



The Journal of Social Sciences Research

ISSN: 2411-9458

Vol. 1, No. 2, pp: 10-19, 2015

URL: <http://arpgweb.com/?ic=journal&journal=7&info=aims>

The Relationship between Extrinsic Motivation and the Physical Activity Level among Students in Faculty of Education Uitm, Section 17 Shah Alam

Azlan Ahmad Kamal*

Faculty of Education Universiti Teknologi MARA (UiTM) 40200 Shah Alam. Selangor, Malaysia

Mohd. Radzani

Faculty of Education Universiti Kebangsaan Malaysia (UKM) 43600 Bangi, Selangor, Malaysia

Anas Rizal Abdul Rahim

Faculty of Education Universiti Teknologi MARA (UiTM) 40200 Shah Alam. Selangor, Malaysia

Abstract: Some people realized about the importance of physical activity in maintaining health and wellness. This perception exists because there is a lot of efforts and studies done to improve people health and wellness through physical activity. In top of that, it is known that motivation is one of the main effects of the people participation in sports or physical activity. Therefore, whether intrinsic or extrinsic, many have agreed that motivation plays important role in determining physical activity level. Hence, this study will be conducted to determine the relationship between extrinsic motivations with the physical activity level. The researcher has randomly selected 172 students from Faculty of Education UiTM as a respondent of this study. The study was conducted using questionnaire based on the Exercise Motivation Inventory (EMI) and International Physical Activity Questionnaire (IPAQ) which then been edited to fulfil the requirement of the study. This study is to examine the relationship between extrinsic motivations with the physical activity level. The results showed that there was significant relationship between extrinsic motivations with the physical activity level. The male respondent was found to have high level of physical activity better than female respondents.

Keywords: Physical Activities; University Students; Physical Activity Level; Extrinsic Motivations.

Contents

1. Introduction.....	10
2. Physical Activity Level	11
3. Benefits of Physical Activity.....	12
4. Problem Statement.....	13
5. Motivation.....	14
6. Relationships between Extrinsic Motivations with the Level of Physical Activity	14
7. Material and Method.....	15
8. Findings.....	15
8.1. Respondent Extrinsic Motivation Level in Sports/ Physical Activity.....	15
8.2. Respondent Level of Physical Activity among Students	15
8.3. Respondent Significant Difference in the Level of Physical Activity between Male and Female	16
8.4. Respondent Relationships between Extrinsic Motivations in Sports/ Physical Activity with Physical Activity Level	17
9. Conclusion	17
References.....	17

1. Introduction

Consideration of health is becoming more critical topic in every person's life nowadays. According to World Health Organization (WHO), health is a state of complete circle of human structure which is physical, mental and social well-being, and it is not merely the absence of disease or infirmity. In addition, the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion and political belief, economic or social condition. Most commonly, the development of health and well-being is largely depend on lifestyle, thus on physical activity specifically.

*Corresponding Author

Doing physical activity is one of the biggest challenges especially in today modernize world. Many people nowadays prefer to spend more time on gadgets such as mobile phone, video games, computer and many others. Boka (2010) said, “as a consequence of modern civilization people do little physical exercise and life is much more comfortable because there is more and more work done by machinery, and the rate of physical exercise is continuously decreasing in our everyday life”. This might be a big problem for us if this matter keeps on moving. Action should be taken in order to improve the nation health.

Many had agreed that physical activity is one of the best methods to improve and maintain our health. Basically, the aim of sport through personality, capability development, and transmission of culture is to educate people to live a healthy lifestyle and to maintain their health. Sport helps us to spend our free time in a useful way, contributes to our health, physical development, and to maintain our physical condition. If somebody pursues a sport seriously, then physical exercise, sport might become a goal of life. As for researcher, doing sports or physical activity is not only contributes to the education of motion structure, but educates the individual to be persistent, self-caring, and to be able to make sacrifices.

In this case, an enforcement toward sport or physical activity should be implemented in everyone own life. Motivation plays an important role in ensuring that everyone is participating in sports or physical activity this day. Based on Vallerand (2006), one of the most important variables in sport or physical activity is motivation. Vallerand (2006) also added that many sports personal like coaches and athletes agree that to facilitate sport performance and positive experience in sport; they need the elements of motivation. So, this study will highlight on the motivation on sport or physical activity and how they are related.

Motivation is often related to what, how and why we are doing something. This is also count in physical activity and sport. This is supported by Zervas (2002), “Motivation is a topic that has been of interest in research on sport and exercise psychology investigating the reasons for human behavior”. However, motivation is very difficult issue to describe and translates. It is a critical issue to give this trend from a health perspective alone, understanding better how to motivate physical activity and lifestyle changes. Yet, these are significant issues even from a mental health perspective (Ryan *et al.*, 2009). From researcher view of point, motivation can be said as an activation key of doing something including physical activity.

Basically, there are two common types of motivation in sport and physical activity which are extrinsic and intrinsic. Vallerand and Rousseau (2001) stated that intrinsic motivation is doing something for its own sake whereas extrinsic motivation is doing something as a means to an end and not for its own sake. This is in particular, have been very popular topics and have allowed researchers to make sense of several phenomena of important in sport and physical activity. Ryan and Deci (2000) also said that, “*Extrinsic motivation* refers to the performance of an activity in order to attain some separable outcome and, thus, contrasts with *intrinsic motivation*, which refers to doing an activity for the inherent satisfaction of the activity itself”.

