safety related behavior was .739. Therefore, the results indicated that there was relatively inclination among all the respondents towards safety related behavior.

4.7 Correlation Test Analysis

Correlation test analysis is done to "determine the strength and the directions of the linier relationship between two variables" (Pallant, 2007). In order to answer research question number three if there was any relationship between safety management practice and safety related behavior among UUM student athletes, the correlation test analysis was used and the range of correlation and the description as in Table 4.7 below.

Table 4.7: Table of correlation

Range of correlation	Description
0.91 – 1.00	Very strong
0.71 – 0.90	Strong
0.51 – 0.70	Moderate
0.31 – 0.50	Weak
0.01 – 0.30	Very weak
0.00	No correlation

Source: Chua, 2006

Based on Table 4.7, from Chua (2006) above showed that the analysis result of Pearson Correlation between safety management practice in which the dimensions were management obligation, security training, athletes' participation, safety correspondent

and feedback, safety regulations and procedures and safety promotion and policies as well as safety related habits are shown in Table 4.8. It displayed a strong correlation at r = 0.567. Results showed that moderate correlation and significant (r = 0.567) between safety management practice and safety related behavior. This means that when all the athletes followed and have clear information about the safety management practice, the possibility and risk towards their behavior and attitude will be moderate. Therefore, the Sport Centre Management should enhance and upgrade their service to be more efficient.

Table 4.8: Correlation Analysis of Safety Management Practice and Safety Behavior

Correlations

		Safety management practice	Safety behavior
Safety management practice	Pearson Correlation	1	.567**
	Sig. (2-tailed)		.000
	N	120	120
Safety behavior	Pearson Correlation	.567**	1
	Sig. (2-tailed)	.000	
	N	120	120

**. Correlation is significant at the 0.01 level (2-tailed).

4.8 Regression Analysis

Regression analysis is a statistical technique for estimating the relationship among variables. It includes many techniques for modelling and analyzing several variables, when the focus is on the relationship between a dependent variable and one or more independent variables. Hence, it will help one to understand on how the typical value of the dependent variable changes when any one of the independent variables is varied, while the other independent variables are held fixed.

Table 4.9 below show the result of regression analysis for the safety management practice and safety behavior of the UUM student athletes. The value for R square is .321 (32.1%). The results showed that the independent variable which is safety management practice is significant with the dependent variable which is safety behavior. The ANOVA result table in Table 4.10 and Table 4.11 indicates that the model and variables as a whole is statistically significant between the groups' means with the t value 7.476 and .000 (< .05).

Table 4.9: Results of Regression Analysis

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.567[a]	.321	.316	5.220

a. Predictors: (Constant), SMP

b. Dependent Variable: CSB

Table 4.10: Result of ANOVA

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1522.974	1	1522.974	55.895	.000[b]
	Residual	3215.151	118	27.247		
	Total	4738.125	119			

a. Dependent Variable: CSB

b. Predictors: (Constant), SMP

Table 4.11: The Coefficients Results

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	12.966	4.394		2.951	.004
	SMP	.281	.038	.567	7.476	.000

a. Dependent Variable: CSB

4.9 Summary

The study was conducted among 120 respondents in the UUM Sports Centre and the percentage rate was 100%. The Cronbach's Alpha value for all variables was 0.909. Therefore, the Cronbach's Alpha value in this study was acceptable and showed good internal consistency reliability as per reference value of above 0.60. Furthermore, it also can be concluded that there was a moderate relationship between the independent variable (safety management practice) and dependent variable (safety related behavior) with a score of r =0.567. There is significant value (.000) between safety management practice and safety behavior with the t value is 7.476 among the UUM student athletes.

CHAPTER FIVE

DISCUSSION AND RECOMMENDATIONS

5.1 Introduction

In this chapter, the summary of the research that was conducted and the data which were gained from the research will also be discussed. Then, the objective of this study is to analyze the relationship between safety management practice (management commitment, safety training, athletes involvement, safety communication and feedback, safety rules and procedures and safety promotion policies) towards safety related behavior in UUM Sports Centre. Therefore, the outcomes and findings of the research may guide UUM Sports Centre specifically and other sports agencies generally in enhancing the level of safety management practice as well as safety related behavior at its organizations.

