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The Effect of Motive Participations towards Physical Activity Levels in Education Students

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Abstract
The level of physical activity is usually affected by many motive and factor. Individual motivation would normally be affected internally or externally based on the individual’s interest, strength, weaknesses, and backgrounds. This study was conducted to determine and investigate the motive participation that influence young adults’ participation in sport and physical activity level. The survey questionnaire based on the source of "Exercise Motivation Inventory" (EMI-2) and the "International Physical Activity Questionnaire" (IPAQ), which was later edited to meet the needs of the study. Data were collected using questionnaires and counted manually. The results were arranged and organized into the SPSS system. The study looked at the effect of motive participations towards level of physical activity among physical and health education students at faculty of education, Selangor. Knowledge gained from this study help strengthen the current ideas on the topic while helping to informed future teaching and modification (instructions, equipment, playing area) to improve teaching and learning.

Keywords: Motive, Physical Activity (Pa), Physical and Health Education, Motivation, Participation

Introduction
Presently, people realized physical activities are important in everyday life. They are more aware of the many benefits they can get from consistent physical activities. Physical activities are also always associated to illnesses and chronic diseases. Similar to dose-response relationship, if we’re doing more physical activities, the lower likelihood of us getting illnesses and diseases. Diabetes, obesity and cancer are the example of illnesses commonly related with the lack of physical activity. They also suggested physical activity can be associated with improved physical and mental health among children (Ploeg, Maximova, McGavock, and Davis 2014). This proved that, physical activity can provide the solutions towards improvement in the individual’s well-beings.

University students participate in physical activity for many reasons. They have their own motive whether intrinsic or extrinsic motive to participate in activity. Motivation represents the most important causes in sport participation. People involved in sports agreed the motivation is the main
key that will bring them to achieve their best sport performance and also provide them with positive experience in physical activity.

Physical activities have always associated with illnesses and diseases. There are several illnesses that being commonly related with the lack of physical activity which is the diseases are obesity, cancer and diabetes. Physically active children and adolescents have lower blood pressure levels, more favorable lipoprotein levels, higher bone density and decreased adiposity compared to their sedentary counterparts (Riner and Sellhorst 2012).

Physical activities have important roles to preventive and therapeutics effect such as reducing the risk to get bone fractures, improving the strength of muscle and enhanced mental and physical to get the quality life (Elena, Georgeta, Cecilia, and Elena 2011). This proved physical activity have many benefits for people who engaged with it. It can help people to increase their health, decrease the level of stress, and can encouraged happy living surrounding.

One of the main things that can make people to participate in physical activity is motivation. Everyone have their own motive. This include intrinsic and extrinsic motive. Motivation is the causes they acting or behaving in some situation. Motivation refers to reasons that underlie behavior that is characterized by willingness and volition (Lai 2011). This study suggested everyone have their own reason to do something. So, motivation could play an important role in encouraging people to participate in physical activity.

Intrinsic motivation refers to participate in an activity for their own satisfaction from the activity. Based on McCullagh (2005), intrinsic motivation can be defined as the need to feel and pride in something for individuals. Weinberg & Gould have been listed three types of intrinsic motivation, which is knowledge (the motive is to learn something), accomplishment (participate in the activity because of the pleasure and satisfaction to get mastering in various skills) and stimulation (participate to get the pleasant sensations or enjoyment) (Weinberg and Gould 2003). When you intrinsically motivated, you will enjoy the activity and also can develop various skills that can increase the excitement of the activity.

Extrinsic motivation refers to actions to get the rewards and it comes from surrounding outside of the individual. Based on Ryan and Deci (2000), extrinsic motivation can be defined as an actions of the activity to obtain some reward from others. There are four types of extrinsic motivation, which are integrated regulation, identified regulation, interjected regulation and external regulation (Weinberg and Gould 2003).

In Malaysia, in the year of 2003, there are ten principal causes of death in hospital. A circulatory system disease is the 1st rank and diseases of the respiratory system in second rank. The percentages diseases of the circulatory system are 24.38% and diseases of the respiratory system are 22.73% (Ministry of Health Virtual Library 2014). These statistics revealed by Ministry of Health were expected to give more awareness about the important of doing physical activity to avoid the diseases.

