

Trends and practices of university students in regular physical activity program, in the case of Woldia University

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Abstract: The objective of this research was to assess the trends and practices of university students in regular physical activity program, the case of Woldia University. Method: the study was conducted using a sample of 45 students by using multi-stage sampling technique with the presence of purposive, stratified and simple random sampling technique (24 females; 21 males) that are attending third year in Woldia University, Faculty of natural and computational science. **Results:** university students were very well informed about the importance of regular physical activity and sport. Nevertheless, when it came to their involvement in various sporting activity, the questionnaire and observation checklist showed that almost 71% of university students do not generally spend their time participating in any regular physical activity/sport. On the other hand, there is a difference between male (61.54%) and female (38.46%) students in terms of participation on regular physical activity/ sport. The main problems that hindered the participation of university students in physical activities/ sport, almost 47% of students have insufficient time to participate with in academic reason and the others that most students do not participated with having lack of interest in regular physical activity/ sport (28.125%). **Conclusion:** Based on the university students thought that gave awareness to all departments, management of time with sport, make sport fields safe enough and fulfill enough amounts of fields and equipment for all types of sport will develop students participation in regular physical activity/ sport.

[Henok Mulugeta, Getasew Abebaw. **Trends and practices of university students in regular physical activity program, in the case of Woldia University.** *Biomedicine and Nursing* 2021;7(2):61-72]. ISSN 2379-8211 (print); ISSN 2379-8203 (online). <http://www.nbmedicine.org> 8. doi:[10.7537/marsbnj070221.08](https://doi.org/10.7537/marsbnj070221.08).

Key terms: Physical Activity, Trend, Adherence mechanism

INTRODUCTION

Background of the study

Physical activity is defined as any bodily movement produced by skeletal muscles that require energy expenditure. Physical inactivity (lack of physical activity) has been identified as the fourth leading risk factor for global mortality (6% of deaths globally). Moreover, physical inactivity is estimated to be the main cause for approximately 21–25% of breast and colon cancers, 27% of diabetes and approximately 30% of ischemic heart disease burden (WHO, 2003).

Regular physical activity is fun, healthy and increasingly more people are starting to become more active every day. Being more active is very safe for most people. However, some people should check with their doctor before they start becoming much more physically active (www.fitness.wikia.com, 2017).

Scientific evidence indicates that regular physical activity, exercise, and fitness are a key determinant of health. Appropriate dose of regular physical activity, participation in sports provides male and female of all ages, including those with disability,

with physical and mental health benefits, as well as with social relationships. Physical activity is a cheap and strong means for prevention of diseases, improvement health and wellbeing, and it also promotes integration and social interaction (WHO, 2003).

Some benefits of regular and adequate levels of physical activity in adults:

- reduce the risk of hypertension, coronary heart disease, stroke, diabetes, breast and colon cancer, depression and the risk of falls;
- Improve bone and functional health; and are a key determinant of energy expenditure, and thus fundamental to energy balance and weight control.

The term "physical activity" should not be mistaken with "exercise". Exercise, is a subcategory of physical activity that is planned, structured, repetitive, and purposeful in the sense that the improvement or maintenance of one or more components of physical fitness is the objective. Physical activity includes

exercise as well as other activities which involve bodily movement and are done as part of playing, working, active transportation, house chores and recreational activities (WHO, 2003).

In this research the university of Gondar student's trend and practice in regular physical activity program was assessed. Furthermore the research was assessed the benefits of physical activity, the environmental factors that discourage people from more active.

Statement of the problem

In the university level, it is obvious that most students give attention on activities that will enhance the overall performance of their academic result. Upon completing those stressful activities as a trend students will then choose to engage themselves on activities that relax them. Some of those activities are going to night clubs, chewing 'chat', smoking cigarettes and other drugs. Some student, even though not interested or are addicted to drugs, still spend their leisure time on events that aren't concerned or involve sport activities. The study was designed to assess the trend and practice of university student's participation in regular physical activity program, the case of Woldia University.

Specific objectives

1. To assess the trend and practice of university students participation in regular physical activities program.
2. To identify the main problems hindering the participation of university students in physical activities.
3. To search out the best adherence mechanism for improving the participation of students in regular physical activity program.

Scope of the study

Specifically the study was delimited with Woldia University students especially *Jeneto* main campus. The study was being broader than this if the total students from the university might be taken as a research sample.

METHODS

Description of the study area

Specifically the study was delimited with Woldia University students especially *Jeneto main* campus. Woldia University were established in 2011 G.C and located in North Wollo part of Ethiopia, city of Woldia. It has a distance of 521 k/m from Addis Ababa which is the capital city of Ethiopia and 361 k/m from the capital city of Amhara regional state which is Bahir Dar.

Research design

The researchers were designed to assess the trend and practices of Woldia University students in regular physical activity program by using mixed method approach that quantitative data through questionnaire followed by observation was obtained. Therefore, the study was used explanatory research design method.

Population of the study

The researchers were focused on Woldia University students, in this university there are totally around 8000 populations (students), from that the research was taken collage of natural and computational science which has 8 departments, in this Faculty the research was taken 3rd year students there are totally around 220. Rationally the researchers were used 3rd year students in order to get enough information while students are stayed in the university long time than other junior students.

Sample Size and Sampling Technique

The research was used multi stage sampling technique which is the presence of purposive, stratified and simple random sampling techniques. First the research chosen Woldia University then goes to *Jeneto main* campus after that Faculty of natural and computational science was selected and at last from 7 departments found in it. The researchers divides departments in to four groups by used stratified sampling technique that is based on their nature of the courses given, then biology, physics and chemistry in one group and mathematics and statistics in one group and at last geology and sport in other two groups.