Most of the literature reviews have emphasized that majority of the previous studies on safety related behavior on other agencies rather than the sports club or sports centre. Related literature regarding safety related behavior in the sports area is scarce. No doubt, all the initiatives need lots of management commitment, safety training, athletes' involvement, safety communication and feedback, safety rules and procedures and safety promotion policies through the platform of Occupational Safety and Health (OSH) committee of an organization. Top level management of the organization needs to be very essential in making the organization safe and in good condition by integrating the knowledge, attitude and action towards occupational safety and health including safety related behavior.

In the study that was conducted, the independent variable was safety management practice (management commitment, safety training, athletes' involvement, safety communication and feedback, safety rules and procedures and safety promotion policies) whereas the dependent variable was safety related behavior. Moreover the respondents involved were 120 personnel whom represent UUM in the sports tournament.

5.2 Discussing the Research Questions

RQ1: What is the level of safety management practice among student athletes in UUM?

In answering the question, the results showed that the mean value was 4.18 (Table 4.5) which indicated a high value of consistency. For the management variable, the UUM student athletes are really appreciated and recognized as well as the efforts and commitment being made by the management in making the work place safe. According to Ismail et. al. (2011), the management commitment is the key entity in making the safety culture can be achieved.

From the safety training perspective, the UUM student athletes who are the important client of the organization are really understandable and appreciative with the initiatives for providing safety and healthy training or exercise in which it will be beneficial for both the athletes and management. Then, for the athletes' involvement, they were not given much chance to participate in the safety management practice discussion, meeting and so on. Furthermore, for safety communication and feedback, the findings demonstrated that the

communication between the athletes and the management is not really effective and lacking.

Next, for the safety rules and procedures, all the Standard Operating Procedures (SOP) as well as Occupational Safety and Health (OSH) protocols have been executed strictly and comprehensively with regular audits checkup. After that is the dimension of safety promotion policies indicated that the management do apply and encourage all the users and athletes to report any hazard or misconduct done by other users. Many methods are being used widely in order to implement recognition and incentive programs for the purpose to convince safety performance (Minter, 2003).

RQ2: What is the safety related behavior among student athletes in UUM?

The mean value of 4.23 (Table 4.5) for the safety related behavior (Dependent Variable) had indicated that a high level of data consistency as according to Veloo and Rahman (2013). Most of the UUM student athletes were really aware and concerned about the safety during exercising or training. Their attitude towards safety behavior were very positive.

RQ3: Is there any relationship between safety management practice and safety related behavior among UUM student athletes?

There was a moderate correlation between safety management practice (management commitment, safety training, athletes' involvement, safety communication and feedback, safety rules and procedures, and safety

promotion policies) and safety related behavior at the r value was 0.567. As according to Chua (2006), the value of r = 0.567 indicates that the correlation is moderate.

5.3 Implications to the Organization

The findings and results of this research will hopefully have practical implications which include the personnel, users / athletes and the organization as well. Zero accident and good quality services should be the main objective of the organization. Safety of the users should also be taken into serious matters. The engagement of the management and the users is a must, the management policy and rules must be made clear and can be disseminate to all users.

From the human resource perspective and behavior, the findings propose that the management should enhance the competency, knowledge regarding the safety aspect, attitude and communication skills of the employees in order to be more efficient and effective in doing their job.

For the users or athletes, the Sports Centre should conduct more mini workshops, briefing, short-term courses, prepare and distribute pamphlets and posters on the facilities offered and the safety aspect regarding the usage of the facilities. Young athletes nowadays are more on their gadgets, so the management should make the information easier, more informative and interactive by using the social media (Facebook, Tweeter, Instagram, etc.) and others that can be manipulated for the good purposes in order to improve and alert the knowledge on safety behavior during exercise or using the sports facilities among user or athletes.

In addition, to improve the knowledge, attitude and action towards safety related behavior among UUM student athletes or other users, the recommendations are:-

i. Make a mini briefing session or workshops during new semester intake, so that the new athletes will be more alert.

ii. Appoint a knowledgeable and skillful staff to monitor and supervise them during training or using the facilities. The staff also must be given knowledge about first aid, so that the staff can give the first treatment if anything happens during the activities.

iii. Survey or discussion can be done with the student representatives or athletes themselves in order to get feedback about the safety aspect or improvement.

iv. Information regarding safety and health can be disseminate via email, or social media.

In conclusion, the safety behavior should be a culture that must be promoted in the UUM Sports Centre in order to make not only the users or athletes but also among the employees itself to be more alert and committed to make the UUM Sports Centre and its facilities and activities to be done in safe and good condition.