According to Kilpatrick, Hebert, and Batholomew (2005), evidence clearly shows that doing regular physical activity can help to improves physiological and psychological health. It clearly shows that physical activity is the important part of our life since it may help us to avoid many illnesses.

By participating in sport or physical activities; it can bring a positive contribution toward the person’s wellbeing. Early participation in sports is widely believed to be a mechanism for building character, promoting healthy lifestyle and social development (LeUnes and Nation 2002). Therefore, everybody is encouraged to participate in any physical activity because sport and exercise are good
for our body. In the other word, physical activity plays an important role to individual to get optimum healthy in their life.

Following the modern technology trends, many people prefer to spend their time with gadgets for many hours than to do activity that can make them energetic and healthier. By engaging with the gadgets, it can make our body feel lazy and prefer to not do any kind of work such as housekeeping. Without movements, the chances to get obesity are high. Extra weight and obesity occur when someone did not use their energy intake with doing the activity. A change in body fat depends to the imbalanced between energy intake and output (Basari, 2011).

Nowadays, sport played an important role of physical activities because everyone can apply in their live. People can choose type of sports that they want to join. It can come from leisure activity to extreme activity. There are many benefits that can individual get while doing the physical activity. Physical activity can prevent illness and can give a fun environment especially in sport team activity. This is because; they can mix or integrate with other people other than playing alone. There are three levels of physical activity, which are low, moderate and vigorous physical activity.

According to McCullagh (2005), motivation can be defined as the intensity and direction of the effort. Direction refers to what do you want to achieve, and intensity refers to the amount of the efforts the need to use. She also said that ‘enhanced our motivation can encourage learning, performance, pleasure and perseverance in sport among other benefits’ (McCullagh 2005).

Methods
The primary tool for this research was the questionnaires. Researchers use this type of instrument to collect the information and data desired for this study. We took a sample questionnaire that was approved and validated from previous studies. This questionnaire is the International Physical Activity Questionnaire (IPAQ) were used in the study in November 2005 in Canada.

The set of questionnaires were edited by researchers and make it specific to the topic of the study. The questionnaire is provided in the appendices section. Questionnaire will be distributed to the samples at the Faculty of Education particularly the Physical and Health Education students. The questions were construct in dual language and consists of three parts, which are part A, B, and C. Part A includes the demographic factors, Part B more to motive participation and Part C focus on students’ level of physical activity.

Part A contains information relating to personal details such as gender, age, status, weight and height of the respondents, office, employment, income. Part B includes 42 questions on motive participation that make respondent want to involve in physical activities. The answers of the questions were structured based on strongly disagree until strongly agree. Respondents will read the statement and answers whether *Strongly Disagree, Disagree, mixed feeling, Agree* or *Strongly Agree*.

Part C consists of seven questions. All these questions require respondents to think about the physical activities that have been carried out within seven days ago. First, with regards to the number of the days of high or heavy physical activity performed by the respondent. For example, heavy lifting, digging, aerobics, sports or cycling speed. Second, followed by the amount of time used for that purpose. Third, with regard to the number of days of moderate physical activity undertaken. For example, lifting lightweight goods, wiping the floor, cycling, car wash or play badminton in doubles. Fourth, followed by the number of hours done. Fifth, walks in the workplace or activities aimed at
recreation. Sixth, the number of hours it takes to perform activities within a day. The seventh question, the time spent by respondents relax or sit in the workplace including the time spent by reading or lying down to watch television. While questions 8 and 9, questioned about cycling and how many hours of time spent on cycling.

Part C, the questionnaire contains seven questions. Question one to seven will be analyzed based on the IPAQ Scoring Protocol through the method of calculation of the amount of Metabolic Equivalent Task (MET) -min / week: Stage MET x minutes of activity / day x days a week. MET values were determined that the current (low) is 3.3 METs; moderate activity is 4.0 METs and 8.0 METs high activity. The overall number of METs will determine hypothetical physical activity or administrative professionals whether at low, medium or high. Seventh questions will determine the amount of time off without any activity undertaken by respondents within a week.

