

UNIVERSITI PUTRA MALAYSIA

MEDIATING EFFECT OF ATTITUDE ON COMPETITIVE SPORTS PARTICIPATION AND ACADEMIC ACHIEVEMENT OF UNIVERSITY STUDENTS IN THE EASTERN REGION OF SAUDI ARABIA

AL-AHMED, MUSTAFA ISSA A

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AL-AHMED, MUSTAFA ISSA A

Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfilment of the Requirements for the Degree of Doctor of Philosophy

July 2017



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DEDICATION

This thesis is dedicated first to my country Kingdom of Saudi Arabia, which allowed me to get a scholarship to complete my study and obtain a PhD degree. Second, it is dedicated to my beloved parents, wife, children and all my family members for their prayers, support and patience during the study. Third, it is dedicated to whom it may be concerned for this subject in our sports field.



Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the degree of Doctor of Philosophy

MEDIATING EFFECT OF ATTITUDE ON COMPETITIVE SPORTS PARTICIPATION AND ACADEMIC ACHIEVEMENT OF UNIVERSITY STUDENTS IN THE EASTERN REGION OF SAUDI ARABIA

By

AL-AHMED, MUSTAFA ISSA A

July 2017

Chairman: Aminuddin Bin Yusof, PhD Faculty: Educational Studies

The main objective of this current study is to investigate how the attitudes of the undergraduate student-athletes mediate the relationship between the participation in competitive sports (PCS) and the academic achievement (AA). The two attitudes being studied are namely the attitude towards academic achievements (ATAA) and the attitude towards participation in competitive sports (ATPCS). Using questionnaire as research instrument, a total of three hundred undergraduate student-athletes from six academic institutions in the Eastern Region of Saudi Arabia were asked to respond to the scale of Attitudes toward Physical Activity (ATPA) to obtain data on ATPCS, the Survey of Study Habits and Attitudes (SSHA) to obtain data on ATAA, and directly enquire the participants about their point average of academic grade (GPA) and the frequency of their competitive sports participation, to obtain data on AA and PCS. The results indicated that PCS significantly predicts the AA [F(1, 298)=272.27, p<.01], whereas ATPCS and ATAA significantly mediate the influence of PCS on AA [Beta value changed from .691 to .695 for ATPCS and from .691 to .520 for ATAA]. The results indicated that the more active an individual to participate in competitive sports, the better his academic performance; however, when his attitude towards participation in competitive sports and his attitude towards academic achievement are more positive, the influence of his participation in competitive sports on academic achievement become stronger. These results could be attributed to the regulation from Saudi Universities Sports Federation (SUSF) that only undergraduate studentathletes who achieve certain academic scores (GPA) can participate in competitive sports. The findings showed that the interrelationship among variables occur when a proper regulation is enforced in order to achieve better condition (student-athletes with high achievements both in sports and academics), because the interrelationship among the variables in this current study might not occur without the regulation.



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Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

KESAN MEDIASI SIKAP KE ATAS PENYERTAAN DALAM SUKAN BERTANDING DAN PENCAPAIAN AKADEMIK PELAJAR UNIVERSITI DI WILAYAH TIMUR NEGARA ARAB SAUDI

Oleh

AL-AHMED, MUSTAFA ISSA A

Julai 2017

Pengerusi: Aminuddin Bin Yusof, PhD Fakulti: Pengajian Pendidikan

Objektif utama kajian ini adalah untuk meneliti bagaimana sikap pelajaratlet prasiswazah berperanan sebagai mediasi dalam hubungan antara penyertaan pertandingan sukan (PCS) dan pencapaian akademik (AA). Dua sikap dikaji, iaitu sikap terhadap pencapaian akademik (ATAA) dan sikap terhadap penyertaan dalam pertandingan sukan (ATPCS). Dengan menggunakan soal selidik sebagai instrumen kajian, seramai 300 orang pelajar-atlet prasiswazah daripada enam institusi akademik di Wilayah Timur Kerajaan Arab Saudi telah diminta untuk memberikan maklum balas melalui skala Attitudes toward Physical Activity (ATPA) tentang sikap terhadap aktiviti fizikal untuk memperoleh data tentang ATPCS, skala Survey of Study Habits & Attitudes (SSHA) untuk memperoleh data tentang ATAA, dan pertanyaan langsung tentang nilai gred purata mereka (GPA) dan kekerapan PCS mereka untuk memperoleh data tentang penyertaan dalam sukan dan pencapaian akademik. Hasil kajian menunjukkan bahawa penyertaan dalam pertandingan sukan (PCS) secara signifikan dapat meramalkan pencapaian akademik (AA) [F(1, 298)=272.27, p<.01], manakala sikap terhadap penyertaan dalam pertandingan sukan (ATPCS) dan sikap terhadap pencapaian akademik (ATAA) secara signifikan memberikan PCS terhadap AA [Nilai Beta berubah daripada .691 kepada .695 untuk ATPCS dan daripada .691 kepada .520 untuk ATAA]. Penemuan ini menunjukkan bahawa semakin aktif seseorang individu menyertai pertandingan sukan, semakin baik prestasi akademiknya; walau bagaimanapun, apabila ATPCS nya dan ATAA nya lebih positif, pengaruh ATPCS nya terhadap AA menjadi lebih kuat. Dapatan ini boleh dikaitkan dengan peraturan Persekutuan Saudi Universities Sports Federation (SUSF) yang menetapkan bahawa hanya pelajar-atlet yang mencapai skor akademik tertentu boleh mengambil bahagian dalam pertandingan sukan.