As a sample, from the total populations the research was taken 45 students by using purposive sampling technique that we can get enough information while they are 3rd year and senior students from Faculty of natural and computational science, distributions of sampled students in each departments was chosen by using simple random sampling techniques from that 10 students from biology, both each sport science and chemistry was chosen 7 students, also both each geology and statistics was chosen 6 students, 5 from physics and 4 from mathematics, the amount of no. difference between departments happen because of they have a difference in their no. of students.

Source of data

The researchers were used both primary source of data. The primary data was collected directly from students through questionnaire and observation. The researchers used two types of data collection instruments namely questionnaire and observation.

Method of data analysis

The collected data was analyzed and tabulated in the form of tables through percentage, number and descriptive method of writing.

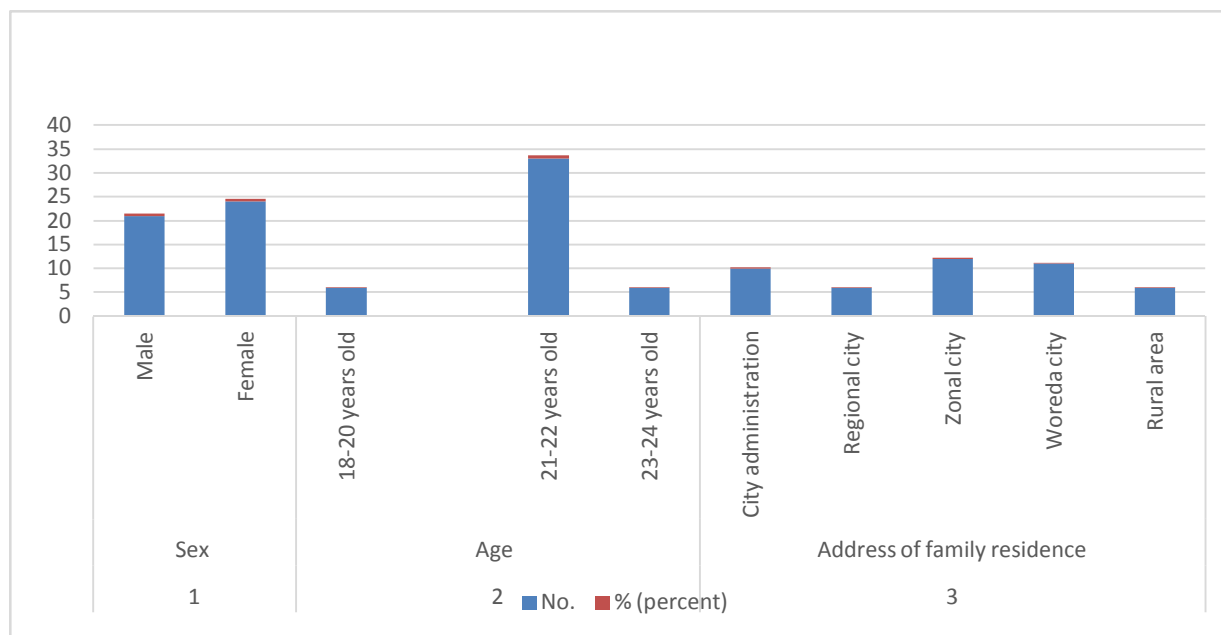
Result**Background information**

This section is discussed about the student's personal information i.e. sex, age and address of family residence.

Table 1. Student's personal information

No.	Item	Choice	No.	% (percent)	Remark
1	Sex	Male	21	46.67%	
		Female	24	53.33%	
2	Age	18-20 years old	6	13.33%	
		21-22 years old	33	73.34%	
		23-24 years old	6	13.33%	
3	Address of family residence	City administration	10	22.22%	
		Regional city	6	13.33%	
		Zonal city	12	26.68%	
		Woreda city	11	24.44%	
		Rural area	6	13.33%	

As table1 and chart 1 indicates that participant's sex; here both male (46.67%) and females (53.33%) were participated in the study, and participants are aged between 18-20 (13.33%), 21-22 (73.33%), and 23-24 (13.33%). From that 22.22% of participants were lived in city administration, 13.33% were lived in regional city, 26.68% of were lived in zonal city, 24.44% of were lived in Woreda city, 13.33% of were lived rural area.

Chart 1: Student's personal information

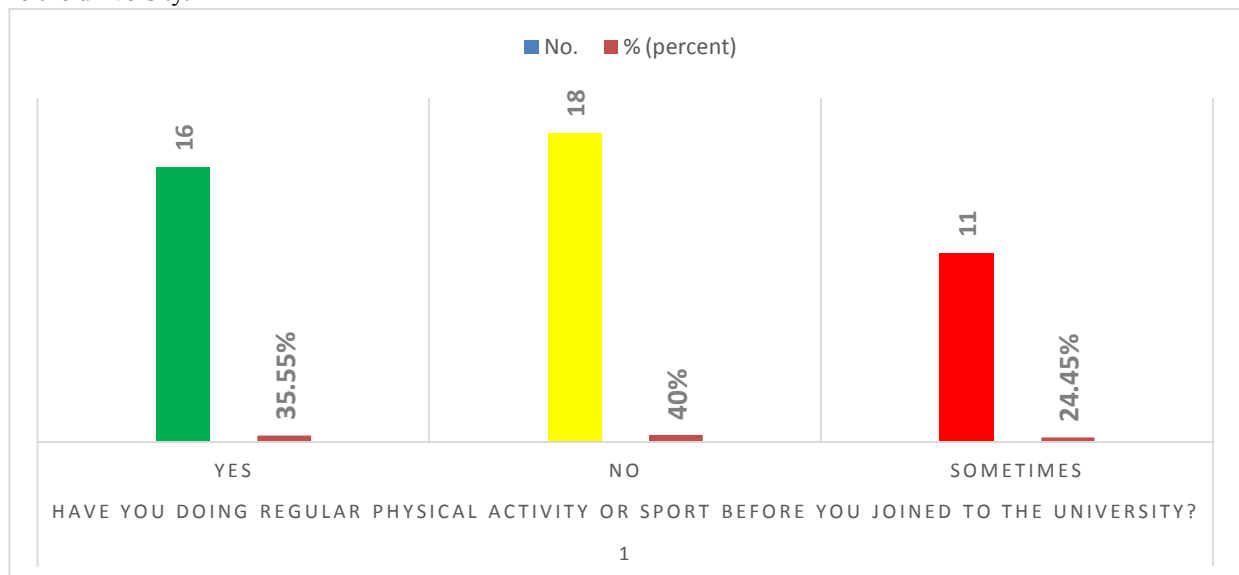
As the information indicated we are understand that students participated in the study are in late adolescence stage that the study incorporates the age between 21-22 years old (73.33%). Whereas, students selected for the study sample are distributed in city administration, regional city, zonal, Woreda, and rural area.