MET values are chosen by the researchers is derived from the work carried out during the IPAQ Reliability study conducted in 2000-2013. Using Ainsworth et al. Compendium (Med Sci Sports Med 2000) obtained average MET scores for each type of activity. For example; all of the included and the average MET value for walking was invented. The same procedure was carried out to moderate intensity activity and intensity of extreme activities.

The questions were constructed using a Likert scale format to measure the strengths and weaknesses of the level of physical activity that respondents participated. All three levels will be count based on MET formula that adapted from IPAQ.

**Table 1. Calculation of MET**

| Category  | Calculation MET                                                                 | Examples                                      |
|-----------|---------------------------------------------------------------------------------|-----------------------------------------------|
| Vigorous  | (days/week) x (times/day) in minutes x (8)                                       | Competitive sports, moving large objects and hiking on step land |
|           | ( 4 x 30 x 8 ) = 960                                                           |                                               |
| Moderate  | (days/week) x (times/day) in minutes x (4)                                       | Water aerobic, mopping the floor, hiking and table tennis. |
|           | ( 2 x 60 x 4 ) = 480                                                           |                                               |
| Low       | (days/week) x (times/day) in minutes x (3.3)                                    | Strolling in parks, potted plants, hanging up and folding clothes |
|           | (1 x 60 x 3.3) = 198                                                           |                                               |
| Total MET | ( vigorous MET + Moderate MET + Low MET )                                       |                                               |
|           | ( 960 + 480 + 198 ) = 1638 ( Moderate )                                        |                                               |

This is the examples of the answers of the questions based on the daily physical activity that the students participated in their life. It consists on the data of how many days per week that students participated in those three levels of physical activity and how much time they spend to do the activity. Level of physical activity will be stated by using the physical activity norm adapted from IPAQ.
Table 2. Level of physical activity norms

| Level of Physical Activity | Norms for MET |
|----------------------------|---------------|
| Vigorous                   | >3000         |
| Moderate                   | >600 <3000    |
| Low                        | <600          |

Result & Discussion
There are several items that been included in demographic data and being studied. It includes gender, race, religion, status, age and BMI range.

Table 3. Demographic profile students

| Valid       | Frequency | Percent |
|-------------|-----------|---------|
| Gender      |           |         |
| male        | 46        | 46.0    |
| female      | 54        | 54.0    |
| N           | 100       | 100.0   |
| Age         |           |         |
| 20 years and below | 4   | 4.0    |
| 21 years to 25 years | 96  | 96.0   |
| N           | 100       | 100.0   |
| weight      |           |         |
| Below 40 KG | 4         | 4.0     |
| 41kg - 50 Kg | 24      | 24.0    |
| 51kg - 60 Kg | 31      | 31.0    |
| 61 Kg - 70 Kg | 28    | 28.0    |
| 71 KG and above | 13  | 13.0    |
| N           | 100       | 100.0   |
| Height      |           |         |
| Below 150 CM | 10       | 10.0    |
| 151 Cm - 160 Cm | 29  | 29.0    |
| 161 Cm - 170 Cm | 38  | 38.0    |
| 171 Cm And Above | 23  | 23.0    |
| N           | 100       | 100.0   |
| Marital status |       |         |
| Single      | 97        | 97.0    |
| married     | 3         | 3.0     |
| N           | 100       | 100.0   |
| Semester    |           |         |
| Semester 1  | 20        | 20.0    |
| Semester 2  | 20        | 20.0    |
| Semester 3  | 20        | 20.0    |
| Semester 4  | 20        | 20.0    |
| Semester 5  | 20        | 20.0    |
| N           | 100       | 100.0   |

Analysis 1
What is the motive participation in physical activity among students in Faculty of Education?
Table 4. Motive participation in physical activity

| COMPONENT       | APPEARANCE | SOCIAL | CHALLENGE | FITNESS | HEALTH |
|-----------------|------------|--------|-----------|---------|--------|
| Mean            | 4.34       | 4.19   | 4.01      | 4.20    | 4.45   |
| Std. deviation  | .511       | .480   | .525      | .528    | .425   |
| Minimum         | 3          | 2      | 3         | 3       | 2      |
| Maximum         | 5          | 5      | 5         | 5       | 5      |

Table 4 shows the motive participation in physical activity among physical and health education students in Faculty of Education. There are 42 items as stated before and it is divided into 5 components which are appearance, social, challenge, fitness and health. Based on the table, the health component show the highest mean with 4.45 and standard deviation of SD = .425. The table also show that challenge component have the least mean with 4.01 and standard deviation of SD = .525. Overall, the data show that motive participation among students is high and balance for all the components.