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Members of the Thesis Examination Committee were as follows:

Tengku Fadilah binti Tengku Kamalden, PhD

Senior Lecturer Faculty of Educational Studies Universiti Putra Malaysia (Chairman)

Soh Kim Geok, PhD

Associate Professor Faculty of Educational Studies Universiti Putra Malaysia (Internal Examiner)

Zaidatol Akmaliah binti Lope Pihie, PhD

Professor Faculty of Educational Studies Universiti Putra Malaysia (Internal Examiner)

Tony Blackshaw, PhD

Professor Sheffield Hallam University United Kingdom (External Examiner)

NOR AINI AB. SHUKOR, PhD Professor and Deputy Dean School of Graduate Studies Universiti Putra Malaysia

Date: 26 October 2017

This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of the Doctor of Philosophy.

The members of the Supervisory Committee were as follows:

Aminuddin bin Yusof, PhD

Professor Faculty of Educational Studies Universiti Putra Malaysia (Chairman)

Saidon bin Amri, PhD

Associate Professor Faculty of Educational Studies Universiti Putra Malaysia (Member)

Borhannudin bin Abdullah, PhD

Senior Lecturer Faculty of Educational Studies Universiti Putra Malaysia (Member)

ROBIAH BINTI YUNUS, PhD

Professor and Dean School of Graduate Studies Universiti Putra Malaysia

Date:

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Name and Matric No.: Al-Ahmed, Mustafa Issa A (GS34406)

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Signature

Name of Chairman of Supervisory Committee

PROF. DR. AMINUDDIN BIN YUSOF Ketua Jabatan Pengajian Sukan <u>Fakulti Pengajian Pendidikan</u> Universiti Putra Malaysia 43400 Serdang, Selangor

Signature

Name of Member of Supervisory Committee PROF. MADYA DR. SAIDON AMRI Jabatan Pengajian Sukan Fakulti Pengajian Pendidikan Universiti Putra Malaysia 43400 Serdang, Selanger D.E.

Signature

Name of Member of Supervisory Committee

3

DR. BORHANNUDIN BIN ABDULLAH Jabatan Pengajian Sukan Fakulti Pengajian Pendidikan Universiti Putra Malaysia 43400 Serdang, Selangor

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LIST OF ABBREVIATIONS

- ATPCS Attitude Towards Participation in Competitive Sports
- ATAA Attitude towards academic achievement
- Saudi Universities Sports Federation SUSF
- ATPA Attitude towards Physical Activity
- Survey of Study Habits and Attitudes Participation in Competitive Sports SSHA
- PCS
- Kingdom of Saudi Arabia KSA
- Academic Achievement AA



CHAPTER 1

INTRODUCTION

1.1 Background

Nowadays, sport has gained a broader meaning in the society. It is believed that sports might positively affect cultural, economical, social, and political effects in the community; therefore, in a very general context, it gains positive attitude from almost every society (Mozafari, 2002). Unfortunately, sport participation of the undergraduate students in the Kingdom of Saudi Arabia has not been as high as what has been expected by the government, both quantitatively and qualitatively (SUSF, 2010). In other words, according to the government, undergraduate students in the country should participate more in sports activities. Accordingly, to elevate sports participation among undergraduate students, the government of Saudi Arabia formed an agency called Saudi Universities Sports Federation (SUSF), which is responsible for improving the level of participation in competitive sports (PCS) among undergraduate students in Kingdom of Saudi Arabia, without jeopardizing their academic achievements (AA).

