WEEKLY LEISURE TIME EXERCISE FOR COLLEGE STUDENTS' LEVEL OF MOTIVATION IN PHYSICAL ACTIVITY: A CONCERN FOR PHYSICAL AND PUBLIC HEALTH EDUCATION

INTRODUCTION

Physical activity can be expressed as a human kinetics or movement(s) produced or trajected by the musculoskeletal systems, which when undertaken regularly for a prolonged period of time (PPT) from moderate to vigorous physical activities (MVPA) devoid of injuries to the tissues of the muscles, ligaments, tendons, joints and bones, improves physiological and psychological health and wellness, Bebeley et al. (2017), and it is of significance to the holistic wellness and wellbeing of an individual, Bebeley et al. (2017), which can be more positive, productive, effective, efficient, fruitful and functional if due attention and significant recognition is given to the teaching and learning of health and physical literacy/education activities, Bebeley et al. (2016); Bebeley et al. (2016) and colleges to improve it literacy level, and by implication also includes physical activity, Bebeley et al. (2017). Physical activity can also be expressed as that aspect of public health education with determinant factors (i.e. personal, social and environmental) that deals with human kinetics of the musculoskeletal systems, which requires both energy or calorie intake and expenditure for improved and sustainable physiological and psychosocial fitness, wellness and healthy lifestyle, Bebeley et al. (2017).

The basic aerobic endurance training that will be somehow sufficient for children, adolescents and adults for effective approach in the improvement of maximum volume of oxygen for sustainable physical activity referencing the advantages and self-efficacy, is by applying the endurance high intensity interval training, Bebeley (2015), which can be implemented in schools and colleges during physical education and literacy lessons, thereby leading to the exposure of pupils as well as students to weight designed physical education programmes i.e. physical literacy, health and physical education literacy, Bebeley et al. (2016) and nutrition education, by helping them improve their motor fitness level components that include speed, agility, reaction time and power, Bebeley (2015), with regards sustainable future participation in physical activity with special focus on the advantages (pros.), motive, behavioural regulation and self-efficacy during adulthood and old age, Bebeley et al. (2017).

And that by adopting and allotting enough time to the teaching and learning of physical literacy/education activities, Laggo et al. (2017); Bebeley et al. (2016); Bebeley et al. (2011), during and outside school or college hours, will help greatly with sustainable future participation in physical activity, Bebeley et al. (2017). With regards attention, it is but vitally important that adequate attention to the teaching and learning of physical education activities, Bebeley et al. (2017), conducting seminars, training workshops and holding focus group discussions amongst pupils and students in the areas of physical fitness, activity and exercise, health education, Bebeley (2016), knowledge about the none-use of drugs and wellness literacy with respect to ageing, Bebeley et al. (2016), for sustainable involvement and motivation in physical activity in schools and colleges, is of outmost importance for effective development and physical activity for adolescents as well as adults, Bebeley et al. (2017).

Physical activity being a sub category of physical education (i.e. an education of the physical and through the physical approach), is an educational programme that teaches pupils and students, the physique of human kinetics/movements, produced by the musculoskeletal systems, when undertaken regularly from moderate to vigorous physical activity (MVPA) improves not only the physiological, but also the psychosocial health, Bebeley et al. (2017). Autonomy in self-determination to engage in physical activity rather than rewards and threats, will help improve greatly the motivational level of school pupils and college students in physical activity with respect to sustainable future participation growth in line with the advantages (pros.), motive, behaviour regulation and self-efficacy regarding physical activity, Bebeley et al. (2017). Therefore, a mandatory institution of a programme or course in physical literacy or education for all college students before graduation will help improve and guarantee motivational level in physical activity, which is the most prominent factor that stimulate and maintain individuals’ participation in physical activity, Bebeley et al. (2017).

And by determining the individuals’ motivation for physical activity, health professionals and clinicians like physical and public health
educators, can use this knowledge to create awareness and develop effective and efficient intervention to motivate the general public to frequently and constantly engage in physical activity, Bebeley et al. (2017), practice the abstinence knowledge from eating disorders, Bebeley et al. (2017), practice the knowledge about non-usage of drugs, Bebeley et al. (2016), practice the knowledge about abstinence from diseases associated with unsafe sexual practices, Bebeley et al. (2016), focus on knowledge about knowing and monitoring of vital signs, Bebeley et al. (2017), and have knowledge about preventing sport injuries, Bebeley et al. (2016), thereby not only increasing the advantages (pros.), motive, behavioural regulation and self-efficacy of physical activity, but also help individuals, communities and the environment as a whole to reduce lifestyle-related illnesses, mortality and morbidity, Bebeley et al. (2017).

Finally, motivation can be expressed as the internal process or approach (intrinsic motivation) and as an external process or approach (extrinsic motivation) that possesses both the factors of nature i.e. inborn tendencies (tendencies acquired by an individual before birth - innate abilities) and nurture i.e. environmental tendencies (tendencies acquired by an individual after birth in an environment), Bebeley et al. (2017), that has the ability and potential to initiate, ignites, guides, maintains goal-oriented physical activity and explain behaviours that involves the holistic forces i.e. emotional force, social force and cognitive force that activate the behavioural direction of an individual desires, needs and actions, which in includes the psychomotor learning (i.e. the physique such as physical activity), affective learning (i.e. the moral such as abstinence) and cognitive learning (i.e. the intelligence quotient such as knowledge), Bebeley et al. (2017).