Analysis 2
What is the level of physical activity among physical and health education students?

Table 5. Level of physical activity

| Level                | Frequency | Percent |
|----------------------|-----------|---------|
| Vigorous (> 3000 METS)| 42        | 42.0    |
| Moderate (>600 METS <3000 METS) | 51        | 51.0    |
| Low (<600 METS)      | 7         | 7.0     |
| Total                | 100       | 100.0   |

From table 5, it shows the level of physical activity among the respondents. Based on the figure, it shows that majority of 51 respondents (51.0%) doing moderate physical activity level, followed by 42 respondents (42.0%) doing vigorous-intensity physical activity and 7 respondents (7.0%) doing a low physical activity. The mean for the physical activity level is 1.65 and the standard deviation is SD = .609.

Analysis 3
Is there significant different between body mass index (BMI) and level of physical activity among students?
Table 6. ANOVA test for BMI and level of physical activity

| ANOVA test | Sum of Squares | df | Mean Square | F  | Sig. |
|------------|----------------|----|-------------|----|------|
| Between Groups | 17.232 | 2 | 8.616 | .554 | .577 |
| Within Groups | 1509.649 | 97 | 15.563 | | |
| Total | 1526.881 | 99 | | | |

The ANOVA table is shown in table 6. ANOVA test was conducted to see whether the different scores of the body mass index (BMI) was statistically significant. For the BMI for all the respondents, the result shows that (F=.554, df=2.97 and sig=.577). This indicates that there was no significant difference among the BMI in their level of participation in physical activity.

Analysis 4

Is there significant different among groups of different level of physical activity in their motive

Table 7. ANOVA Test level of physical activity and motive

| ANOVA test | Sum of Squares | df | Mean Square | F  | Sig. |
|------------|----------------|----|-------------|----|------|
| APPERARANCE | Between Groups | .590 | 2 | .295 | 1.132 | .327 |
| Within Groups | 25.263 | 97 | .260 | | |
| Total | 25.853 | 99 | | | |
| Between Groups | .389 | 2 | .195 | .843 | .434 |
| SOCIAL | Within Groups | 22.408 | 97 | .231 | | |
| Total | 22.797 | 99 | | | |
| Between Groups | 1.107 | 2 | .553 | 2.048 | .134 |
| CHALLENGE | Within Groups | 26.200 | 97 | .270 | | |
| Total | 27.307 | 99 | | | |
| Between Groups | 1.080 | 2 | .540 | 1.975 | .144 |
| FITNESS | Within Groups | 26.528 | 97 | .273 | | |
| Total | 27.608 | 99 | | | |
| Between Groups | .461 | 2 | .230 | 1.282 | .282 |
| HEALTH | Within Groups | 17.428 | 97 | .180 | | |
| Total | 17.889 | 99 | | | |

The ANOVA table is shown in table 7. ANOVA test was conducted to see whether the different scores of the five groups were statistically significant. For the appearance motive, the result shows that (F=1.132, df=2.97, and sig=.327). For social motive, the result show that (F=.843, df=2.97, and sig=.434). For challenge motive, the result show that (F=2.048, df=2.97, sig=.134). Then, for fitness motive, the result show that (F=1.975, df=2.97, sig=.144). For health motive, the result show
that (F=1.282, df=2.97, sig=.282). This indicates that there was no significant difference among the three groups in their five motive participation in physical activity.

**Conclusion & Suggestion**

**Motive Participation in Physical Activity**

Based on the data analysed, it shows that majority of the students agree that motive to involve in sports or physical activity plays an important part to increase students’ interest to physical activity. Based on the table 4, it totally shows the motive participation in physical activity among physical and health education students in Faculty of Education. There are 42 items as stated before and it is divided into 5 components which are appearance, social, challenge, fitness and health. Based on the results, the health component shows the highest mean with 4.45 and standard deviation of SD = .425. The table also show that challenge component has the least mean with 4.01 and standard deviation of SD = .525. Overall, the data show that motive participation among students is high and balance for all the components. Previous study also states that, by doing the physical activity actively it can increase the cardiovascular functional capacity and can helped person to reduce the risks of cardiovascular diseases (Fletcher et al. 1992).