5.4 Limitation of the Study

The research can be discussed in different demographic characteristic which can influence the data collection since the data was a cross-sectional study. Furthermore, students in UUM come from various countries in the world. Then, the training schedule for each team is different and the location of the training also varies. The literature for sports safety in facilities usage in Malaysia or this region is also scarce.

5.5 Recommendations for Future Studies

The research regarding the relationship of safety management practice towards safety behavior can be expanded to the staff or other users also because they are not athletes but they also frequent the sports facilities. An effective communication framework can also be developed for the purpose to gain higher efficiency data collection and users or athletes participations such as using the social media (email, survey websites, WhatsApp, Tweeter, etc.) because the survey that had been done during or after training were not really proper and the respondents seem tired due to training and sweating.

5.6 Conclusion

For the conclusion, the safety management practice such as management commitment, safety training, athletes' involvement, safety communication and feedback, safety rules and procedures and safety promotion policies do have moderate correlation at the value of r = 0.567 with safety behavior. Lots of efforts, commitments, resources, enforcements and enhancements need to be done by the management in order to improve the quality of safety management practice and make the safety behavior as a culture in the UUM Sports Centre.

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APPENDICES

Reliability

Scale: Cronbach Alpha for Safety Management Practice

Case Processing Summary

		N	%
Cases	Valid	120	100.0
	Excluded[a]	0	.0
	Total	120	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.886	.888	33

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.528	1.767	4.183	2.417	2.368	.344	33

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
116.42	162.615	12.752	33

Reliability

Scale: Cronbach Alpha for Safety Behavior

Case Processing Summary

		N	%
Cases	Valid	120	100.0
	Excluded[a]	0	.0
	Total	120	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.824	.840	12

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.802	3.050	4.225	1.175	1.385	.133	12

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
45.63	39.816	6.310	12

Reliability

Scale: Total Cronbach Alpha for Safety Management Practice & Safety Behavior

Case Processing Summary

		N	%
Cases	Valid	120	100.0
	Excluded[a]	0	.0
	Total	120	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.909	.914	45

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.601	1.767	4.225	2.458	2.392	.298	45

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
162.04	293.671	17.137	45

CORRELATIONS - SAFETY MGT PRACTICE & SAFETY BEHAVIOR

Descriptive Statistics

	Mean	Std. Deviation	N
SMP	116.42	12.752	120
CSB	45.63	6.310	120

Correlations

		SMP	CSB
SMP	Pearson Correlation	1	**.567****
	Sig. (2-tailed)		.000
	N	120	120
CSB	Pearson Correlation	**.567****	1
	Sig. (2-tailed)	.000	
	N	120	120

**. Correlation is significant at the 0.01 level (2-tailed).

Multiple Regression Analysis - SMP & SB

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	SMP[b]	.	Enter

a. Dependent Variable: CSB

b. All requested variables entered.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	**.567[a]**	.321	.316	5.220

a. Predictors: (Constant), SMP

b. Dependent Variable: CSB

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1522.974	1	1522.974	**55.895**	**.000[b]**
	Residual	3215.151	118	27.247		
	Total	4738.125	119			

a. Dependent Variable: CSB

b. Predictors: (Constant), SMP

Coefficients[a]

