

Attitude of Young Students towards Sports and Physical Activities

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Abstract

This study examines the attitude of Pakistani students towards sports and physical activities as ratio of sedentary lifestyle is increasing among them. A sample of 384 students having ages between 18-26 years from five different universities of Islamabad, Pakistan was selected for the study. Attitudes were assessed by using self-administered questionnaire namely Student's Attitude towards Physical Activity (SATPA). Five dimensions of attitudes were measured for data collection namely Health and Fitness, Social Experience, Aesthetic Experience, Ascetic Experience and Pursuit of Vertigo. SPSS and AMOS were used for analysis of data and the relationship between the variables was examined using Structural Equation Modeling (SEM). Overall results of the study showed that students in Pakistan shows favorable attitude towards physical activities and likes to participate in such activities to improve their health. They are aware of benefits related to participating in sports and physical activities. The finding also showed that cricket is most widely played sports among students in Pakistan.

Keywords: Attitude, Physical Activity, Sports, Sedentary Lifestyle, Young Students

1. Introduction

There is an agreement on the fact that physical activities and sports play an important role in the physical, social and mental development of both male and female (Mirsafian et al., 2014). Physical activity has proved to be an important aspect in weight loss and weight maintenance (Mirsafian, Doczi, & Mohamadinejad, 2015). In comparison to other population members, students have a lack of understanding towards physical activities and its benefits and hence there arises a need to study the attitude of young students towards it (Kee et al., 2017). It has been reported that 40 to 50 percent of college students are physically inactive and are not involved in required amount of physical activity (Li, Chen, & Baker, 2014). The same was endorsed by Nxumalo & Edwards (2017). There is an overall sedentary lifestyle among the young students. Sedentary lifestyle can be defined as an action or a movement in which physical inactivity is dominating the physical activity, or in other words, the resulting energy outflow is close to energy in flow or expenditure at rest (Lajous et al., 2009). Multiple interactions exist between lack of physical activity and obesity; for instance, physical activity is essential to achieve proper energy balance in order to prevent or reverse obesity. However there exist number of factors related to reduced physical activity including less campus recreation facilities, poor weather, improper time management, lack of motivation, increased study time, and lack of social support for physical activities (Ding & Sugiyama, 2018).

In current era sports has broader spectrum which plays positive impact on individual health and happiness. In order to gain a positive attitude towards sports, it must create an overall cultural, economic and social effect in society (Ding & Sugiyama, 2017). A survey was conducted on high school students indicated that boys and girls who have positive attitude towards physical activities are active and physically fit in their life after school (Elena & Beata, 2017). It is anticipated that the people who enjoy benefits of physical activities, have a favorable and positive attitude toward physical activities. It has also been reported that physical activities will be highly accepted by a community if majority of its members have positive attitude toward such activities, however in contrast a negative attitude would result in rejection of these activities and their associated positive effects (Eraslan, 2015). According to McMorris (2016) physical activities develop the mental capabilities among students thus resulting in positive attitude towards such activities. A recent research conducted on students of higher secondary school showed that attitude levels of students fluctuate with respect to their residential areas for instance; the students living in towns hold the highest attitude level. The students of metropolitans were involved in physical activities to make their body beautiful and in proper shape (Eraslan, 2015).

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Hence, this study is designed to investigate the relationship between students' attitudes and their participation in physical activity. It is also focused to give a general picture of the students' attitude toward physical activity and their participation pattern in physical activity. The aim of this research is also to shed light on factors influencing the behavior of a student to engage in physical activities.