Study related information

This section can discussed about the students trend about participation of regular physical activity/ sport.

Table 2.Trends of student’s participation in regular physical activity/ sport

No.	Item	Choice	No.	% (percent)	Remark
1.	Have you doing regular physical activity or sport before you joined to the university?	Yes	16	35.55%	
		No	18	40%	
		Sometimes	11	24.45%	
2.	If your answer for question no. 1 is “Yes”, then in what levels of sport or physical activity did you participate?	Project level	4	25%	
		Personal exercise	8	50%	
		School curricular sport activity(no class purpose)	3	18.75%	
		Club level	1	6.25%	
3.	Have you practice sport/physical activity regularly in this university?	Yes	13	28.89%	
		No	32	71.11%	
4.	If your answer for item no. 3 is “Yes”, then how many times in a week do you exercise?	1 day/week	2	15.39%	
		2 days/week	5	38.46%	
		3 days/week	4	30.76%	
		4 days/week and above	2	15.39%	
5.	If your answer for item on. 3 is “Yes”, then in what types of sport/physical activity do you participate?	Football	4	30.76%	
		Volleyball	4	30.76%	
		Basketball	1	7.70%	
		Athletics	3	23.08%	
		Gymnastics	1	7.70%	
6.	If your answer for item no. 3 is “No”, then what is the reason you do not participate sport/ physical activity? Because	I am not interested in sport	9	28.125%	
		The sport fields are not safe	6	18.75%	
		I have not enough time to participate, within academic reason	15	46.875%	
		In other reason	2	6.25%	

Chart 2: Student’s participation in physical activity/ sport before they joined To the university.

As table 2 and chart 2 indicates that (35.55%) of participants are participated in physical activity/ sport before they are joined to the university, whereas (40%) of participants were not participated and(24.45%) of participants were did physical activity sometimes.

Chart 3: Levels of student’s participation in sport or physical activity did they participated before they joined to the university

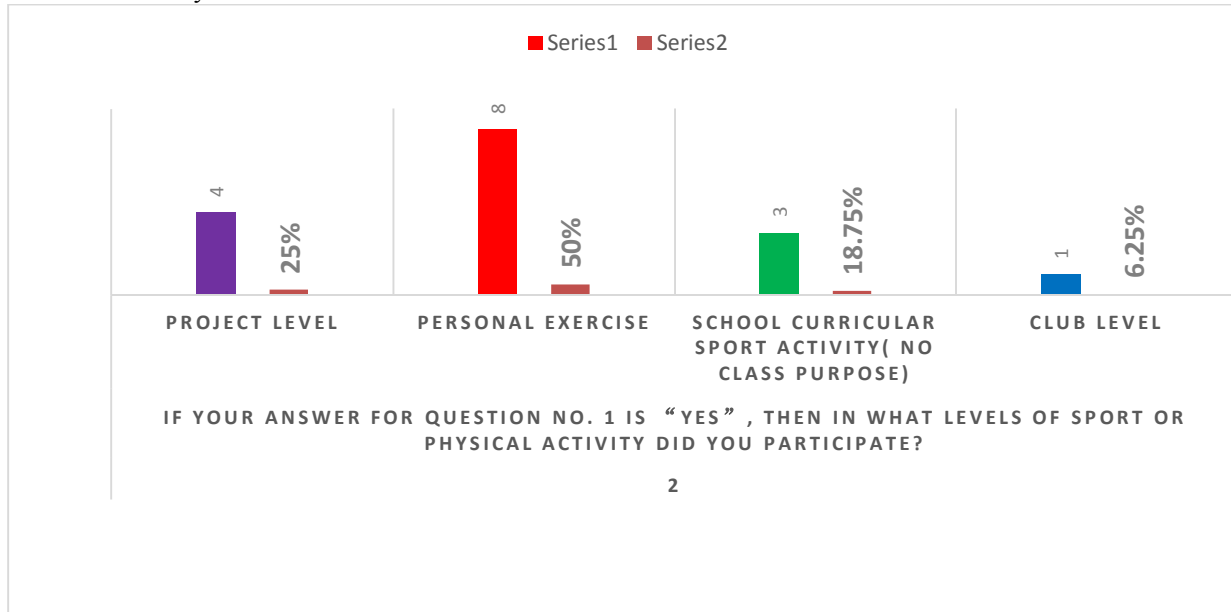
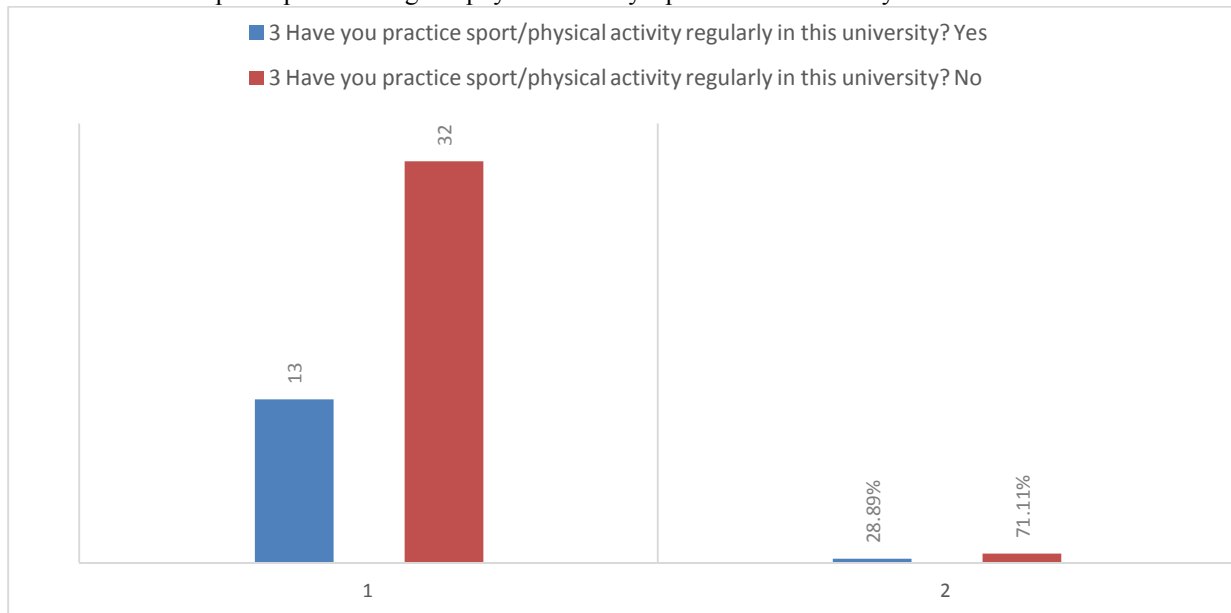