Studies on the relationship between AA and PCS among undergraduate students did not seem to produce consistent results. Some studies reported that PCS might negatively affect students' AA (Rees & Sabia, 2010; Zeiser, 2011), some others reported otherwise (Howie & Pate, 2012; Donnelly & Lambourne, 2011; Lipscomb, 2007; Rasberry et al., 2011; Stearns & Glennie, 2010), and even reported that there is no significant correlation between PCS and AA among student-athletes (Eide & Ronan, 2001). Nevertheless, none of those aforementioned studies has done in the context of Saudi Arabian undergraduate students, and the government of KSA is trying hard to find ways to improve the PCS among undergraduate students without sacrificing the AA.

Moreover, the Saudi Universities Sports Federation has imposed a policy that only student-athletes with a required of GPA can participate in competitive sports at yearly sport events (SUSF, 2010). This policy does not mean that SUSF changed the way to select the athletes such as by training students with good AA to become successful athletes; instead, this policy is expected to make students who are actively involved in competitive sports to give more effort to achieve higher AA. The aforementioned policy of SUSF leads to a question, whether the AA and the PCS can be equally high in one individual, and therefore whether they have any common elements that influence both of them. In other words, SUSF must make their elite undergraduate student- athletes (who are expected to show excellent performance in competitive sports) also excel in academic achievements.

Accordingly, many studies reported that attitude is one of many factors that influence PCS (for example: Aronson et al., 2005; Dollman & Lewis, 2010; Lindner & Kerr, 2000; Rowe et al., 2013; Wicker et al., 2013), accordingly it was also included as the factors that influence AA (for example: Aronson et al., 2005; Bradley & Greene, 2013; Gaddis, 2013; Strambler et al., 2013). Thus, according to the aforementioned studies, attitude is a common element that is interrelated to both AA and PCS.

Attitude defined as a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor (Eagly & Chaiken, 1998). The first theory of the structure of attitude was coined by McGuire (1968), which is called attitudinal bases theory. He mentioned that an attitude consists of three attitudinal bases: cognitive, affective, and behavioral. It was explained that attitude can be formed by affective (emotional feeling towards an attitudinal object), cognitive (logical reason in preferring an attitudinal object) and behavior (frequency or habituation of a certain behavior) elements (Aronson et al., 2005).

As an example, the three attitudinal bases can be involved in shaping the attitude of student athletes on AA. If a student athlete study hard to achieve high AA (developing positive attitude towards AA) because he wants to make his parents proud of him, then the attitudinal base was affective base. If he study hard because he knows that having high AA leads him to getting offer letter from good universities, then his attitude was based on cognitive attitudinal base. When his positive attitude towards AA was developed because he used to study hard since he was a child, then his attitude was formed by behavioral attitudinal base.

Based on the attitudinal base theory, especially about the behavioral base, frequency and intensity of participating in competitive sports will positively affect the attitude towards participation in competitive sports, and at the same time, frequency and intensity of showing high academic performance will positively affect the attitude towards academic achievements. For instance, a student who used to participate in volleyball practice activities develops a more positive attitude towards volleyball than the students who seldom participate.

Furthermore, in the context of Saudi Arabia, the policy of SUSF that allows only students with required of GPA to perticipate in competitive sports (SUSF, 2010) play it's specific role in connecting PCS to ATAA. A studentathlete would develop positive towards academic achievement because they can only participate in competitive sports when they perform academically well. At the same time, the policy seems to connect their PCS-related attitude to their academic performance because when they have positive attitude towards participation in competitive sports (high ATPCS), they would likely to pay more effort to perform academically high (high ATAA).

Another theory that involved in this current study is the theory of Operant Conditioning (Skinner, 1953), which stated that a behavior that leads to a preferred consequence would likely be repeated. In the context of this study, when a student athlete who loves sports is allowed to participate in competitive sports because he had studied hard and showed high AA, most likely that he will study hard again in the future because that leads him to a consequence that he preferred. When related to the attitudinal base theory, this process combines cognitive-base attitude (positive ATAA because it leads to something beneficial), affective-base attitude (his love of sports that gave him positive ATPCS) and behavioral-base attitude (positive ATAA that will keep him studying hard after he gets used to it).

Theory of attitudinal bases (McGuire, 1968), and Theory of Operant Conditioning (Skinner, 1953) can explain the participation in competitive sports among student-athletes, and the knowledge obtained leads to a hypothetical concept that the PCS affects the AA. Additionally, the existence of ATPCS and ATAA might alter the relationship between PCS and AA in the context of undergraduate student-athletes in Saudi Arabia.