2. Literature Review

The trend of obesity is increasing in young generation; a recent survey showed that most people become obese before reaching the age of 35. The rate of obesity has increased more than twice since 1980. In 2014, more than 1.9 billion adults, 18 years and older, were overweight across the globe of which over 600 million were obese. 39 percent of adults aged 18 years and over were overweight in 2014, and 13 percent were obese (Eraslan, 2015). It also showed that students of college are more vulnerable to weight gain than the general public (Grasiela, Menezes, Barbosa, Artioli, & Marliere, 2015). Various studies on students' behavior towards exercise advocate that sedentary life style and physical inactivity happens to be an important aspect in weight gain and obesity (Mir safian, Doczi, & Mohamadinejad, 2015). A research conducted on students eating habits shows that majority of young students use excessive amounts of sugary drinks and beverages and high fat food and consume less than recommended amounts of fruits, fresh vegetables, and calcium. Such findings show that factors such as unhealthy eating habits and sedentary lifestyle are resulting in obesity and weight gain among young students (Goncalves et al., 2014). According to the findings of (Kopczynski & Kellmann, 2014) 40 to 50 percent of college students are seen physically inactive and do not exhibit required level of physical activity and that results in obesity. Physical activity is necessary to maintain sufficient level of energy which is required to prevent obesity.

In Pakistan, physical inactivity and obesity is becoming a significant health issue which has drawn the attention of researchers over the past few years. Sedentary life style and increasing trend of urbanization in Pakistan are considered the root causes for inactive lifestyle and various illnesses. A study showed that Pakistan carries the highest ratio of people with diabetes in South Asia whereas worldwide Pakistan carries 9th position in ranking of obese and inactive lifestyle whereas America tops the list and it arises a need to examine the attitudes of students towards physical activities (Streib and Lauren, 2007). Moreover, more than 22 percent of population in Pakistan over the age of fifteen is considered obese or overweight. Studies also show that one in every four Pakistanis is overweight and according to a list showing the names of world's "fattest countries" Pakistan holds 165th position out of 194 countries. Such inactive lifestyle and obesity can also be seen among students where it has dramatically increased over the past two decades due to poor physical activities of the 86450 students in their college life and sedentary life style (Ngandu et al., 2015). Studies have been conducted to find out the ways to reduce obesity for instance; it has been identified that positive attitude towards physical activities and active campus life are strongly associated with weight loss behaviors among students (Linde, Rothman, Baldwin, & Jeffery, 2006). Therefore Patel et al. (2010) emphasized that there exist a strong need to assess the attitude of youth towards physical activities and sports, keeping in view that positive attitude towards sports leads to an active physical life and reduces the level of obesity.

Multiple studies have been conducted on the nature and characteristics of attitude (Pulur et al 2011). Attitude can be defined as the mental, emotional and behavioral tendencies of people organized with regard to experience, knowledge, emotion and response to a particular situation in a particular time frame (Inceoglu 2010). In this world today, a lot of multidimensional researches have been conducted on the nature and characteristics of attitude (Pulur et al 2011). Some researchers have focused on the significance of attitude lessons in an academic environment (Kangalgil et al. 2006; Gullu and Guclu 2009) whereas some identified personality and behavior are considered as key influencers for playing sports and performing physical activities (Burnett, Allen, & Vella, 2016). Celik (2011) concluded that during college life, physical development is fast as students in this age are strong and energetic and their need for mobility and physical activity is high. Hence at this stage, the physical activities greatly support the physical and behavioral development of students. Moreover, during student life, students develop positive or negative attitudes towards different physical activities (Defina et al., 2014). Negative attitudes of the young students for physical education and fitness classes can decrease effectiveness of the subject and also reduce the commitment with subject. Due to this reason, students' attitude towards physical activities is very important for shaping and attaining aims of the course. Furthermore, in previous studies, it was specified that high school students' attitudes towards physical activity class were shaped in accordance with important features

like demographics, grades level, sex, and student's cultural factors (Ali et al., 2015). A recent study conducted on young Austrians adults demonstrates that lacking physical activities leads to greater risk of obesity and cardiac disease which ultimately leads to premature death (Burnett et al., 2016). University of Philippines conducted a research on students' sports attitude of those who are active in sports and physical activities and found that they have balanced body weight, responsible behavior and low rate of absenteeism while the students who were not involved in any physical activity showed sedentary life style and were obese showing that sports and health are correlated (Bulaklak, 2014).