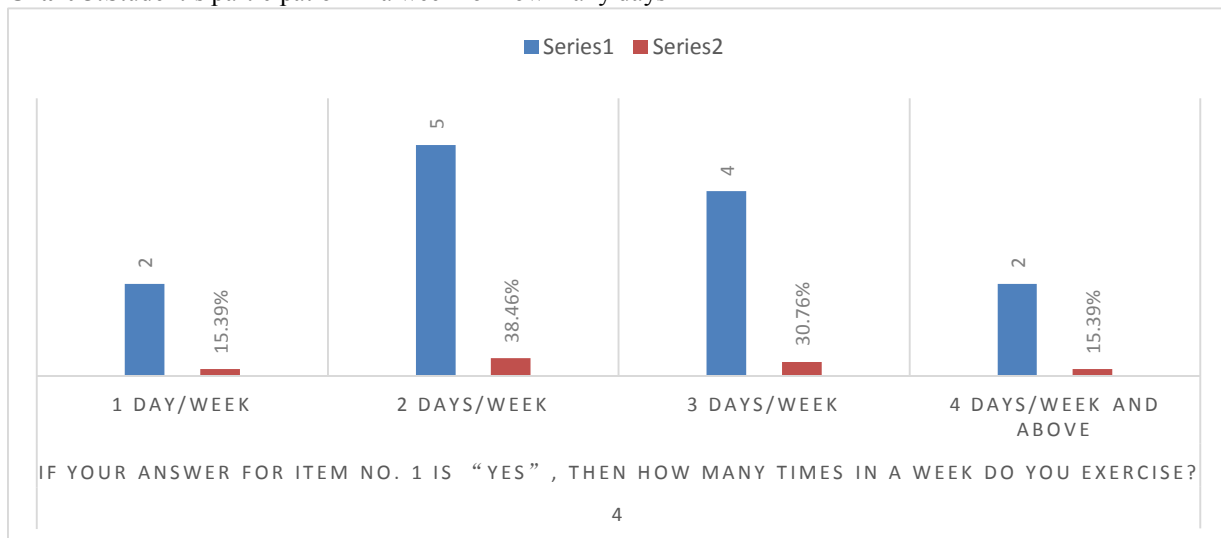
Table 2 and chart no. 3 also shows that in levels of students participation in sport or physical activity did they participated before they joined to the university from that they participated(25%) of participants were in project level (50%) of participants were in personal exercise, (18.75%) of participants were in school curricular sport activity (no class purpose), (6.25%) of participants were in club level.

Chart 4: Student’s participation in regular physical activity/ sport in this university



As Table 1 and Chart 4 shows that the student’s participation in regular physical activity/ sport in this university from that (28.89%) of participants were participated and (71.11%) of participants were did not participated.

Chart 5: Student’s participation in a week for how many days



As table and chart no. 5 shows that the students participation in a week for how many days from that participants were exercise 1 day (15.39%), 2 days (38.46%), 3 days (30.76%), 4 days and above (15.39%).