To be specific, this study will focus on one of these types of motivation which is extrinsic motivation with respect to physical activity level. As stated earlier, extrinsic motivation is doing something as a means to an end and not for its own sake. It is clearly mentioned by Vallerand (2006), “when extrinsically motivated, individual does not engage in the activity out of pleasure but rather do so to derive some kind of rewards that are external to the activity itself”. For instance, an athlete who participates in the Commonwealth Game to obtain a gold medal and the associated fame and fortune that goes with it. In addition, avoiding punishment also refers to extrinsic motivation, (Vallerand, 2006).

2. Physical Activity Level

As we concern that physical activity (PA) is an important factor to promote and maintain a healthy lifestyle along the whole life cycle. Over the past years there are many evidence prove that an active lifestyle is one of the best investments for individual and community health (Bauman *et al.*, 2000). Physical activity level is an indicator of how active is individuals in this life. As suggested by FITT’s formula, physical activity level may refer to the frequency, intensity, time and types of activity done by individual. Moreover, regular physical activity facilitates better stress management, alleviates depression and anxiety, strengthens self esteem and provides social benefits through increased social interaction and integration (Bauman *et al.*, 2000).

The Committee of the Sports Commission Hong Kong (2006) stated that intensity or level of physical activities can be classified into three categories which are low, moderate and vigorous levels. “Low-intensity physical activities” are the activities that are simple, light and easy to do. “Moderate-intensity physical activities” are the activities that will slightly speed up breathing and heart rate, and cause mild sweating without exertion (e.g. one can still talk with ease while exercising). “Vigorous-intensity physical activities” are the activities that will greatly speed up breathing and heart rate, and cause profuse sweating and exertion (e.g. one cannot or finds it difficult to talk with ease while exercising).

Based on guideline of International Physical Activity Questionnaire (2005), there are also three levels of physical activity proposed to classify population which are high, moderate and low. “High physical activity” refers to those who move at least 12,500 steps per day or the equivalent in moderate and vigorous activities. This represents at least an hour more moderate-intensity activity over and above the basal level of activity, or half an hour of vigorous-intensity activity over and above basal levels daily (based on results in pedometers studies). “Moderate physical activity” is defined as doing some activity, more than the low active category. It is proposed that it is a level of activity equivalent to ‘half an hour of at least moderate-intensity physical activity on most days’ (based on the

former leisure time-based physical activity population health recommendation). “Low physical activity” is simply defined as not meeting any of the criteria for either of the previous categories.

Even though, the level of physical activity itself may determine our level of physical and mental health and wellness. However, engaging in regular physical activity, even of moderate intensity, will help in reduces the risk of diseases such as cardiovascular disease, osteoporosis, obesity and injury. In addition, Australian and international guidelines recommend participation in at least 60 minutes (and up to several hours) of moderate to vigorous activity per day for children and adolescents (National Association for Sport and Physical Education, 2004; Commonwealth Department of Health and Aging, 2004). However, according to [Thompson et al. \(2010\)](#) children are becoming less active as they become older, and participation and activity levels are lower in female children.

[Cavill et al. \(2006\)](#), in general, health-enhancing physical activity comprises activities that are classed as of at least moderate intensity. Moderate-intensity physical activity raises the heartbeat and leaves the person feeling warm and slightly out of breath. It increases the body’s metabolism to 3–6 times the resting level (3–6 metabolic equivalents –METs). For most inactive people, 3 METs is equivalent to brisk walking. For more active and fit people, fast walking or slow jogging constitutes moderate-intensity physical activity. Most public health recommendations on physical activity focus on activities of at least moderate intensity; this ensures inclusion of a broad range of activities. Vigorous-intensity physical activities enable people to work up a sweat and become out of breath. They usually involve sport or exercise: for example, running or fast cycling. Vigorous-intensity activities raise the metabolism to at least six times its resting level (6 METs).

3. Benefits of Physical Activity

Physical activity among youth is an important issue that is being discussed continuously among the public ([Knop, 1996](#)). Authorities of public health must promote physical health to youth so that they will have a healthy lifestyle. [Biddle et al. \(1995\)](#) said that an expert panel suggested that children and youth participate in a minimum of 60 minutes per day of physical activity. The activity, however, must be developmentally appropriate as well as enjoyable, and it must involve a variety of activities. According to the panel, a minimum of 60 minutes can be collected throughout the day in school. It can also be done during the Physical Education classes and recess, as well as during internal sports, and during before and after school programs. [Castelli and Erwin \(2007\)](#) said that children give positive attitude towards outdoor activities. Thus, more fun outdoor activities must be implemented in the school syllabus for the children to be interested in Physical Education classes.

Physical activity has been associated with many benefits such as reducing weights and obesity ([Fletcher et al., 1996](#)). [Biddle et al. \(2004\)](#) Said physical activity is important for the health of young people. Children and adolescents who participated in sports or physical activities have lesser risk of getting cardiovascular disease. Moreover, participating in physical activity can prevent chronic diseases such as heart disease, cancer, diabetes, and obesity-related diseases ([Pender et al., 2002](#)). In addition to that, physical activity can help improve the cardiovascular endurance and blood lipid profile, for example low density-lipoprotein (LDL) and triglycerides decrease, whereas the high-density lipoprotein (HDL) increases ([Stevenson et al., 1987](#)). According to [Sallis et al. \(2000\)](#) and [United States Department of Health and Human Services \(USDHHS\) \(1996\)](#), there are many benefits children and youth can get when they are physically active. Youths who do physical activity regularly throughout their childhood and adolescence will gain immediate health benefits. The benefits include excellent body composition and musculoskeletal development which can reduce the risk of getting coronary heart disease ([Gutin et al., 1994](#)). Besides that, the [United States Department of Health and Human Services \(USDHHS\) \(1996\)](#) said physical activity and fitness are generally recognized as contributing to enhance one’s physical well-being. People who are physically active will have better physiological and psychological health ([Nieman, 2003](#); [Schmalz et al., 2007](#)). According to [Nieman \(2003\)](#), physical activity provides positive effects on psychological state especially positive well-being and vigor, reduces anxiety and depression. Furthermore, physical activity enhances group social support, which may increase the probability of maintaining long term weight loss and management ([Nieman, 2003](#)). [Corbin et al. \(2000\)](#) Believed that it is imperative to have students take part in many different physical activities. This way, students can gain a lot of experiences and opportunities of physical activities. It is believed that students will find physical activities more enjoyable when they are exposed to numerous activities. Hence, students will be more knowledgeable regarding physical activity and education, which can make them remain active throughout their adulthood.