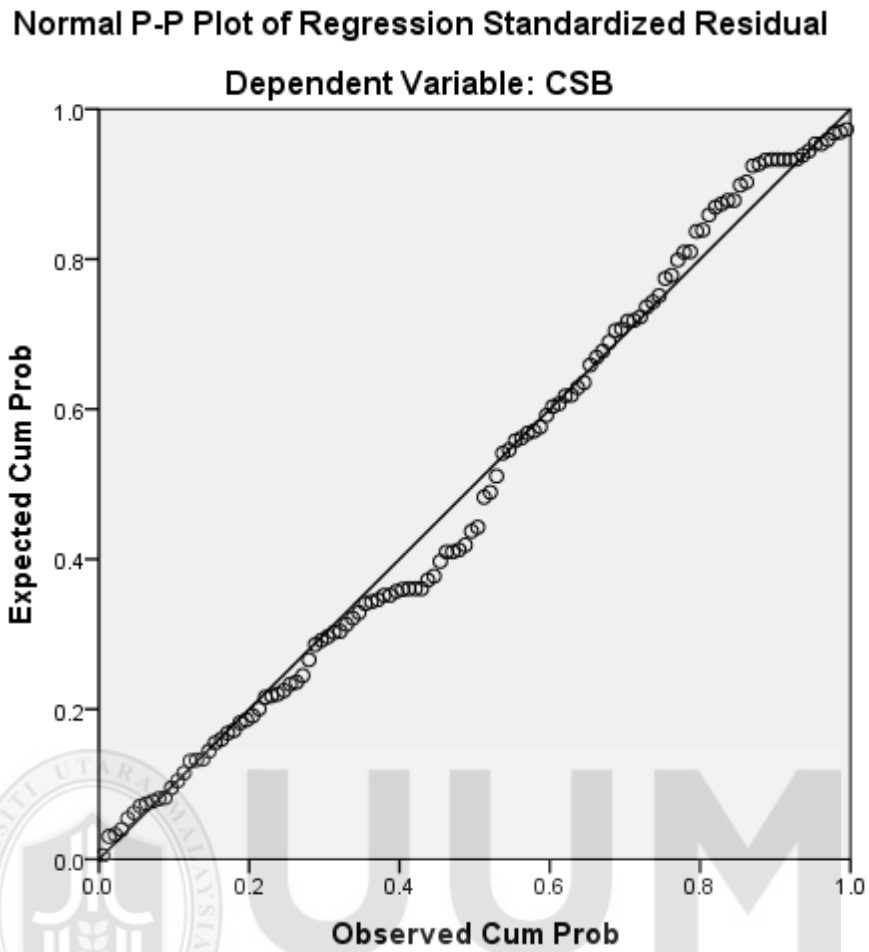
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	12.966	4.394		2.951	.004
	SMP	.281	.038	.567	7.476	**.000**