1.2 Problem Statement

The government of the Kingdom of Saudi Arabia is in need of knowledge about how PCS can be enhanced without negatively affecting AA (SUSF, 2010); and therefore they realized that a balance between PCS and AA should be kept stable. In other words, the government of Saudi Arabia set an aim that student athletes who achieve superb performance in sports also excel in academic.

In the context of this study, the government is represented by a federation called Saudi Universities Sports Federation (SUSF). Nevertheless, some studies suggested that other contexts like education can undermine sport investment among adolescents (Boiche & Sarrazin, 2007), or in other words, students who invested their time and energy more into academics are not likely to invest their time and energy to sport activities. This statement led to an understanding that students who invest their time in being active in sports activity might jeopardize their academic achievement, and thus it is suggested for the students who would rather perform well

academically not to be actively engaged in sport activities. Moreover, some members of the society believe that PCS might contribute to negative developments of student athletes, such as the involvement of drug abuse (Smith et al., 2010), and violence (Sønderlund et al., 2014).

On the other hand, some other studies indicated that involvement in sports activities has a positive effect on students' life in general, such as socialization levels (Devecioglu et al., 2012), better social health (Belanger et al., 2013), general academic achievements (Lipscomb, 2007), homework completion (Bembenutty & White, 2013), and even reduce the frequency of illegal behavior (Davis & Menard, 2013). Contextually, some studies had also reported that PCS has positive or no relationship with AA (for example: Eide & Ronan, 2001 and studies compiled in Rasberry et al., 2011).

The contradictive scientific findings stated in the previous two paragraphs represent he problems around the idea of improving the level of PCS among university students while maintaining their AA levels, as aimed by SUSF in the context of Saudi Arabia (SUSF, 2010). Thereby, a deeper understanding of the interrelationship between AA and PCS, along with it's elements, is necessary in order to reach their overarching goal. Furthermore, consistent with the theory of attitudinal base (McGuire, 1968), and studies which reported that attitude is related to both AA and PCS, further research is highly required to see how attitude can be altered to cater the needs of elevating both AA and PCS.

Based on the theory of attitude (McGuire, 1968), in the context of this current study, how active an individual engaged in competitive sport activities (level of PCS) can be taken as 'behavioral attitudinal base' that will affect the attitude towards participating in competitive sport activities. Moreover, previous studies reported that PCS affects AA. Furthermore, the policy of Saudi Universities Sports Federation that allows only undergrduate student athletes with required of GPA to participate in competitive sports (SUSF, 2010) leads individuals with high level of participation in competitive sports, to think that it is logic and rational to achieve high academic achievements (develop positive ATAA) because they have to be academically good before they can participate in competitive sports.

In other words, two kinds of attitude development are involved in this current study: (1) ATPCS is developed by behavioral attitudinal base (the intensity and frequency of participation) and (2) ATAA is developed in the minds of the students with high level of PCS because they can logically think that having good AA will benefit them with opportunities to participate in competitive sports activities (cognitive, attitudinal base).

Explaining that PCS predicts AA can also be done by employing the theory of operant conditioning (Skinner, 1953); when high AA brings the student athletes to a reward, (to be allowed to participate in competitive sports), they would likely repeat any behavior that give them high AA, such as studying harder. Therefore the higher the students' ATPCS, the harder he would like to force himself to perform academically good.

The aforementioned paragraph had explained how the four variables were chosen; because they have a specific contextual interaction based the theories above. PCS predicts ATPCS due to the behavioral attitudinal base, it also predicts ATAA and AA due to the cognitive attitudinal base. ATPCS predicts AA due to the affective attitudinal base. ATPCS predicts AA due to the affective attitudinal base. Additionally, it seems impossible for PCS to directly affect AA without the mediation of positive attitude both towards PCS and AA; thereby, both attitudes were taken as the mediator variables, while PCS as the independent variable because this study was conducted among student athletes with naturally high PCS, and AA as the dependent variable because it is the aim of the government of KSA to keep AA high among undergrduate student athletes. Thus, the specific aim of this study is to examine whether the ATPCS and the ATAA mediate the relationship between PCS and AA.