Chart 6: Students participation that in what types of physical activity/ sport

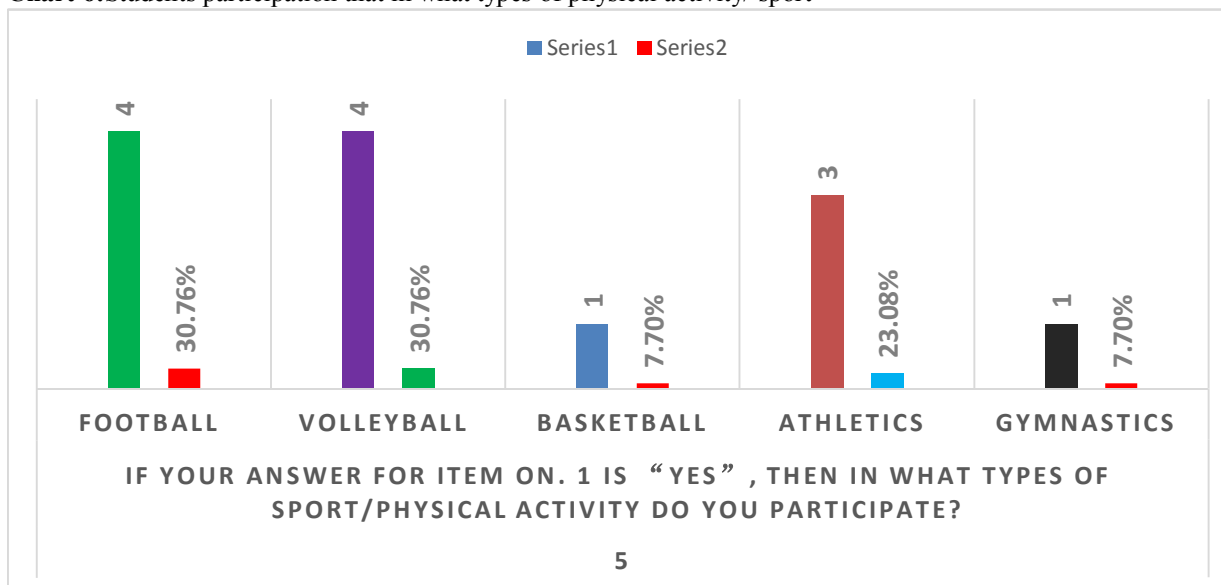


Table 2 and chart no. 6 also shows about the students participation that in what types of physical activity/ sport which they are participated from that they were participated (30.76) in football, (30.76%) in volleyball, (7.70%) in basketball, (23.08%)in athletics and(7.70%) in gymnastics.

From the analysis above we are understand that most of students did not participated in regular physical activity/ sport before they joined to the university (40%). Whereas, WHO 2010 wrote globally, around 23% of adults aged 18 and over were not active enough in 2010. Here in the current study, from students that participated, most of students are participated in the

level of personal exercise (50%) and most of students are not participated in regular physical activity/ sport in this university (71.11%).In the previous study, University students spend most of their time sitting at the computer desks doing their homework, so the amount of time that can be allocated to some other activities, especially to physical activities is comprehensively reduced(Milanovic *et al*, 2013).

From students that participated in regular physical activity, most of students (38.46%) are participated 2 days in a week. As the previous study conducted,20 % of university students were involved recreationally (2 to 3 times a week). Whereas most of

students are participated in football (30.76%) and volleyball (30.76%). Evidences suggest that football

and volleyball was the most popular sport among the male university students (Milanovic et.al, 2013).

Chart 7:Reasons that affect students did not participated in regular physical activity/ sport

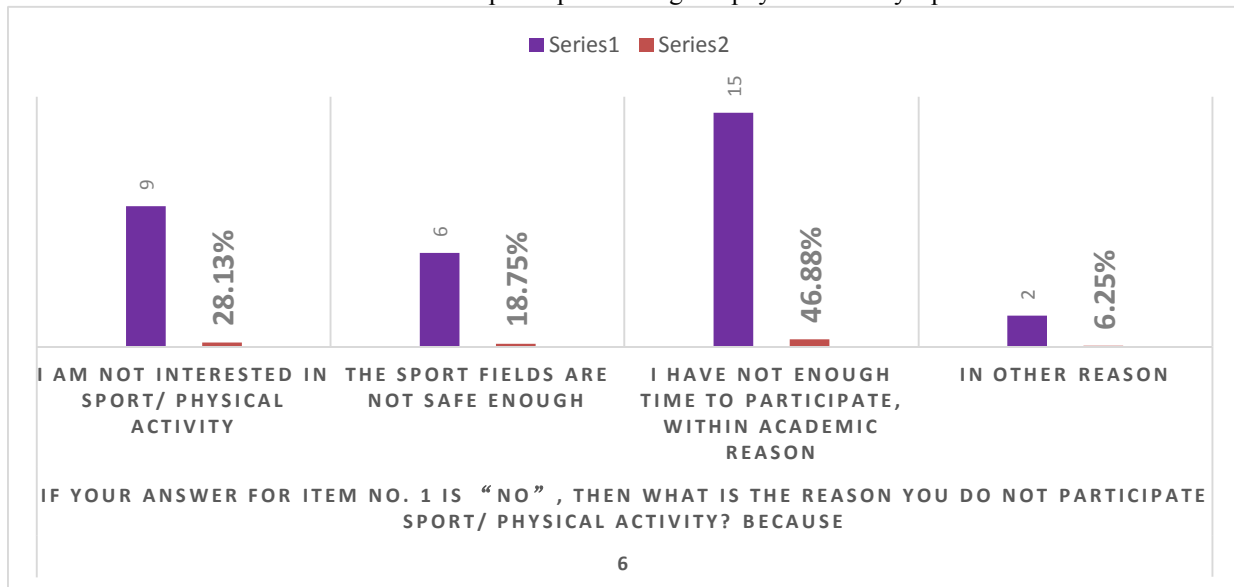


Table 2 and chart 7 also shows that the reasons that affect students do not participated in regular physical activity/ sport from that they were do not participated by (28.125%) do not have interest in sport or physical activity, (18.75%) the sport fields are not safe enough, (46.875%) do not have enough time to participate, within academic reason, (6.25%) other reason related to health attitude, regional reason.

physical activity/ sport by not having enough time to participate, with in academic reason(46.875%). According to(Colabianchi *et al*, 2012)The first factor gathers the variables related to external barriers-lack of time to devote to physical activity and sport practice, including having sufficient time and lack of appropriate equipment for any types of sport. The students were have Knowledge on benefits of physical activity/ sport

From the analysis above we are understand that most of students do not participated in regular

Chart 8: Benefits of physical activity/ sport for academic performance



As table 3 and chart 8indicates that the benefits of physical activity/ sport for academic performance from that 100% participants were believed

that physical activity/sport have benefits for academic performance.