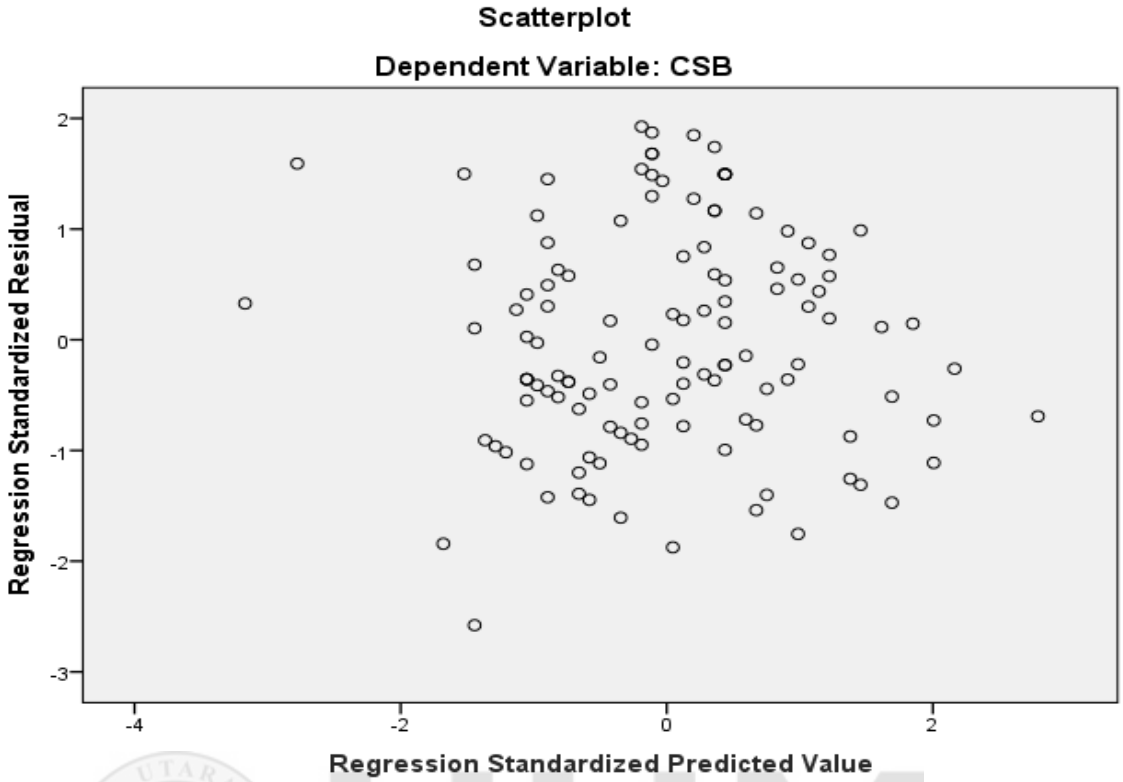
a. Dependent Variable: CSB

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	34.29	55.61	45.63	3.577	120
Std. Predicted Value	-3.169	2.790	.000	1.000	120
Standard Error of Predicted Value	.477	1.590	.644	.199	120
Adjusted Predicted Value	34.11	55.89	45.63	3.607	120
Residual	-13.458	10.053	.000	5.198	120
Std. Residual	-2.578	1.926	.000	.996	120
Stud. Residual	-2.612	1.934	-.001	1.004	120
Deleted Residual	-13.816	10.141	-.007	5.285	120
Stud. Deleted Residual	-2.680	1.957	.000	1.010	120
Mahal. Distance	.001	10.045	.992	1.538	120
Cook's Distance	.000	.108	.008	.015	120
Centered Leverage Value	.000	.084	.008	.013	120

a. Dependent Variable: CSB





MOHD AIZUL FIRDAUS BIN MUSA
MASTER OF SCIENCE (MANAGEMENT)
S817797

PART A: DEMOGRAPHIC FACTORS

GENDER

☐ Male ☐ Female

NATIONALITY

☐ Malaysian
☐ Non- Malaysian
Country of origin _____

AGE

☐ 18 – 21 Years ☐ 22 – 25 Years
☐ 26 – 29 Years ☐ 30 – 33 Years
☐ 34 – 37 Years ☐ Above 38 Years

QUALIFICATION

☐ Sijil Pelajaran Malaysia (SPM) ☐ Sijil Tinggi Pelajaran (STPM)
☐ Diploma ☐ Degree
☐ Master ☐ PhD

NUMBER OF ACCIDENTS EXPERIANCED

☐ None ☐ More than 4 times
☐ 1 – 2 times
☐ 3 – 4 times

==========

Please **circle** your opinion on the following statements by using the given scale.

Strongly disagree ⟶ Strongly agree

PART B: MANAGEMENT COMMITMENT

Safety is given high priority by the management	1	2	3	4	5
Safety rules and procedures are strictly followed by the management	1	2	3	4	5
Corrective action is always taken when the management is told about unsafe practices	1	2	3	4	5
Management do not show interest in the safety of athlete / customer	1	2	3	4	5
Management considers safety to be equally important as satisfaction	1	2	3	4	5

I feel that the management is willing to compromise on safety for increasing athlete / customer satisfaction	1	2	3	4	5
When near-miss accidents are reported, the management acts quickly to solve the problems	1	2	3	4	5
The management provides sufficient personal protective equipments (PPE) for the athlete / customer	1	2	3	4	5

PART C: ATHLETES / CUSTOMER INVOLVEMENT

Management always welcomes opinion from athlete / customer before making final decisions on safety related matters	1	2	3	4	5
The management has safety committees consisting of representatives of athlete / customer	1	2	3	4	5
Management promotes athlete / customer involvement in safety related matters	1	2	3	4	5
Management consults with athlete / customer regularly about workplace health and safety issues	1	2	3	4	5
Athlete / customer do not sincerely participate in identifying safety problems	1	2	3	4	5

PART D: SAFETY RULES AND PROCEDURES

The safety rules and procedures followed in the Sports Centre are sufficient to prevent incidents from occurring	1	2	3	4	5
The management always try to enforce safe working procedures	1	2	3	4	5
Safety inspections are carried out regularly	1	2	3	4	5
The safety procedures and practices in this Sports Centre are useful and effective	1	2	3	4	5

PART E: SAFETY BEHAVIOR

I use all necessary safety equipments to do exercise / training	1	2	3	4	5
I carry out my exercise / training in a safe manner	1	2	3	4	5
I follow correct safety rules and procedures while carrying out exercise / training	1	2	3	4	5
I ensure the highest levels of safety when I carry out exercise / training	1	2	3	4	5
Occasionally due to lack of time, I deviate from correct and safe procedures	1	2	3	4	5
Occasionally due to over familiarity with the facilities / activity, I deviate from correct and safe procedures	1	2	3	4	5
It is not always practical to follow all safety rules and procedures while doing the exercise / training	1	2	3	4	5

I help my friend when they are exercise / training under risky or hazardous conditions	1	2	3	4	5
I always point out to the management if any safety related matters are noticed in the Sports Centre	1	2	3	4	5
I put extra effort to improve the safety of the facilities	1	2	3	4	5
I voluntarily carry out tasks or activities that help to improve athlete / customer safety	1	2	3	4	5
I encourage my friend to athlete / customer safely	1	2	3	4	5

Adopted from:

1- Vinodkumar and Bhasi (2010)