In Oman a study was conducted on 98 students to examine their participation in sports and physical activities. The study concluded that students who are usually active in sports or some other physical exercises show healthy life and favorable attitude towards such activities. It is evident from the study that students who are healthy they show positive and strong attitude toward physical activities. This phenomenon can possibly be described by students in their childhood age when they are seen keenly involved in physical activities for joy, fun and amusement and learning (Ainsworth et al, 2014). Health experts argue that many recent cases of prolonged diseases and obesity are due to lack of physical activities and negative attitude toward such activities. Studies also suggest taking part in physical activities in order to control cardiac diseases, cancer, and diabetes.

(Omolayo, Olawa, Omole, & Awolowo, 2013) reveals benefits related to health and socializing due to participation in physical activities, such as chances to interconnect with others, enhance self-efficacy, increase health and well-being. Studies have shown that expert physical educators or coaches with professionally high motivation level and positive attitudes toward physical activities helps in understanding of the purposes of the physical activities resulting in players' increased level of fitness (Murcia, Coll & Perez, 2009). Trudeau and (Khan, 2012) in their research on physical activities and academic performance established that engaging in physical activities somewhat increase academic performance, however it was not statistically significant and it furthermore shows that GPA does not affect attitude for physical activities. Students who are naturally motivated and feel the change in their body and health with the game are keen to take part in physical activities irrespective to their GPA (Murcia et al., 2009).

Society is the most significant social structure in which an individual spends all of his life. A society learns human skills or instigates his beliefs that can help in formation of attitudes and important actions towards physical activities (Drum, Bellovary, Jensen, Moore, & Donath, 2016). As certain by the achievement goal theory which reflects that in an environment of accomplishment, such as society or peers, a person is inspired by obtaining success (Granero Gallegos et al., 2014). A study conducted in China investigated attitudes and personal experiences of 949 students toward four Chinese universities. The model of attitudes consisted of social development and social realization while in the results a positive association was shown by the students and the schoolboys in China (Li, 2014). Likewise, in Poland an academic study was conducted on students to know the attitude of youth of Poland towards sports. The findings validate the assumption that School Sport Clubs affiliates present higher pro-social behavior towards sport as compare to their friends who were not involved in sports. The outcomes supports the significant role of sports for creating positive effects of social and cultural education in schools and colleges (Tomik, Olex-zarychta, & Mynarski, 2012).

Kalaja et al. (2010) suggests that strong attitude is governed by apparent physical abilities and sports skills shown by players. The behavior a player is highly influenced by the fellow team members and sports coaches. According to the research by WHO, the level of obesity is rising increasingly in Canadian youth because of lack of physical activity and growing trend of sedentary life style however, young boys who are involved in social activities also perform physical activities as compare to their counter parts. (WHO, 2010; Paterson and Warburton, 2010). Another study by Dacey, Kennedy, Polak, and Phillips (2014) supported these findings and examined the youngsters' attitude towards physical activity by examining 58 male and 56 female students using SATPA inventory. The findings showed that the students' attitude towards aesthetic domain was mostly positive for both genders however compared to male students, females were having favorable attitudes towards aesthetic domain. According to another research on students and their attitude towards sports, female students had more positive attitude towards physical activity in case of aesthetic domain as they were more concerned to make their body in shape by performing physical activities (Dacey et al., 2014). Politino and Smith (1989) presented some findings related to gender

difference and attitude towards physical activities where SATPA list was directed to 80 students who were emotionally disturbed and 390 mentally retarded school students. Results showed that more negative attitude for physical activities was shown by emotionally disturbed students than the normal fellows. Furthermore, there was also substantial difference between the normal boys and girls. Similar results were demonstrated by Gullu and Guclu (2009) and (Ekici et al. (2011)). Most studies employing SATPA list have their focus on high school students as they usually demonstrate positive attitude towards sports and physical activities. Moreover notable differences have been revealed between different sexes with respect to attitudes. In the five subdomains, females were found showing greater scores in aesthetic subdomain while boys showed higher scores in vertigo and health & fitness subdomain. These differences exist due to various reasons for instance, males and females by nature carry unlike instinctive feelings about the meanings of each subdomain. Secondly, they might be coming with stereotypic attitudes in mind when taking part in physical activities (Griffin, 1983 cited in Patterson & Facucette, 1990). A research was conducted in Islamic Republic of Iran with a total of 368 male and female students from Islamic Azad University. The respondents were examined in four different sets measuring six different components of attitude toward physical activities including health and fitness, social aptitude, pursuit of vertigo, aesthetic experience, catharsis, and ascetic experience. Results of study showed that there exist a positive relationship between aesthetic experience of students and physical activity (Nia, Mizany, Sajadi, & Rahimizadeh, 2012). Figure-1 shows the research framework of the study.