**Level of Physical Activity**

Based on the results, it shows that majority of the students perform vigorous-intensity physical activity, followed by moderate-intensity physical activity and least performs low-intensity physical activity. From table 5, it shows the level of physical activity among the respondents. Figure shows that majority of 51 respondents (51.0%) doing moderate physical activity level, followed by 42 respondents (42.0%) doing vigorous-intensity physical activity and 7 respondents (7.0%) doing a low physical activity. The mean for the physical activity level is 1.65 and the standard deviation is SD = .609. These results have been agreed by previous researchers that stated, by doing regular physical activity, it can help people to increase their level of physical activity and also can help them to increasing their self-esteem, increase their performance in study or job and can help them to cope with stress (Mehmet, Cengizhan, and Mehmet 2015).

**Significant Relationship between Motive Participation and Level of Physical Activity**

This point is the main objective of this research. Based on table 7, ANOVA test was conducted to see whether the different scores of the five groups was statistically significant. For the appearance motive, the result shows that (F=1.132, df= 2.97, and sig=.327). For social motive, the result show that (F=.843, df=2.97, and sig=.434). For challenge motive, the result show that (F=2.048, df=2.97, sig=.134). Then, for fitness motive, the result show that (F=1.975, df=2.97, sig=.144). For health motive, the result show that (F=1.282, df=2.97, sig=.282). This indicates that there was no significant difference among the three groups in their five motive participation in physical activity. Individual personality demand can influence individuals’ participation motive to engaging in health-related behaviour’s and personality can usually be associated with health-related behaviour’s, although the results are not always consistent (Vollrath and Torgersen 2002).

As a conclusion, this study is made in order to determine the significant relationship between motive participation and physical activity level among physical and health education students in Faculty of Education. Based on the study, it shows that there are no significant relationship between motive participation and physical activity level among students for each
semester. Besides that, this study also proves that most of the respondents which are the physical and health education students agree that individual motive can influence their level of physical activity.

This study also helped various stakeholders such as school, teachers, parents and students themselves to know their own physical activity levels and how to increase the level based on the motive participation that they have been answered in a set of questionnaires. It might help them to determine which component is the best to encourage them to become more active, either appearance, social, challenge, health or fitness.

References
Arzu, D., Tuzun, E. H., & Eker, L. (2006). Perceived barriers to physical activity in university students. Journal of Sports Science & Medicine, 5(4), 615-620. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3861763/

Azlan, A. K. (2014). Motif dan Tahap Aktiviti Fizikal Dikalangan Kakitangan Universiti Teknologi Mara (UiTM). Fakulti Pendidikan. Universiti Kebangsaan Malaysia (UKM).

Ball, K., Crawford, D., & Owen, N. (2000). Obesity as a barrier to physical activity. Australian and New Zealand Journal of Public Health, 24(3), 331-333. doi:10.1111/j.1467-842X.2000.tb01579.x

Bersukan untuk kecergasan. (2015). Sinar Harian. Retrieved from http://www.sinarharian.com.my/rencana/bersukan-untuk-kecergasan-1.382310

Bush, L. M. (2010). Perceived barriers to physical activity among rural youth: ANTI OCH UNIVERSITY NEW ENGLAND.

Casper, J. M., Bocarro, J. N., Kanters, M. A., & Floyd, M. E. (2011). "Just Let Me Play!"—Understanding constraints that limit adolescent sport participation. Journal of Physical Activity and Health, 8(1), S32.

Chaput, J.-P., Klingenberg, L., Rosenkilde, M., Gilbert, J.-A., Tremblay, A., & Sjödin, A. (2011). Physical activity plays an important role in body weight regulation. Journal of Obesity 11. doi:10.1155/2011/360257

Huey, C. T., Ying, Y. C., Hock, K. L., Cheong, C. K., Kuay, K. L., Sien, P. Y., . . . Nazni, W. A. (2015). Association of physical activity with blood pressure and blood glucose among Malaysian adults: a population-based study. BMC Public Health, 15, 1-7. doi:10.1186/s12889-015-2528-1

Chu, A. H. Y., & Moy, F. M. (2015). Reliability and validity of the Malay International Physical Activity Questionnaire (IPAQ-M) among a Malay population in Malaysia. Asia-Pacific Journal of Public health, 27(2), NP2381-NP2389.