On top of that, studies show that physical activity can give benefits to the children’s academic performance. Previous researches have shown that students who are active in physical activity and sports activity may boost up their academic achievement at the high school level. It is said that children who are more physically active have higher levels of self-esteem and healthy body image when compared to children who are not physically active. Moreover, physically active students are more likely to achieve better academic performance than those who are inactive ([Biddle et al., 2004](#)). In addition, [Sibley and Etnier \(2003\)](#) believed physical activities give positive effects to students’ academic achievement, academic readiness, and perceptual skills. This is due to the fact that physical activity can increase the students’ concentration levels ([Caterino and Polak, 1999](#)). According to [Harrison and Narayan \(2003\)](#), students who participated in extracurricular activity alone, or in combination with sports, were found to do more exercise as well as taken a liking to school and homework. Furthermore, many researchers in the past agreed that students who participated in physical activities have better learning development and learning process. It has been observed that physically active youths tend to show positive traits such as increased brain

function and nourishment, higher energy and concentration levels, changes in body build, higher self-esteem and positive behavior that can support cognitive learning (Cocke, 2002; Shepherd, 1997). According to Raviv *et al.* (1994) and Trudeau and Shephard (2008), the hippocampus in the brain is the connection of physical education and academic performances. The brain functions to get involved in the memory learning process through the changes of cerebral circulation. Therefore, it is believed that the more a person do physical activity, the more the learning process will increase. Several studies done in the USA found that when students are given an ample amount of time to do physical activities in schools, the students' academic performances will raise as opposed to students who do not receive physical activities in schools (Shepherd, 1997). According to Linder (1999), a study done in Hong Kong found a significant low correlation between physical activity and academic performance. Nevertheless, more correlation were found in girls than the boys. The result of the study indicated that students who perceived themselves as active in physical activity do have high academic performances. Another study supported the fact that higher levels of physical activities are linked with higher academic performance among children and adolescents. Studies conducted in Australia, Korea and the USA found that physical activities are significantly and positively related to academic performances (Dwyer *et al.*, 2001). In addition to that, researchers from Michigan State University and Grand Valley State University found that school students that are active in physical activities perform better in academic. Nonetheless, the researchers also found that students who took part in more energetic sports like football, or after-school activities such as roller skating perform better in core subjects like math and science by approximately 10 percent (Coe *et al.*, 2006). In other studies, it was shown that schools that offer extra time for Physical Education may contribute to enhancing students' academic achievement.

Van der Mars (1999) said that a reduced amount of Physical Education classes in favor of academic work does not necessarily result in improved academic performance. Hence, students who ignore physical activities to concentrate in academic subjects may not increase their academic achievement. So, it is rather pointless and futile to disregard physical activities altogether. However, Coleman (1961) argued that students who are active in physical activity or sports activity may not get high academic achievement due to less time and energy to achieve excellent grades in academic. According to Coleman (1961), it is hard for the students to satisfy both of the roles where they have to be good in academic as well as be good sportsmen. It is hard work, but not impossible.

In a study done by Birtwistle and Brodie (1991) it was found that girls had significantly more positive attitudes towards physical activity than boys. However, it was found that there was no significant interaction between gender and sport participation on attitudes toward physical education. In general, students' who participated in sports gave more positive attitudes toward physical education than students who do not participate in sports. Furthermore, there was a significant difference in attitudes toward physical education score between female and male students. The result showed that male students scored significantly higher than female students (Koca and Demirhan, 2004). Females are normally less active than the male students and female students' level of activity participation start to decline at younger age (Armstrong and Welsman, 1997). In another study by Cockburn (2001), it was found that some students, especially among the female students, do not like to make too much effort during Physical Education. Even though Physical Education is a fun and unique school subject, some students cannot see the importance and relevance of the subject to their life as compared to other school subjects (Armstrong and Welsman, 1997). Armstrong and Welsman (1997) believed that it is important for the students to change their mindset and perception towards Physical Education. When the perception is changed, the lesson will be more enjoyable and meaningful to the students. In addition to that, Youth Media Campaign Longitudinal Survey (YMCLS) (2002) reported that, among 3,000 children ages from 9 to 13 years old, less than 40% of the children said they are participating in organized physical activity while more than 20% reported they did not get any free-play activity outside of school hours.

4. Problem Statement

The level of physical activity can be said as an indicator of how fit or how well is our physical and mental health. It has been known that sedentary lifestyles will have serious consequences for public health. Generally, as suggested by FITT's formula, physical activity level may refer to the frequency, intensity, time and types of activity done by individual. According to Cavill *et al.* (2006), physical activity can vary widely in intensity, type of activity and the capacity of the individual or the amount of effort made by an individual. It means that, the level of physical activity is evaluated by the effort that individuals put on their physical activities.