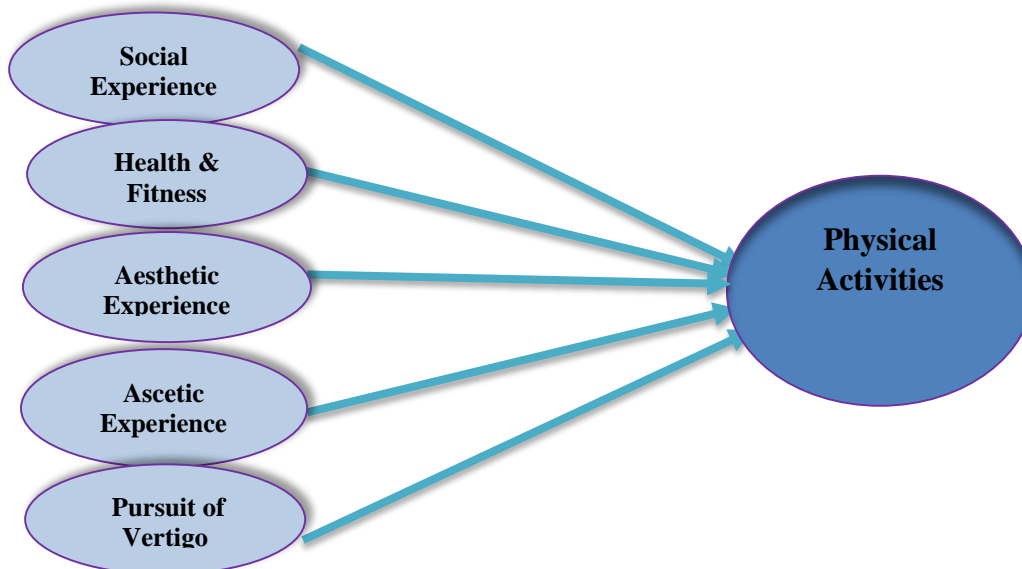


Figure No.1: Research Framework adapted from Salehnia et al. (2011)

3. Methods

A sample of 384 students aged 18 to 25 years from five Pakistani universities in Islamabad took part in the study. Out of 384 participants, 262 i.e. 68 percent were male students and 122 i.e. 32 percent were females with a response rate was 76 percent. Universities were randomly selected from Islamabad, the capital city of Pakistan. All the universities selected had similar sports facilities and academic structure. The demographic characteristics of the students were almost same for all respondents and were measured through 7 items. A formal letter was written to universities under study to get an approval to conduct the study. All participants gave consent to participate in the study and they were informed that it is an academic research and they were free to withdraw at any time. Each participant took ten minutes to complete the questionnaire. Questionnaire namely the revised Students Attitude toward Physical Activity (SATPA) was used to get the responses from the students. The instrument was principally developed and used by Schutz et al. (1995) and used to measure attitude of students toward Physical activity. Its use is also recommended by Salis et al. (1996) to assess the student participation in sports physical activity. Cronbach Alpha obtained was calculated and ranged from 0.80 to 0.90. SATPA instrument was also used and appreciated by (Gullu

and Guclu 2009; Ekici et al, 2011, Eraslan, 2015). The data was collected using constructed items and then imputed for missing values. A multistep procedure was adopted to conduct analysis including reliability analysis and Confirmatory Factor Analysis (CFA) of all constructs using Structural Equation Modeling. The impact of independent variables towards physical activities was assessed using Structural Equation Modeling (SEM) and the conceptual framework was found relevant in revealing the impact of predictor variables on the dependent variable. For analysis of data and descriptive statistics, SPSS version 22 was used and various tests were conducted.