From the analysis above we are understand that regular physical activity have benefits for

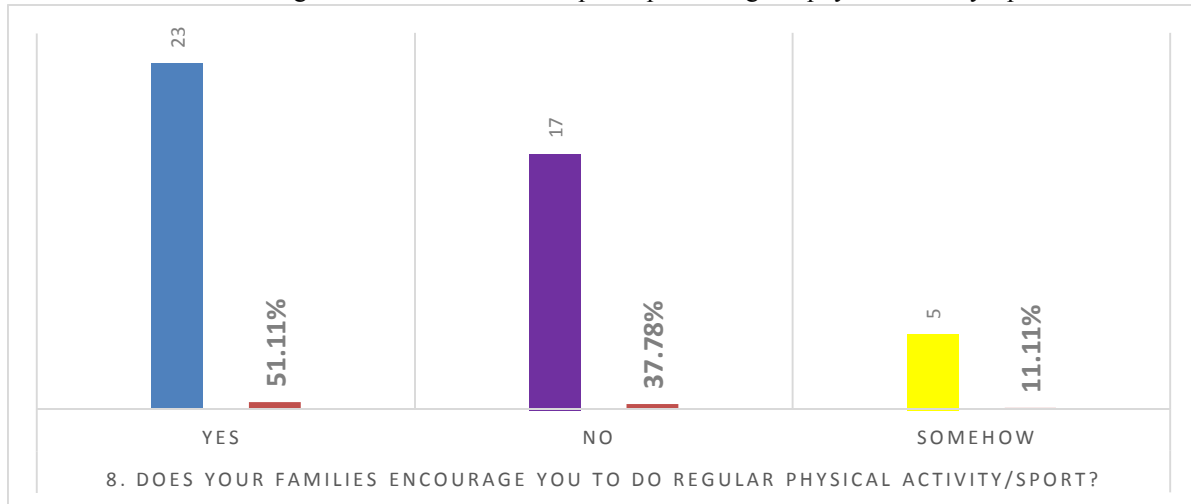
academic performance (100%), Available evidence suggests that mathematics and reading are the academic topics that are most influenced by physical activity. Basic cognitive functions related to attention

and memory facilitates learning, and these functions are enhanced by physical activity and higher aerobic fitness,(Basch et al, 2010).

Table 4. Families and Colleagues support to students for participating in regular physical activity program

Item	Does your family encourage you to do regular physical activity/sport?			Remark
	Yes	No	Somehow	
Choice				
No.	23	17	5	
% (percent)	51.11%	37.78%	11.11%	

Chart 9: Families encouragement for their child’s to participate in regular physical activity/ sport



As table 5 and chart 8 indicates that the families encouragement for their child’s to participate in regular physical activity/ sport from that (51.11%) were encouraged (37.78%) were did not encouraged and (11.11%) of participants were said that somehow. From the analysis above we are understand that most parents are encouraged their child’s to participate in regular physical activity/ sport (51.11 %), according (Olivares et al, 2015) to Parents have a bigger influence in adolescents than PE teacher in adolescents for them to be active.

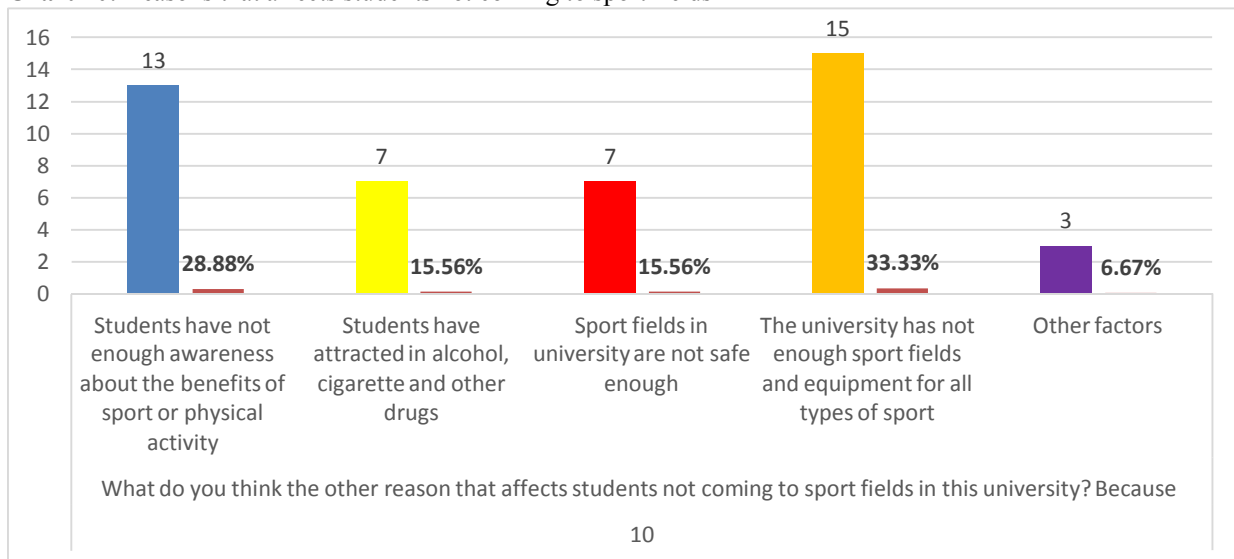
Question no. 9 indicates that the parent’s attitude to encourage or discourage their child’s in participation of

physical activity/ sport from that listed reasons are for that said “Yes” the reasons was because parents enough awareness about the benefits of physical activity/ sport for academic reason and Physical activity/sport use for overall health and to build up physical fitness such as strength, endurance, flexibility etc.