Basically, physical activity was categorized into three levels which are; **vigorous-intensity**, **moderate-intensity**, and **low-intensity physical activity**. Vigorous-intensity physical activity refers to activities that take hard physical effort and make us breath much harder than normal. For example like competitive sports like swimming or rugby. Moderate-intensity physical activity refers to activities that take moderate physical effort and make us breath somewhat harder than normal such as recreational sports like badminton or volleyball for example. Lastly, low-intensity physical activity consists of simple everyday activities which can be carried out in short periods of time such as window shopping and strolling in parks or gardens.

Like researcher stress earlier, today's modernize world is becoming challenging for physical activity because of the culture that make public just do the opposite. Based on this, psychological factor is the key elements which can stimulate the physical activity participation. According to Frederick and Ryan (1993), based on *Self-Determination Theory* (SDT), physical activity can be inherently rewarding activity that contributes to both happiness and subjective vitality. It will contribute to overall wellness when people feel energize and feel satisfy psychologically. Based on that, the best method to attract people in physical activity is motivations. This is supported by Zervas

(2002), “motivation is a topic that has been of interest in research on sport and exercise psychology investigating the reasons for human behavior”.

Motivations are normally classified into two categories which are intrinsic and extrinsic motivation. According to Ryan and Deci (2000), intrinsic motivation influences people to engagement in an activity because of the inherent pleasure and satisfaction that it has. For instance, many physical activities are enjoyable in their own right, and require no external rewards or incentives to be performed. In other hand, extrinsic motivation is the planned activities that are performed in order to obtain some separable outcome, whether that is a tangible reward, an avoidance of a punishment, or the attainment of recognition, or approval. In this study, researcher will focus only on the extrinsic motivation in regards to physical activity level.

As we already know, extrinsic motivation refers to behavior influence in engagement of activity in order to attain some outcome separable from the activity. Whether we realize or not, many sport and exercise activities are extrinsically motivated, especially on average exercise that normally tend to be more extrinsically motivated than sport. Ryan and Deci (2006), “most people maintain their exercise activities not because of the activities are inherently interesting or enjoyable to them, but because they something to gain in it. However, although there are many studies demonstrating the importance of extrinsic motivation in sports or physical activity, there are several gaps that need to address to better understand how these extrinsic motivations influence or stimulate individuals’ physical activity level.

Many recent researches that have examined physical activity level have failed to be consistent with definitions of “vigorous-intensity physical activity, moderate-intensity physical activity, and low-intensity physical activity”, and method for measuring physical activity level. Besides that, many researches also failed to clearly relates extrinsic motivations with physical activity levels. In top of that, there are still many studies that have successfully reached their objectives in examining the relations between extrinsic motivations with the level of physical activity. However, there is not much study carried out to understand the relationship between the extrinsic motivations with individuals’ level of physical activity in local context. From this, researcher has proposed to carry out this study toward students of Faculty of Education, UiTM Shah Alam.

According to the National Philosophy of Education system.

5. Motivation

Motivation plays an important role in influencing people behaviour. It can be defined as a force which acts on or within a person to initiate behaviour. This definition was able to show the framework that includes both intrinsic and extrinsic factors. In other word, the motivation is more than a resistance of an individual’s personality that may help care providers efforts to encourage and motivate their elderly clients and also to provide the elderly people with the tools to empower themselves to become self-directed about exercise participation.

According to Sallis *et al.* (2000) based on the complexity task of motivating, there are multiple models of motivation on the elderly people to exercise that have been developed in the literature. But research suggests motivational factors that are amenable to intervention, no consensus has emerged regarding a theoretical framework for activity promotion research or practice (Assor *et al.*, 2004). Basically, there are two common types of motivation in sport and physical activity which are extrinsic and intrinsic.

6. Relationships between Extrinsic Motivations with the Level of Physical Activity

Essentially there are two types of motives or motivation which are derived from different sources which are extrinsic and intrinsic motivation. This study will focus on extrinsic motivation in sport or physical activity. However, there is not much literature or study conducted toward relating the *Extrinsic Motivation* with the *Physical Activity Level*. According to Gerdy (2000) focus first on the extrinsic motives; it will affect a person’s effort and persistence. Appearance and weight management motives were prominent during early stages of change, enjoyment and revitalisation motives were important for progression to and maintenance of actual activity (Ingledeu and Markland, 2009).

Many of the previous studies show that extrinsic motivation has a huge impact on physical activity level. This is supported by Kilpatrick *et al.* (2005), motivations on exercise were more extrinsic and focused on appearance and weight and stress management. Moreover, this is consistent with other research, it was found that sports program participation factors were competition, social benefits, skills and fitness (Sirard *et al.*, 2006). In addition, Ingledeu and Markland (2008) highlighted that people are involved in sport activities for many different reasons. For example, some people tend to participate in sport activities in fitness centre to socialize with other people and because they feel it interesting and enjoyable.

Furthermore, based on Bandura (1997), the experience of sport appears to be attractive to students for the following types of reasons; such as fun, enjoyment, to improve skills, learning and being with friends, success, winning and health. Vansteenkiste *et al.* (2008) found that a composite of social affiliation, health management, and skill development motives was positively associated with autonomous exercise, whereas a composite of social recognition and image motives was positively associated with controlled regulation. However, Frederick and Ryan (1993); Ryan (1993) said that, the study then noted that exercise primarily motivated by extrinsic factors and sport participation is by intrinsic factors .

7. Material and Method

The purpose of this study was to explore the relationship between extrinsic motivation and the physical activity level among students in faculty of education. This study looks at the respondent's motivation participation in physical activity, their physical activity level and the physical activity adherence. Apart from that, the study also looks at the respondents' motivation factors participating in physical activity. The findings of the study can improve the teaching and learning of Physical Education in school as well as enhance people's health and lifestyle.