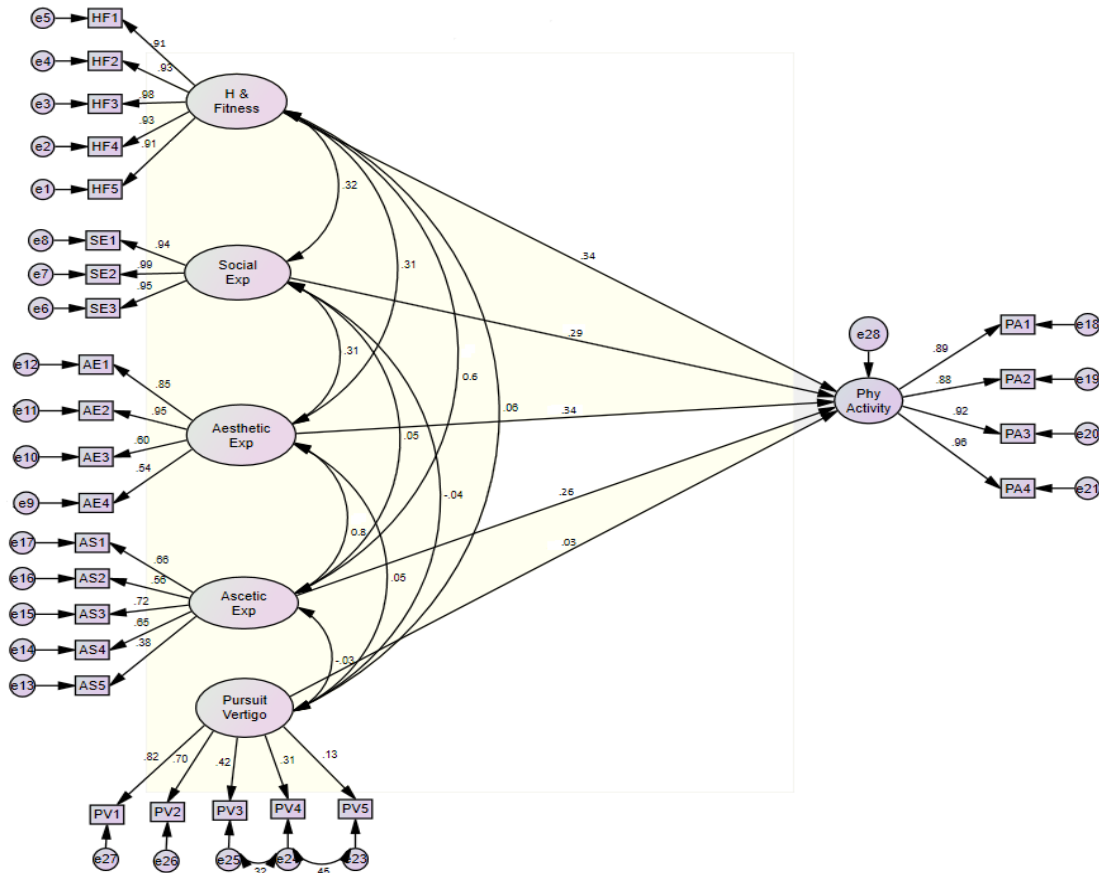


Figure No.2: Model showing relationships among the variables.

AMOS version 18 has been used to run SEM recommended by Hair Jr. et al., (2010) for estimation of latent relationships, variance, covariance and analysis of confirmatory factors to tests the derived hypothesis. It is one of the main tools used in academic research and helps find causal relationship between variables.

4. Data Analysis

Factor wise reliability of the variables was assessed and was found to be 0.86 for health and fitness 0.87 for social experience, 0.83 for aesthetic experience, and 0.73 for ascetic experience, 0.87 for physical activity and 0.66 for the factor Pursuit of vertigo (Table 1). The model contains five independent and one dependent variable at initial stage but after SEM is applied, few questions and constructs were changed as these constructs did not yield the required factor loading of 0.40 as suggested by Haier et al. (2007). The overall model shows that physical activity is effected by five exogenous variables including Health and Fitness (H&F), Social Experience (SE), Aesthetic Experience (AEE), Ascetic Experience (ASE) and Pursuit of vertigo (PV) represented by a single headed arrow from the endogenous variable to the exogenous variables. It showed the linear dependency of one variable on the other. Ellipses show the latent variables which are measured by the observed variables in the model boxes. Every latent variable is measured by a number of observed variables or indicators. At the end of every indicator an error term is shown, accounting

for various influences not accounted in the said model. Physical Activity variable is also linked with an error term. In the model the bowed or curved like arrows denote the bidirectional correlation in variables. This collectively makes the structural model or the path diagram. All five variables are correlated with one another.