Nevertheless for that said “No” the reasons was because of Parents have not enough awareness about the benefits of physical activity/sport for academic reason, Parents are not interested in sport/physical activity and Parents more encourages about academic performance.

Table 5.The other reason that affects students not coming to sport fields in this university.

No.	Item	Choice	No.	% (percent)	Remark
10.	What do you think the other reason that affects students not coming to sport fields in this university? Because	Students have not enough awareness about the benefits of sport or physical activity	13	28.88%	
		Students have attracted in alcohol, cigarette and other drugs	7	15.56%	
		Sport fields in university are not safe enough	7	15.56%	
		The university has not enough sport fields and equipment for all types of sport	15	33.33%	
		Other factors	3	6.67%	

Chart 10: Reasons that affects students not coming to sport fields

As table 5 and chart 9 indicates that the other reasons that affects students not coming to sport fields from the participants (28.88%) by have not enough awareness about the benefits of sport or physical activity, (15.56%) by attracted in alcohol, cigarette and other drugs, (15.56%) sport fields in university are not safe enough, (33.33%) the university has not enough sport fields and equipment for all types of sport, (6.67%) other factors such as insufficient time with religious purpose, insufficient food in the café and in sport fields most students are not disciplined enough so they afraid to participate with them.

From the above analysis we understand that the other factors that hinder most of students to participate in regular physical activity/ sport are the university have not enough sport fields and equipment for all types of sport (33.33%), according to (Colabianchi et al, 2012) Facilities and equipment are another recognized barrier to participation. A lack of

funding for sports equipment has further reduced the number of participating students, as the number of uniforms available per sport has caused the selection process to become more stringent.

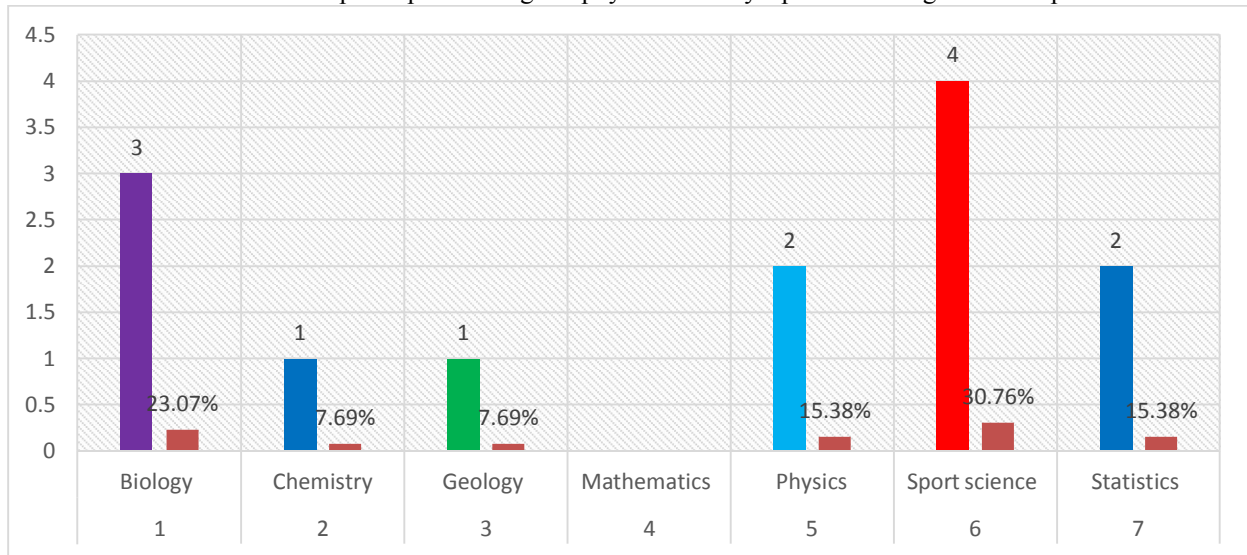
Question no. 11 indicates that the possible solution to develop student's trend to participate in different types of regular physical activity/ sport from the table, from that gave enough awareness about benefits of physical activity/sport for academic performance, overall health and physical fitness, make sport fields safe enough and the university should fulfill enough amounts of fields and equipment for all types of sport.

According to (American heart association, 2015) Shared use policies that make physical activity facilities available to the community during out-of-school time should also be in place to facilitate physical activity outside of school hours.

Table 6: Difference between departments which participated in sport/physical activity in the university level

No.	Departments	No. of participants	% (percent)	Remark
1	Biology	3	23.07%	
2	Chemistry	1	7.69%	
3	Geology	1	7.69%	
4	Mathematics	-	-	
5	Physics	2	15.38%	
6	Sport science	4	30.76%	
7	Statistics	2	15.38%	

Chart 11: Student’s which are participated in regular physical activity/ sport according to their departments



As table 6 and chart 10 indicates that the students which are participated in regular physical activity/ sport by their departments are (23.07%) were biology, (7.69%) were chemistry, (7.69%) were geology, (15.38%) were physics, (30.76%) were sport science and (15.38%)were statistics.

From the above analysis we are understands that most of students that participated in regular physical activity/ sport are sport science students (30.76%), whereas biology students also have good participation (23.07%) and the list one is mathematics students which there is no students participated currently in this university.