Population and sample selection were conducted among Faculty of Education students, in which 172 students agreed to take part in this research. These students consisted of ED226 (PHE) students, follows by 32 of ED220 (Tesl) students, 20 of ED229 (Maths) students, 11 of ED228 (Physics) students, 31 of ED227 (Biology) students, 22 of ED230 (Chemistry) students, 18 of ED222 (Arts) students. Out of the 172 students, 116 respondents or 67% were female students while 56 respondents or 33% were male students. Their age ranges between 18 to 30 years old. The methodology used in this study was descriptive method or survey which was in the form of quantitative through the using of questionnaire. The data was collected and analyzed based on the answers of 172 set of questionnaires that were returned by the participants to the researchers.

8. Findings

8.1. Respondent Extrinsic Motivation Level in Sports/ Physical Activity

Table-1. Total Extrinsic Motivation

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Total Extrinsic Motivation (Appearance)	172	0	35	25.93	6.941
Total Extrinsic Motivation (Social)	172	0	25	17.42	5.999
Total Extrinsic Motivation (Challenge)	172	0	25	12.62	6.554
Total Extrinsic Motivation (Reward)	172	0	45	29.33	8.617
Total Extrinsic Motivation (Health)	172	5	35	27.97	5.255
Total Extrinsic Motivation	172	28	165	113.27	26.144
Valid N (list wise)	172				

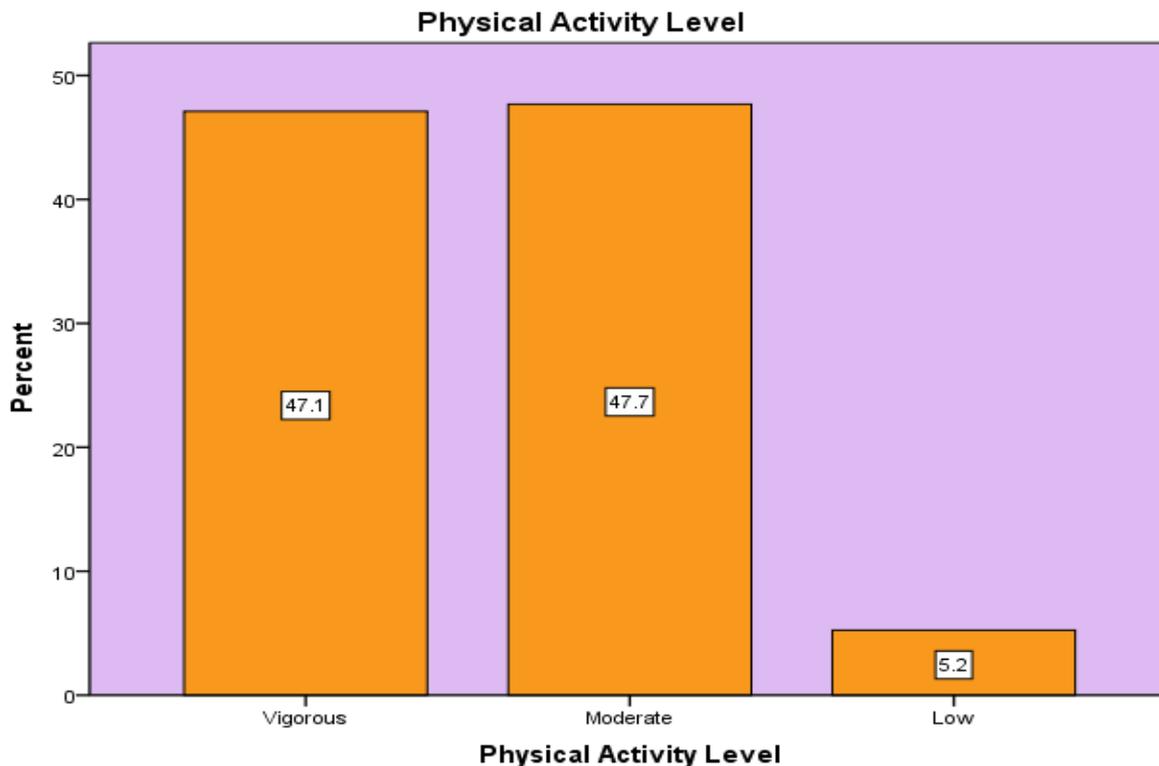
As depicted in the Table 1, there are 33 items from 5 groups that shown in the table above were used to measure students' extrinsic motivation in physical activity participation. The mean score for the total Extrinsic Motivation is 113.27 whereas the SD for the total Extrinsic Motivation is 26.144. Based on the table 1, group of Social get the lowest mean among all which is (mean = 17.42). The group of reward shows the highest mean which is (mean = 29.33). Overall, most of the respondents are extrinsically motivated to participate in the sport/ physical activity.

8.2. Respondent Level of Physical Activity among Students

Figure 1 shows the level of physical activity of the respondents in this study. It was shown that 81 (47.1%) of the respondents are in the category of vigorous and 82 (47.7%) of the respondents are in the category of moderate. There are only 9 (5.2%) of the respondents in the category of low. The mean score for the physical activity level is 1.58 with SD of 0.592. It was shown that majority of the respondents are active.