SEM generates the values indicated above the one headed arrow (Figure-2). The threshold value should be above 0.5 when SEM was applied two of the constructs showed some item values below the required value of 0.5 hence these items were removed to make the model better fit and run again.

Table No. 1: Coefficient of Cronbach Alpha

Variables	No. of Items	Alpha Reliability
Health & Fitness	5	0.86
Social Experience	3	0.87
Aesthetic Experience	4	0.83
Ascetic Experience	5	0.73
Pursuit of Vertigo	5	0.66
Physical Activity	4	0.87

In the model, correlation of the variables is represented by double headed arrow. The normal range lies within 0.3-0.9. The correlation of the variables lies in the acceptable range and indicates fitness of the model (Table-2). This research reports three categories of fit indices to show overall fitness of the model as encouraged by Jalees & Derun (2013).

Table No. 2: Measure of Fitness

Absolute			Parsimonious			Relative		
Test	Prescribed Value	Obtained Value	Test	Prescribed Value	Obtained Value	Test	Prescribed Value	Obtained Value
CMIN/DF	<2	1.423	PNCFI	>0.5	0.84	CFI	>0.90	0.98
P Value	<0.5	000	PCFI	>0.5	0.84	TLI	>0.90	0.980
RMSEA	<0.10	0.037				NFI	>0.90	0.983
						IFI	>0.90	0.980

4.1 Relationship of Variables

SEM is an important tool used in academic research to measure casual association among variables (Kline, 2005). The purpose of SEM is to analyze latent relationship but it is also used to estimate variance, covariance, hypothesis testing and confirmatory factor analysis (Canfield, 2012). Figure-1 depicts the causal relationship represented by single headed arrow. The values above the arrow reflect the standardized regression coefficients connecting the independent variable to dependent variable. It shows the amount of change in dependent variable due to a single standard deviation unit change in independent variable. The result suggests that:

1. When there is 1.0 standard deviation increase in social experience, the dependent variable physical activity (PA) increases by 0.6 standard deviations.
2. For 1.0 standard deviation change in pursuit of vertigo there is a decrease of 0.1 in dependent variable physical activity.
3. For 1.0 standard deviation change in aesthetic experience there is an increase of physical activity by 0.53 standard deviation.
4. If there is 1.0 standard deviation increase in ascetic experience, physical activity increases by 0.3 S.D.
5. For 1.0 standard deviation increase in health and fitness, physical activity increases by 0.22 standard deviations.

4.2 Hypothesis Testing

Based on theory, five hypotheses were developed to test the relationship of dependent variable with the independent variables. These were tested against a significant level of 5 percent denoted as α . Null hypothesis were accepted when p -value was equal to or less than α . Following null hypothesis were developed to test the relationship of variables under study.

H1: There exist a positive relationship between health & fitness and physical activity.

The result of Structural Equation Modeling showed that β weights 0.34 which is above the threshold value of 0.25; hence a hypothesis is accepted. This proves that social experience has a significant effect on physical activity.

H2: There exist a positive relationship between social experience and physical activity.

In this case a β weight is 0.29 higher than threshold value of 0.25, proving that social experience has an impact on physical activity.

H3: There exist a positive relationship between aesthetic experience and physical activity.

The obtained β value 0.34 is greater than 0.25, hence it can be said that aesthetic experience has a positive significant effect on physical activity and hypothesis is accepted.

H4: There exist a positive relationship between ascetic experience and physical activity.

The obtained β value 0.26 is higher than 0.25, hence it proves that aesthetic experience has positive significant effect on physical activity.