It is important to remember that there is a research gap on the mediation effect of both attitudes on the interrelationship between PCS and AA, because while attitudes are determined by their own attitudinal bases (McGuire, 1968), they also affect the behavioral outcome. Therfore, knowing that attitudes have the mediating effect can result to further knowledge on how to alter attitude to maximize the outcome. It is also expected that the finding of this study will address the problem on how to improve both PCS and AA among undergraduate student-athletes in Saudi Arabia and keep a good balance between them.

1.3 Research Objectives

- 1. Determining the influence of participation in competitive sports on academic achievements among undergraduate studentathletes in Saudi Arabia.
- Determining the influence of participation in competitive sports on attitude towards participation in competitive sports and attitude towards academic achievements among undergraduate student-athletes in Saudi Arabia.
- 3. Determining the influence of participation in competitive sports on attitude towards academic achievements among undergraduate student-athletes in Saudi Arabia.

- 4. Determining the influence of attitude towards participation in competitive sports on the academic achievements among undergraduate student-athletes in Saudi Arabia.
- 5. Determining the influence of attitude towards academic achievements on the academic achievements among undergraduate student-athletes in Saudi Arabia.
- 6. Investigating the mediating effect of attitude towards participation in competitive sports on the relationship between participation in competitive sports and academic achievements among undergraduate student-athletes in Saudi Arabia.
- 7. Investigating the mediating effect of attitude towards academic achievements on the relationship between participation in competitive sports and academic achievements among undergraduate student-athletes in Saudi Arabia.

1.4 Null Hypotheses of Research

- 1. H₀₁: There is no significant influence of the participation in competitive sports on the academic achievements among undergraduate student-athletes in Saudi Arabia.
- 2. H₀₂: There is no significant influence of the participation in competitive sports on the attitude towards participation in competitive sports among undergraduate student-athletes in Saudi Arabia.
- 3. H₀₃: There is no significant influence of the participation in competitive sports on the attitude towards academic achievements among undergraduate student-athletes in Saudi Arabia.
- 4. H₀₄: There is no significant influence of the attitude towards participation in competitive sports on the academic achievements among undergraduate student-athletes in Saudi Arabia.
- 5. H₀₅: There is no significant influence of the attitude towards academic achievements on the academic achievements among undergraduate student-athletes in Saudi Arabia.
- 6. H₀₆: There is no mediating effect of the attitude towards participation in competitive sports on the relationship between participation in competitive sports and the academic achievements among undergraduate student-athletes in Saudi Arabia.
- 7. H₀₇: There is no mediating effect of the attitude towards academic achievements on the relationship between participation in competitive sports and the academic achievements among undergraduate student-athletes in Saudi Arabia.

1.5 Significance of the Study

Findings of this study will be beneficial to the SUSF in order to help them decide the best way to improve the university sport achievements through improving the students' participation in sport activities while maintaining, or might even be increasing their academic achievements. Findings of this study can also be used to develop further research on how to alter ATAA and ATPCS in order to improve participation in competitive sports and academic achievement at the same time.

This study might also fill the theoretical gap; in the context of this study, the theory of attitude is challenged by determining whither an attitude towards an independent variable can mediate it's effect on a dependent variable; theoretically, ATPCS should not have anything to do with AA due to the nature that an attitude towards a variable can only improve the behavioral quality towards that specific variable (such as ATAA will mediate or moderate the effect of any variables towards AA). In the context of this study, the SUSF regulation which states that only students with a required AA can participate in competitive sports had created such a unique interrelationship among variables involved in this current study.

Another significance of this study is that it might fill the literature gap in the field of sports management and sport science, especially related to ATPCS and ATAA as a mediator between PCS and AA. Other studies have been conducted not in the context of Saudi Arabia, and most importantly, the previous studies have not paid any attention the fact that students attitude can mediate the influence between participation in competitive sports and academic achievement. In other words, while many studies reported the negative effect of PCS on many aspects of students' life, little studies have been done on how to mediate such effect. Focusing on how to develop both PCS and AA, this study can be considered as a starting step towards developing well-rounded athlete personals, that are positive in life and performing well in sports.

1.6 Scope and Limitations

Scope of this study is all the male undergraduate student-athletes in the Eastern Region of Saudi Arabia. This study does not take female students into the sample due to the governmental regulation in Saudi Arabia that limits the female students' participation in sport activities. A population of this current study were taken among the Saudi Arabia male undergraduate student-athletes in the Eastern Region that participated in the fifth season of competitive sports organized by Saudi Universities Sports Federation in 2015; therefore it's findings might not be generalized into wider scope such

as to female undergraduate students, male undergraduate students the other Regions of Saudi Arabia, or non-undergraduate students. This current study will take place in the second semester of 2014-2015, which means that any changes in governmental regulations prior to or after 2015 should not be taken into consideration related to the findings of this study.