Cordes, K. A., & Ibrahim, H. M. (1999). Applications in recreation and leisure: for today and the future. Maidenhead: McGraw-Hill Book Company Europe.

Division of Nutrition Physical Activity and Obesity Glossary of Terms. (2015). Retrieved from http://www.cdc.gov/physicalactivity/basics/glossary/

Dokumen Rancangan Malaysia Ke-11 (RMK11) 2016-2020. (2015). Unit Perancangan Ekonomi Retrieved from http://rmk11.epu.gov.my/index.php/bm/dokumen-rmke-11.

Economy 2013/2014. (2014). Ministry of Finance Malaysia.

EUFIC. (2006). Physical Activity. Retrieved from http://www.eufic.org/article/en/expid/basics-physical-activity/
Fagaras, S. P., Radu, L. E., & Vanvu, G. (2015). The level of physical activity of university students. Procedia - Social and Behavioral Sciences, 197, 1454-1457. doi:http://dx.doi.org/10.1016/j.sbspro.2015.07.094

Field, A. (2005). Discovering statistics using SPSS (2nd ed.). Publisher location: Sage.

Fishbein, M., & Azjen, I. (1975). The theory of reasoned action.

Fit Malaysia. (2015). Retrieved from https://www.fit.my/

Fuchs, R. (2015). Physical activity and health. In J. D. Wright (Ed.), International Encyclopedia of the Social & Behavioral Sciences (Second Edition) (pp. 87-90). Oxford: Elsevier.

Gobbi, S., Sebastiao, E., Papini, C. B., Nakamura, P. M., Netto, V. A., Gobbi, L. T. B., & Kokubun, E. (2012). Physical inactivity and related barriers: a study in a community dwelling of older brazilians. Journal of aging research, 2012.

Halforty, G. A. (2012). Constraints to students' participation in sport on a formalised level: implications for marketers. (Magister Technologiae), Nelson Mandela Metropolitan University.

Hallal, P. C., Andersen, L. B., Bull, F. C., Guthold, R., Haskell, W., Ekelund, U., & Group, L. P. A. S. W. (2012). Global physical activity levels: surveillance progress, pitfalls, and prospects. The Lancet 380, 247-257.

Hills, A. P., Andersen, L. B., & Byrne, N. M. (2011). Physical activity and obesity in children. British Journal of Sports Medicine, 45(11), 866-870.

Hoos, M. B., Gerver, W. J. M., Kester, A. D., & Westerterp, K. R. (2003). Physical activity levels in children and adolescents. Int J Obes Relat Metab Disord, 27(5), 605-609. Retrieved from http://dx.doi.org/10.1038/sj.ijo.0802246

Insel, P. M., & Roth, T. R. (2012). Wellness Worksheets: McGrawHill.

International Physical Activity Questionnaire (IPAQ). Retrieved from https://sites.google.com/site/theipaq/

Irwin, J. D. (2004). Prevalence of university students' sufficient physical activity: A systematic review. Perceptual and Motor Skills, 98(3), 927-943. doi:10.2466/pms.98.3.927-943

Janssen, I., & LeBlanc, A. G. (2010). Systematic review of the health benefits of physical activity and fitness in school-aged children and youth. The International Journal of Behavioral Nutrition and Physical Activity, 7, 40-40. doi:10.1186/1479-5868-7-40

Kavosi, A., Saadati, M., Movahedi, A., Farahnia, M., Mohammadi, G., Aghababayan, A., . . . Assari, S. (2015). Physical activity enhances self-esteem of male college students; a randomized controlled trial. 2015, 3(2). doi:49-52

Kim, J. H., & McKenzie, L. A. (2014). The Impacts of physical exercise on stress coping and well-being in university students in the context of leisure. Health, 6(19), 2570.

Konting, M. M. (1993). Kaedah penyelidikan pendidikan: Dewan Bahasa dan Pustaka.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. Educ Psychol Meas.