Table 7. Difference between participants which are participated in regular physical activity/ sport according to their sex

No.	Sex	No.	% (percent)	Remark
1.	Male	8	61.54%	
2.	Female	5	38.46%	

Chart 12: Participants which are participated in regular physical activity/ sport according to their sex

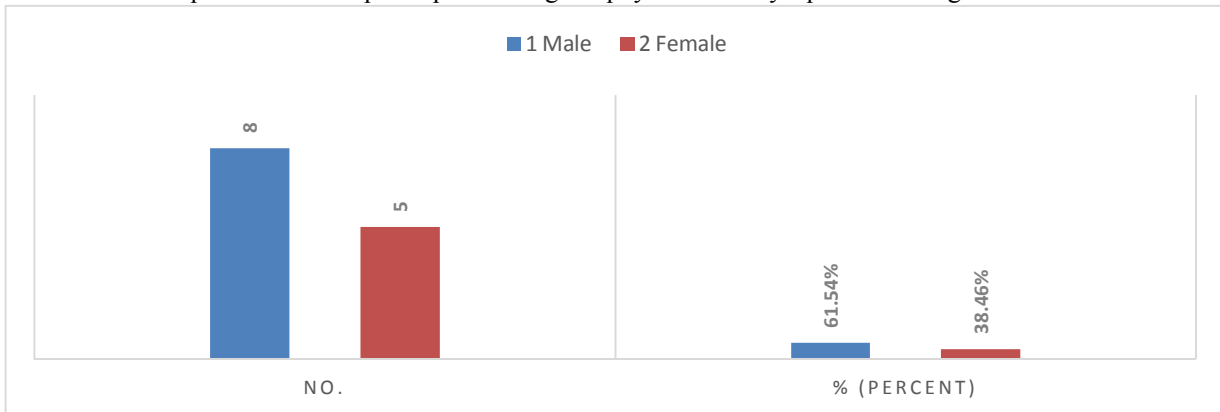


Table 7 and Chart 11 indicates that the participants which are participated in regular physical activity/ sport according to their sex from that, (61.54%)were male and (38.46%) were female.

From the above analysis we are understands that most of students that participated in regular physical activity/ sport are male students (61.54%).

Observation

The last discussion talks that data gathered through observation. Student's participation in regular physical activity/ sport was not as much participated in regular physical activity. It also indicates about the comparison according to sex in the participation of physical activity/ sport, as we observed female students were not participated equally with male students.

As we observed about the types of sport which are students mostly participated in football, volleyball and somehow in apparatus gymnastics. It also indicates about the infrastructure or sport fields that participate much number of students, are not safe enough and comfortable. Also it has not much more infrastructure for all types of sports.

Conclusion

The results showed that university students were very well informed about the importance of regular physical activity and sport. Nevertheless, when it came to their involvement in various sporting activity, the questionnaire and observation checklist showed that almost 71% of university students do not generally spend their time participating in any regular physical activity/ sport.

On the other hand, there is a difference between male (61.54%) and female (38.46%) students in terms of participation on regular physical activity/ sport. There is also a difference according to departments the results showed that sport science department students more participated than other departments (30.76%) and biology students were also good participants (23.07%).

The main problems that hindered the participation of university students in physical activities/ sport, almost 47% of students have insufficient time to participate, with in academic reason, the others that most students do not participated with having lack of interest in regular physical activity/ sport (28.125%) and other factors that are the university have not enough sport fields and equipment for all types of sport.

As the result showed that the possible solution to develop student's trend to participate in different types of regular physical activity/ sport from the table; gave enough awareness about benefits of physical activity/sport for academic performance, overall health and physical fitness, make sport fields safe enough and the university should fulfill enough amounts of fields and equipment for all types of sport.

Recommendation

Generally, give awareness to all departments about the benefits of regular physical activity/ sport more than they know, about management of time with academic performance, with religious purpose and physical activity /sport.

Make sport fields safe enough and fulfill enough amounts of fields and equipment for all types of sport will develop student's participation in regular physical activity/ sport, when equipment's are founded easily most of students will come to sport fields then the university have the responsibility to fulfill and make equipment for students.

REFERENCES

- Åberg MA, Pedersen NL, (2009; 106(49):20906–2091). Cardiovascular fitness is associated with cognition in young adulthood. Proceedings of the National Academy of Sciences of the United States of America. 1. [PMC free article] [PubMed].
- Ahamed Y, Macdonald H, (2007; 39(2):371–376). School-based physical activity does not compromise children's academic performance. *Medicine and Science in Sports and Exercise*. [PubMed].
- American heart association, (2015), Increasing and Improving Physical Education and Physical Activity in Schools: Benefits for Children's Health and Educational Outcomes.
- Asian Pacific Journal of Cancer Prevention, Vol. 10, 2009.
- Basch, Stanca, Baxter, (2011) and Strong (2005). Physical activity, fitness and physical education: Effects on academic performance.
- CJ Caspersen, KE Powell, GM Christenson - Public health reports, 1985 ncbi.nlm.nih.gov.
- Colabianchi, Han, Sinclair (2008, 2012): Niñerola, Garcia, Daskapan (2001, 2006): Lee, Park, Kim and Capdevila (2007, 2008). Barriers to participation in sports.
- Pedro R. Olivares, Marco Antonio Cossio-Bolanos, (2015, 15). Influence of parents and physical education teachers in adolescents physical activity.
- Trudeau F, Shephard RJ,(2008; 5): Basch (2010). Physical education, school physical activity, school sports and academic performance. *International Journal of Behavioral Nutrition and Physical Activity*. [PMC free article] [PubMed].
- Warburton P., (2006, 2007). Benefits of physical activity and risk of insufficient physical activity. [PubMed].

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- World health organization, (2003, 2010, 2013). Physical activity, benefits of physical activity and how to increase physical activity. [Article].
 - WWW.WIKIPEDIA.COM, (2017).
 - WWW.FITNESS.WIKIA.COM, (2017). Physical activity and the benefits from being active. being active
 - Zoran Milanovic, Goran Sporis, (2013, 5): Koca, Asci and Demrihan (2005): Goldsten and Isco-Ahola (2006). Attitudes towards exercise and the physical habits of university of Zagreb students. [Original scientific article] [PubMed].

6/2/2021