Situational limitation also occurs due to the regulation of SUSF that the participation in competitive sports is exclusive for students with required GPA. This situation creates a unique interrelationship among variables; in a normal situation, attitude towards participation in competitive sports might not be related to AA or ATAA. Thus, the interrelationship among variables in this current study might not be applicable in countries or institutions without similar regulation.

Another limitation of this study is related to the research objective. The main objective was to prove whether both attitudes (the attitude towards participation in competitive sports, and the attitude towards academic achievements) mediated the prediction of academic achievements by participation in competitive sports among undergraduate student-athletes, instead of studying the details of the mediation. Therefore, details on the mediation, such as partial/full, and other features of mediation effects were not reported and discussed in further details. Due to the aforementioned limitation, then findings, results, and data in this study might not be compatible with different circumstances and settings. However, findings of this study can be used as a reference for other studies with regards to the scope and limitations.

1.7 Operational Definition of Terms

The following subsections explain about the conceptual and operational definitions of the terms used in this current study. Operational definitions are defined in order to draw a clear line between the definition used in this study and other studies; however, the operational definitions in this study are adopted from conceptual definitions and previous studies.

1.7.1 Participation in Competitive Sports

Conceptually, students' participation in competitive sports refers to the frequency and intensity of the involvement of students in sports activity of their choice by using the facility available in their educational institutions (Wicker et al., 2013). It was also defined as how often students visit sporting facilities, including public sport centers (Dollman & Lewis, 2010). Another definition of PCS is whether a student is actively involved as a

member of any sport clubs (Lindner & Kerr, 2000). In this current study, participation in competitive sports is defined as the frequency of the students' participation in sports activities in a week and whether the students are active members of sport academic institution teams or sport clubs. In order to measure the value of participation in competitive sports among the population, a self-developed questionnaire was employed.

1.7.2 Academic Achievement

Academic Achievement refers to the recorded and tested results of the students' learning activities along an academic year (Rubie-Davies, 2010). In this current study, academic achievement is defined as the general percentage achievement (GPA) of the students as per reported by the students in the academic year where this study is conducted. In order to measure the value of academic achievement among the population, a self-developed questionnaire was employed.

1.7.3 Attitudes

Attitude refers to an integration of multiple properties in different domains of the mind (Zhang & Campbell, 2010). It is also defined as tendency to think, to feel or preferences of a person about an object, based on their beliefs about the object, which can be positive or negative (Coll et al., 2002; Kind et al., 2007; Oluwatelure & Oloruntegbe, 2010; Salta & Tzougraki, 2004). The theory of attitude explains it as a person's positive or negative tendency of preference about an object based on the patterns of their cognitive, attitude, or behavior (Aronson et al., 2005). Attitude towards an object can be based on some attitudinal base, such as affection, cognition, and behavior (McGuire, 1968).

1.7.3.1 Attitude Towards Participation in Competitive Sports

In the context of this study, the attitude towards participation in competitive sports refers to the feelings that students has about PCS, based on their beliefs and preferences about it that can be positive or negative. Theoretically, when a person develop some positive likeness towards participation in competitive sports, his/her score in ATPCS will be higher; following the theory of McGuire (1968), the ATPCS is derivated from affection-base if the students love to participate in competitive sports, cognitive-base if the students understand the future benefits of having PCS (such as; offer letters, scholarships, potential job, etc), and behavior-base if the students involved in competitive sports as a habit.

1.7.3.2 Attitude Towards Academic Achievements

In the context of this study, the ATAA refers to the feelings that students has about AA, based on their beliefs and preferences about it that can be positive or negative. Theoretically, when a person develop some positive likeness towards AA, his/her score in ATAA will be higher; following the theory of McGuire (1968), the ATAA is derivated from affection-base if the love to get high academic score, cognitive-base if the students understand the future benefits of having high academic achievement (such as; scholarships, offer letter, potential job, etc), and behavior-base if the students used to score high in academic achievement.

1.8 Conclusion

Background of the research has been discussed in this chapter, followed by the problem statement and the research objectives. Research questions and hypotheses have been presented based on the research objectives, limitations and delimitations have been set. Operational definitions of each variable have been discussed, and thesis organization has been presented. The following chapter will discuss about the related theories, literature, and previous studies, followed by the presentation of conceptual and theoretical framework of the study.

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