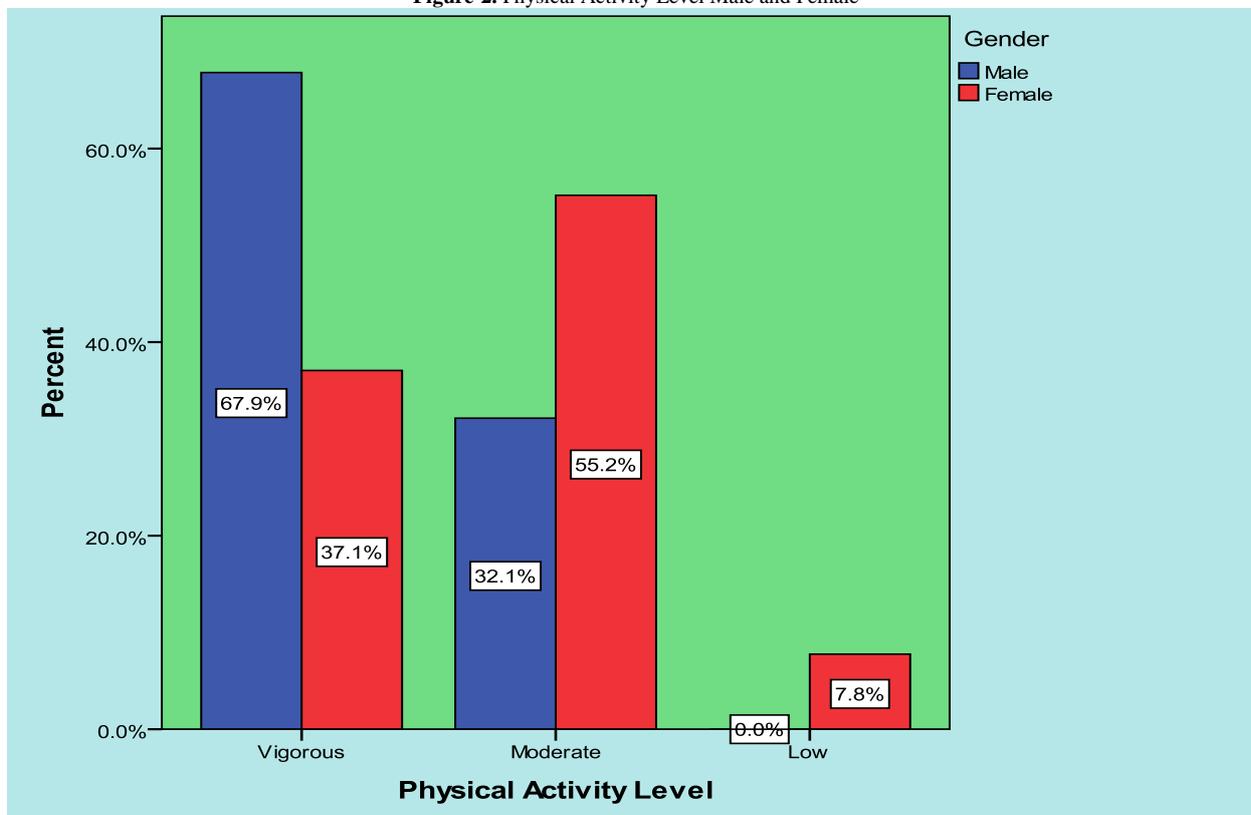
Figure 2, shows that the number of female respondent is greater than the number of male. The result of the Independent-Sample T Test shows that the difference in the two means was significant ($t = -4.193$, $df = 170$, $sig = .000$). This indicates that there was a significant difference between male and female in the level of physical activity. Based on the Figure 2, majority of the male respondents is in the vigorous category with 67.9% and remaining 32.1% of male respondents are in the moderate category. There are no male respondents in the low category. In other hand, majority of the female respondents is in the moderate category with 55.1%, 37.1% of female respondents are in vigorous category and 7.8% more in low category.

Figure-1. Physical Activity Level-Vigorous, Moderate, and Low



8.3. Respondent Significant Difference in the Level of Physical Activity between Male and Female

Figure-2. Physical Activity Level Male and Female



8.4. Respondent Relationships between Extrinsic Motivations in Sports/ Physical Activity with Physical Activity Level

Table-2. Relationships between Extrinsic Motivations with the Level of Physical Activity

Correlations			
		Total Extrinsic Motivation	MET
Total Extrinsic Motivation	Pearson Correlation	1	.403**
	Sig. (2-tailed)		.000
	N	172	172
MET	Pearson Correlation	.403**	1
	Sig. (2-tailed)	.000	
	N	172	172

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

Table 2 illustrates the relationships between Extrinsic Motivations with the Level of Physical Activity (Total MET). The total mean score for the Extrinsic Motivations (mean = 113.27) is being correlate with the total mean score for the Physical Activity MET (mean = 3234.29). The result of Pearson correlation test shows that there is a significance relationship between Extrinsic Motivations and the Level of Physical Activity ($r = 0.403$ and $\text{sig} = .000$). This is means that there is a statistically significant relationship between those variables. Based on the Pearson correlation strength relationship, the relationship between Extrinsic Motivations and the Level of Physical Activity is *Moderate* relationship.

9. Conclusion

This study is unconditionally useful for lecturers, administrators, and students itself to increase the level of physical activity among students in Faculty of Education, UiTM Shah Alam, Selangor. Moreover, this study also helps in identifying the extrinsic motivations towards participation in sport or physical activity. In addition, this study unconditionally provides more ideas on how to extrinsically motivate individuals to participate in sports or physical activity as well as promoting the health and wellness among community.

Not just that, lecturers, administrator and parents also can give more knowledge and information about physical activity and motivation to their students or child and at the same time can increase the level of physical activity of their self. Through this, lecturers, administrator and all the community in Faculty of Education, UiTM also can get benefits from this study as an alternative for them to increase their level of physical activity through motivation especially extrinsic motivation. Besides that, this study can also help in identifying the current level of physical activity among individuals which will definitely help them to be motivated in sports or physical activity participation.