Kubayi, N., & Surujlal, J. (2014). Perceived benefits of and barriers to exercise participation among secondary school students. Mediterranean Journal of Social Sciences, 5(20), 121.

Law, L. S., Mohd Taib, M. N., & Abu Saad, H. (2014). Factors sssociated with physical activity level among adolescents in Sarawak, Malaysia. 2014, 2(1). Retrieved from http://www.jpaspex.com/index.php/JPASE/article/view/41
Lippo, B. R. d. S., Silva, I. M. d., Aca, C. R. P., Lira, P. I. C. d., Silva, G. A. P. d., & Motta, M. E. F. A. (2010). Fatores determinantes de inatividade física em adolescentes de área urbana. Jornal de Pediatria, 86, 520-524. Retrieved from http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0021-75572010000600013&nrm=iso

Lopez, M. G., Gallegos, A. G., & Extremera, A. B. (2010). Perceived barriers by university students in the practice of physical activities. Journal of Sports Science and Medicine, 9, 374 - 381. Retrieved from http://www.jssm.org/vol9/n3/3/v9n3-text.php

Mchunu, S., & Roux, L. K. (2010). Non-participation in sport by black learners with special reference to gender, grades, family income and home environment. South African Journal for Research in Sport, Physical Education & Recreation (SAJR SPER), 32(1). Retrieved from http://www.aol.info/index.php/sajrs/article/view/54102

Media sosial : Malaysia antara pasaran paling aktif. (2014, 23 September 2014). Sinar Harian. Retrieved from http://www.sinarharian.com.my/nasional/media-sosial-malaysia-antara-pasaran-paling-aktif-1.319387

Models and theories of health behaviour (4): The Theory of Reasoned Action Retrieved from http://amactraining.co.uk/resources/handy-information/free-learning-material/models-and-theories-of-health-behaviour-change-index/models-and-theories-of-health-behaviour-4/

Moore, S. C., Patel, A. V., Matthews, C. E., Berrington de Gonzalez, A., Park, Y., Katki, H. A., . . . Lee, I. M. (2012). Leisure Time Physical Activity of Moderate to Vigorous Intensity and Mortality: A Large Pooled Cohort Analysis. PLoS Med, 9(11), e1001335. doi:10.1371/journal.pmed.1001335

Motallebi, M. S. L., & Noorbakhsh, M. (2010). Study the effect of participation in physical activity on mental health. British Journal of Sports Medicine, 44(Suppl 1), i60. doi:10.1136/bjsm.2010.078725.202

Munford, S. N. (2011). Gender Differences in Barriers to Physical Activity among College Students Reporting Varying Levels of Regular Physical Activity: ERIC.

Nabetani, T., & Tokunaga, M. (2001). The effect of short-term (10- and 15-min) running at self-selected intensity on mood alteration. Journal of Physiological Anthropology and Applied Human Science, 20(4), 233-239. doi:10.2114/jpa.20.233

Nam, J.-W., Cho, M. H., & Goo, K. B. (2009). The perceived constraints, motivation, and physical activity level of South Korean youth. South African Journal for Research in Sport, Physical Education & Recreation (SAJR SPER), 31(1), 37-48.

Norhaslinda, Z. A., Zura, N. Z., & Jafri, H. Z. (2014). The role of physical activity to control obesity problem in Malaysia. AIP Conference Proceedings, 1605, 1140-1146. doi:10.1063/1.4887751

Oja, P., Bull, F. C., Fogelholm, M., & Martin, B. W. (2010). Physical activity recommendations for health: what should Europe do? BMC Public Health, 10, 10-10. doi:10.1186/1471-2458-10-10

Organization, W. H. Global Strategy on Diet, Physical Activity and Health Retrieved from http://www.who.int/dietphysicalactivity/pa/en/

Pallant, J. F. (2007). SPSS survival manual : a step by step guide to data analysis using SPSS for Windows (3rd edition ed.). Crows Nest, N.S.W: Allen & Unwin.
Park, S. H. (2004). Constraints to recreational sport participation for adolescents exposed to internet-related delinquency: developing marketing strategies for increasing sport participation. International Journal of Applied Sports Sciences : IJASS, 16(1), 41-54.