H5: There exist a positive relationship between pursuit of vertigo and physical activity.

The obtained β value is 0.03 which is lower than 0.25, hence hypothesis is rejected. In this case it can be inferred that pursuit of vertigo does not have significant impact on the physical Activity.

Table No.3: Participation Pattern of Students

Activity					
Activities/Sports		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No Activity	82	21.4	21.4	21.4
	Badminton	57	14.8	14.8	36.2
	Cricket	139	36.2	36.2	72.4
	Basket ball	14	3.6	3.6	76.0
	Football	54	14.1	14.1	90.1
	Tennis	17	4.4	4.4	94.5
	Snooker	5	1.3	1.3	95.8
	Gym / Body Building	16	4.2	4.2	100.0
	Total	384	100.0	100.0	

Out of total 384 students, the analysis shows that 36 percent students were interested in playing cricket while 14.8 and 14.1 percent were playing badminton and tennis respectively. Compared to males, females were less involved in physical activities as 69 percent of male students while 39 percent of female students were into physical activities. The results of this research are quite similar with previous researches. According to the *Table-4*, highest percentages of students perform physical activities for less than an hour a day. Whereas more than 20 percent of the participants are those who are not involve in any sort of physical activity during the whole day.

Table No.4: Time Allocated to Physical Activities

Time					
Duration		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 1 hour	159	41.4	41.4	41.4
	1 or more than 1 hour	124	32.3	32.3	73.7
	2 or more hours	19	4.9	4.9	78.6
	No time for activity	82	21.4	21.4	100.0
	Total	384	100.0	100.0	

The results demonstrates that around 41 percent of students are involved in physical activities for less than one hour regularly while around 32 percent spend one or more than one hour in playing sports or performing some other physical activity every day. This demonstrates a positive attitude towards physical

activities on an average. These results are quite similar to that of Salehnia et al. (2011) and Fung Tsz Kin (1997).

5. Discussion and Conclusion

This section attempts to answer the broader question mentioned in the proposed hypothesis such as what is the attitude of students towards physical activities on the basis of variables and subdomains identified and its effect was examined on physical activities of students. Based on analysis, students in general showed a favorable attitude toward physical activity. The results corroborates with the study Tsang & Chan (1993) using local student as respondents. Health and fitness was ranked highest by them, followed by aesthetic which showed that students in Pakistan are aware of the benefits of physical exercise but their participation level is low as compare to many western countries. Students scored the vertigo domain comparatively low based on various reasons. The study concluded that social experience has a strong positive relationship with physical activities, showing that social mobility greatly influences the pattern and trend of his physical activities. Similarly the aesthetic experience and ascetic experience also influence physical activities in the same manner and the results were similar with that of Salehnia et al (2011) and Fung Tsz Kin (1997). There are numerous reasons which can influence the participation of students in physical activity, for instance, attitude of parents about physical activities may affect their children as risky sports are discouraged in Pakistan. Likewise, past experiences of students regarding some risky sports or injury, increasing burden of study on the students at university level, lack of the provision of sport facilities and resources are all those reasons that may affect students' attitude towards physical activities. It is suggested that institutions should create awareness related to health problems due to sedentary lifestyle and promote physical activities among students. Furthermore suitable amount of resources and opportunities must be provided to the students for the sports and physical activities.

6. Areas for Further Studies

In this study all the data is self-reported and is very difficult to verify hence there is no inquiry into the authenticity of the data. It is assumed that the subjects have given bonafide responses. The respondents in the study are undergraduate, graduate and post graduate level with most of them within 20 to 28 years old. Thus, the results of the study may be too age-specific and be hard to apply to other age groups. Such limitations of the study provide areas for further studies such as, the difference in students' attitude toward physical activity can be examined better if a large random sampling is used. It is also suggested that attitude of students should be measured based on their profile by adding more demographic questions to the scale and analyzing it from a new perspective. Further studies are also needed to find the factors which contribute to the local students' participation in physical activity. Besides, social and electronic media creates great impact on the minds of young generation. Research needs to be conducted on the role and impact of media on attitudes of youth towards sports.

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