From this study, it was shown that there is a relationship between extrinsic motivations with the physical activity levels. In addition, majority of the respondents do agree that extrinsic motivation really influenced their behavior in participating the sports or physical activity. In addition, based on this study, majority of the respondents can be considered as active. Most of them are in the moderate to vigorous-intensity physical activity level. With that, we can see that most of UiTM students in Faculty of Education are physically active.

Not just that, based on this study too, it was reported that there is significant difference between male and female respondents in the physical activity level as well as extrinsic motivations. It is hoped that, this study will help the administrator, lecturers, and students itself aware with the importance of physical activity as well as monitoring the level of physical activity in order to improve health and wellness. In addition, this will help in making physical activity as a one of the routine in life which will give more benefits and advantages to our health and well being specifically. Last but not least, this study also aimed to influence the Faculty of Education students' participation in physical activity or sport as well as their extrinsic motivation especially.

In addition, physical activity has the benefits of reducing stress, increasing attention to academic tasks, and better classroom behavior. Most importantly, physical activity will help individuals become intellectually, emotionally, physically and socially balanced, which is in line with the Malaysian's National Philosophy of Education.

References

- Armstrong, N. and Welsman, J. R. (1997). *Young people and physical activity*. Oxford University Press: Oxford.
- Assor, A., Roth, G. and Deci, E. L. (2004). The emotional costs of perceived parental conditional regard: A self-determination theory analysis. *Journal of Personality*, 72(1): 47-87.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. Freeman: New York.
- Bauman, A. E., Booth, M. L., Owen, N., Clavisi, O. and Leslie, E. (2000). Social- cognitive and perceived environment influences associated with physical activity in older Australians. *American Health Foundation and Academic Press*, 31(1): 1522.

- Biddle, S. J. H., Gorely, T. and Stensel, D. J. (2004). Health -enhancing physical activity and sedentary behavior in children and adolescent. *Journal of Sport Science*, 22(8): 679-701.
- Biddle, S. J. H., Cury, F., Goudas, M., Sarrazin, P., Famose, J. P. and Durand, M. (1995). Development of scales to measure perceived physical education class climate: A cross-national project. *British Journal of Educational Psychology*, 65: 341-58.
- Birtwistle, G. E. and Brodie, D. A. (1991). Children's attitude towards activity and perceptions of physical education. *Health Education Research*, 6(4): 465-78.
- Boka, F. (2010). the effect of regular physical activity on health and health behavior. Department of public health, faculty of medicine, University of Szeged. *Unpublished Journal*.
- Castelli, D. M. and Erwin, H. E. (2007). Chapter 4: A comparison of personal attributes & experiences among physically active & inactive children (monograph). *Journal of Teaching in Physical Education*, 26: 375-89.
- Caterino, M. C. and Polak, E. D. (1999). Effects of two types of activity on the performance of 2nd,3rd, and 4th grade students on a test of concentration. *Perception Motor Skills*.
- Cavill, N., Kahlmeier, S. and Racioppi, F. (2006). Physical activity and health in europe: evidence for action. World Health Organization Europe 2006.
- Cockburn, C. (2001). Year 9 girls and physical education: a survey of pupil perceptions. *Bulletin of Physical Education*, 37(1): 5-24.
- Cocke, A. (2002). Brain may also pump up from workout. retrieved april 11, 03, from society for neuroscience annual meeting. Web Site: <http://www.neurosurgery.medsch.ucla.edu/whastnew/societyforneuroscience.htm>
- Coe, D. P., Pivarnik, J. M., Womack, C. J., Reeves, M. J. and Malina, R. M. (2006). Effect of physical education and activity levels on academic achievement in children. *Medicine and Science in Sports and Exercise*, 38(8): 1515-19.
- Coleman, J. S. (1961). *The adolescent society: The social life of the teenager and its impact on education*. Free Press: New York.
- Corbin, C. B., Pangrazi, R. P. and Franks, B. D. (2000). Definitions: Health, fitness, and physical activity. *President's Council on Physical Fitness and Sports Research Digest*, 3(9): 1-8.
- Dwyer, T., Sallis, J. F., Blizzard, L., Lazarus, R. and Dean, K. (2001). Relation of academic performance to physical activity and fitness in children. *Pediatric Exercise Science*, 13: 225-38.
- Fletcher, G. F., Balady, G., Blair, S. N., Blumenthal, J., Caspersen, C., Chaitman, B., Epstein, S., Sivarajan Froelicher, E. S., Froelicher, V. F., Pina, I. L. and Pollock, M. L. (1996). Statement on exercise: Benefits and recommendation for physical activity programs for all American. *Circulation*, 94: 857-62.
- Frederick, C. M. and Ryan, R. M. (1993). Differences in motivation for sport and exercise and their relations with participation and mental health. *Journal of Sports Behavior*, 16: 124-46.
- Gerdy, J. (2000). *Sports in school: the future of an institution*. NY. Teacher's College Press: Columbia University.
- Gutin, B., Islam, S., Manos, T., Cucuzzo, N., Smith, C. and Stachura, M. E. (1994). Relation of body fat and maximal aerobic capacity to risk factors for atherosclerosis and diabetes in black and white seven-to-eleven year old children. *Journal of Pediatrics*, 125: 847-52.
- Harrison, P. A. and Narayan, G. (2003). Differences in behavior, psychological factors and environmental factors associated with participation in school sports and other activities in adolescence. *The Journal of School Health*, 73(3): 113-20.
- Ingledeu, D. K. and Markland, D. (2008). The role of motive in exercise participation. *Journal of Psychology and Health*, 23(7): 807-28.
- Ingledeu, D. K. and Markland, D. (2009). Three levels of exercise motivation. *Applied Psychology: Helath and Well-being*, 1(3): 336-55.
- International Physical Activity Questionnaire (2005). Guidelines for data processing and analysis of the International Physical Activity Questionnaire (IPAQ).
- Kilpatrick, M., Hebert, E. and Bartholomew, J. (2005). College students' motivation for physical activity: Differentiating men's and women's motives for sport participation and exercise *Journal of American College Health*, 54(2): 87-94.
- Knop (1996). European trends in youth sport: a report from 11 European countries. *European Journal of Physical Education*, 1: 36-45.
- Koca, C. and Demirhan, G. (2004). An Examination of high school students' attitudes towards physical education with regard to sex and sport participation. *Perception Motor Skills*, 98(3 Pt 1): 754-8.
- Linder, K. J. (1999). Sport participation and perceived academic performance of school children and youth. *Pediatric Exercise Science*, 11: 129-44.
- Nieman, D. (2003). Current perspective on exercise immunology. *Current Sports Medicine Reports*, 2(5): 239-42.
- Pender, N. J., Murdaugh, C. L. and Parsons, M. A. (2002). *Health promotion in nursing practice*. 4th edn: Prentice Hall: Julie Alexander.
- Raviv, S., Reches, I. and Hecht, O. (1994). Effects of activities in the motor-cognitive-learning center on academic achievements, psychomotor and emotional development of children (aged 5-7). *Journal Physical Education Sport Science (Israel)*, 2: 50-84.