Parry, D. C., & Shaw, S. M. (1999). The role of leisure in women’s experiences of menopause and mid-life. Leisure Sciences, 21(3), 205-218. doi:10.1080/014904099273101

Rajappan, R., Selvaganapathy, K., & Liew, L. (2015). Physical activity level among university students: A cross sectional survey. International Journal of Physiotherapy and Research, 3. doi:http://dx.doi.org/10.16965/ijpr.2015.202

Raustorp, A., Pangrazi, R. P., & Ståhle, A. (2004). Physical activity level and body mass index among schoolchildren in south-eastern Sweden. Acta Pædiatrica, 93(3), 400-404. doi:10.1111/j.1651-2227.2004.tb02969.x

Reichert, F. F., Barros, A. J., Domingues, M. R., & Hallal, P. C. (2007). The role of perceived personal barriers to engagement in leisure-time physical activity. American journal of public health, 97(3), 515.

Reiner, M., Niermann, C., Jekauc, D., & Woll, A. (2013). Long-term health benefits of physical activity – a systematic review of longitudinal studies. BMC Public Health, 13(1), 1-9. doi:10.1186/1471-2458-13-813

Salmon, P. (2001). Effects of physical exercise on anxiety, depression, and sensitivity to stress: A unifying theory. Clinical Psychology Review, 21(1), 33-61. doi:http://dx.doi.org/10.1016/S0272-7358(99)00032-X

Singh, P., Ghan, A. P., & Hoon, T. S. (2009). Quantitative data analysis for novice researchers: Primera Publishing.

Smith, K. L., Carr, K., Wiseman, A., Calhoun, K., McNevin, N. H., & Weir, P. L. (2012). Barriers are not the limiting factor to participation in physical activity in Canadian seniors. Journal of aging research, 2012.

Spinney, J., & Millward, H. (2010). Time and money: A new look at poverty and the barriers to physical activity in Canada. Social Indicators Research, 99(2), 341-356. Retrieved from http://www.jstor.org/stable/40927596

Stanton, R., Happell, B., & Reaburn, P. The mental health benefits of regular physical activity, and its role in preventing future depressive illness. Statistik Pelajar Fakulti Muzik. (2015). Retrieved from Universiti Teknologi Mara Seksyen 17: Statistik Pelajar Fakulti Pendidikan. (2015). Retrieved from Universiti Teknologi Mara Seksyen 17: Statistik Pelajar Intec. (2015). Retrieved from INTEC Educational College:

Strong, W. B., Malina, R. M., Blimkie, C. J. R., Daniels, S. R., Dishman, R. K., Gutin, B., . . . Trudeau, F. 2005 Evidence based physical activity for school-age youth. The Journal of Pediatrics, 146(6), 732-737. doi:10.1016/j.jpeds.2005.01.055

Sukan babitkan pelajar IPT perlu dipandang serius. (2014). Berita Harian. Retrieved from https://www.bharian.com.my/node/24672

Tan, A. K. G., Wang, Y., Yen, S. T., & Feisul, M. I. (2015). Physical activity and body weight among adults in Malaysia. Applied Economic Perspectives and Policy. doi:10.1093/aep/ppv020

Tartibian, B., Yaghoobnezhad, F., & Abdollahzadeh, N. (2014). Effects of physical activity and sleep quality in prevention of asthma. J. Phys. Pharm. Adv., 4(5), 356-359. Retrieved from http://www.scopemed.org/?mno=157996
Tatar, F. M. (2009). Perceived barriers to physical activity among IIUM Students: Self-efficacy as mediator. (Master of Human Sciences), International Islamic University Malaysia.

Warburton, D. E. R., Nicol, C. W., & Bredin, S. S. D. (2006). Health benefits of physical activity: the evidence. Canadian Medical Association Journal, 174(6), 801-809. doi:10.1503/cmaj.051351

Williamson, D., Madans, J., Anda, R., Kleinman, J., Kahn, H., & Byers, T. (1993). Recreational physical activity and ten-year weight change in a US national cohort. International Journal of Obesity and Related Metabolic Disorders: Journal of the International Association for the Study of Obesity, 17(5), 279-286.

World Life Expectancy (2015). Retrieved from http://www.worldlifeexpectancy.com/