- Ryan and Deci (2000). Intrinsic and extrinsic motivations: classic definitions and new direction. *Journal of Educational Psychology*, 25(1): 54-67.
- Ryan and Deci (2006). Self-Regulation and the problem of human autonomy: does psychology need choice; self-determination and will? *The Journal of Personality*, 74(6): 1557-1586
- Ryan, R. M. (1993). *Agency and organization: Intrinsic motivation, autonomy and the self in psychological development*. In J. Jacobs (Ed.), *Nebraska Symposium on Motivation: Vol. 40. Developmental perspectives on motivation*. University of Nebraska Press: Lincoln.
- Ryan, R. M., Williams, G. C., Patrick, H. and Deci, E. L. (2009). Self-determination theory and physical activity: The dynamics of motivation in development and wellness. *Hellenic Journal of Psychology*, 6: 107-24.
- Sallis, J. F., Prochaska, J. J. and Taylor, W. C. (2000). A review of correlates of physical activity of children and adolescents. *Medicine and Science in Sports and Exercise*, 32(5): 963-75.
- Schmalz, D. L., Deane, G. D., Birch, L. L. and Davidson, K. K. (2007). A longitudinal assessment of the links between physical activity and self-esteem in early adolescent non-hispanic females. *Journal of Adolescent Health*, 41(6): 559-65.
- Shepherd, R. J. (1997). Curricular physical activity play and academic performance. *Pediatric Exercise Science*, 9(2): 113-26.
- Sibley, B. A. and Etnier, J. (2003). The relationship between physical activity and cognition in children a meta-analysis. *Pediatric Exercise Science*, 15(3): 243-256.
- Sirard, J. R., Pfeiffer, K. A. and Pate, R. R. (2006). Motivational factors associated with sports program participation in middle school students. *Journal of Adolescent Health*, 38(6): 696-703.
- Stevenson, D. W., Darga, L. L., Spafford, T. R., Ahmad, N. and Lucas, C. P. (1987). Variables effects of weight loss on serum lipids and lipoproteins in obese patients. *International Journal of Obesity*, 12: 495-502.
- The Committee of the Sports Commission Hong Kong (2006). *Know your physical activity level. leisure and cultural service department*. Physical Fitness Association of Hong Kong: China.
- Thompson, W. R., Gordon, N. F. and Pescatello, L. S. (2010). ACSM's guidelines for exercise testing and prescription. American College of Sports Medicine. Edisi ke-8. Philadelphia: Lippincott Williams & Wilkins.
- Trudeau, F. and Shephard, R. J. (2008). Physical education, school physical activity, school sports and academic performance. *International Journal of Behavioral Nutrition and Physical Activity*, 5: 10.
- United States Department of Health and Human Services (USDHHS) (1996). *Physical activity and health: A report of the Surgeon General*, Atlanta, GA: U.S Department of health and human services, centers for disease control and prevention, National center for chronic disease prevention and health promotion.
- Vallerand and Rousseau (2001). *Intrinsic and extrinsic motivation in sports and exercise: A review using hierarchical model of intrinsic and extrinsic motivation*. In R. Singer, H. Hausenblas, & C. Janelle (Eds.). *Handbook of sports psychology*. 2nd edn: John Wiley: New York.
- Vallerand, R. J. (2006). *Intrinsic and extrinsic motivation in sport*. *Encyclopedia of Applied Psychology*. Elsevier Inc: 2.
- Van der Mars, H. (1999). *Physical education time and academic achievement*. In: Kirk D, O'Sullivan M, McDonald D, eds. *Handbook of Physical Education*. Sage Publications: Thousand Oaks, Calif.
- Vansteenkiste, M., Ryan, R. M. and Deci, E. L. (2008). *Self-determination theory and the explanatory role of psychological needs in human well-being*. In L. Bruni, F. Comim, & M. Pugno (Eds.), *Capabilities and happiness*. Oxford University Press: Oxford, UK.
- Youth Media Campaign Longitudinal Survey (YMCLS) (2002). The US centers for disease control and prevention; A National Media Campaign.
- Zervas (2002). The effect of users' tagging motivation on the enlargement of digital educational resources metadata. *Journal Computers in Human Behavior*, 32(March): 292-300.