This study only aimed at scoring the measured and evaluated factors under weekly leisure time exercise for college students’ level of motivation in physical activity: a concern for physical and public health education in maintaining healthy lifestyle, wellness, fitness and reducing cardiovascular related diseases, mortality and morbidity amongst university students, case at Njala University and Eastern Polytechnic in Sierra Leone.

METHODOLOGY

Respondents

The survey was carried out on sampled participants of five hundred (N=500), with a mean and standard deviation (M±SD) age of 28.5±9.5 with 100% response rate, ranged from nineteen to thirty-eight (19-38) years, selected mainly from undergraduate students of the two tertiary institutions, through a process or a mechanism called simple random sampling (SRS) method or technique.

Instrumentation

The Weekly Leisure Time Exercise Questionnaire (WLTEQ) was the research instrument adopted for the survey, which has been used in research to assess time spent on physical activity and physical activity level, Godin et al. (1985), with a 2-week test-retest reliability of 0.74, Cardinal et al. (2002) also reported modest reliability coefficients at pre-and-post-tests with Cronbach’s alpha coefficient scores of 0.47 and 0.44 respectively.

Procedure

The sampled participants were each interviewed on their respective college campuses using the face-to-face on-the-spot approach, in principle with the instructions provided for by the survey instrument, using tablets, computers and smart phones installed with census survey entry (CSEntry) and census survey processing (CSPro.) application software.

Analysis

Descriptive Statistics and Frequency, Mann-Whitney U Test and Independent Samples Test from IBM SPSSv.23 Statistics were used to compute, analyze and compare the findings of the survey using a significant value of $P \leq 0.05$.

RESULTS

All sub-scales measured, evaluated and scored under weekly leisure time exercise with respect to frequency and percentage of physical activity outside college scored highest [n=206 (41.2%)] in the response rate of the respondents for the option “two (2-3 times a week)”. Again, with time spent on physical activity, for physically active for a total of at least 60 minutes per day past 7 days scored highest [n=124 (24.8%)] frequency and percentage in the response rate of the respondents for the option “(two days a week)”. And duration of physical exercise per hour outside college scored highest [n=200 (40.0%)] frequency and percentage in the response rate of the respondents for the option “(approximately an hour)”, as slated in table 1.

In all sub-scales measured, evaluated and scored under physical activity status, physical activity level at present scored highest [n=250 (50.0%)] frequency and percentage in the response rate of the respondents for the option “(average)”. Again, have enough PA at present scored highest [n=406 (81.2%)] frequency and percentage in the response rate of the respondents for the option “(not enough PA)”. And finally, with reasons for not enough physical activity scored highest [n=298 (59.6%)] frequency and percentage in the response rate of the respondents for the option “(study pressure, no time)”, as slated in table 2.
tailed sig. (0.211) and Study Pressure, No Time [t = 0.808 with 2-tailed sig. (0.419)], compared to Eastern Polytechnic respondents. Also, female respondents scored higher mean rank with respect to PA 2-3 Times A Week [t = 2.918 with 2-tailed sig. (0.004)], PA/HR. Approximately 1Hr. [t = -0.808 with 2-tailed sig. (0.419)], PA/HR. Approximately 1Hr. [t = -0.808 with 2-tailed sig. (0.419)], PA Average [t = 2.522 with 2-tailed sig. (0.011)] and Study Pressure, No Time [t = 1.825 with 2-tailed sig. (0.069)]. Also, scores recorded by sex in the final analysis showed no significant values with respect to PA 2-3 Times A Week [t = -1.215 with 2-tailed sig. (0.225)], PA 2 Days A Week [t = -1.215 with 2-tailed sig. (0.225)], PA/HR. Approximately 1Hr. [t = -1.064 with 2-tailed sig. (0.288)], PA Average [t = -1.522 with 2-tailed sig. (0.129)] and Study Pressure No Time [t = -1.522 with 2-tailed sig. (0.129)] as stated in tables 3, 4, 5 and 6.

In a comparative mean rank for weekly leisure time exercise by institution and sex, the greater majority of respondents mostly from Njala University (NU) and Eastern Polytechnic (EP) found under sex recorded more positively with satisfactory values to all factors measured under time spent on physical activity and physical activity status. However, in the final analysis, the sex compared to the institution (combined), recorded the greater majority of unsatisfactory values, which is a clear demonstration that the respondents were at greater risks of the potential health risk factors associated with physical inactivity at the time of the evaluation process, which according to reports from Gremeraus, V. et al. (2012), physical exercise is important for maintaining physical fitness and can contribute to maintaining a healthy weight, regulating digestive health, building and maintaining healthy bone density, muscle strength, and joint mobility, promoting psychological well-being, reducing surgical risks, and strengthening the immune system. Gremeraus, V. et al. (2012) continue in their report that, exercise may increase life expectancy and the overall quality of life.

In connection with the greater majority of negative or unsatisfactory values reported for time spent on physical activity and physical activity status in the final analysis, it raises a great concern within the physical and public health education sector whether colleges have a structured programmes designed to encourage students’ participation in physical activity for the state of their holistic wellbeing (cognitive, psychomotor and affective) and on outside campus, which as reported by DeLong, L. L. (2006) has key aspects needed to refer the college population to test the effectiveness of programs designed to promote physical activity.

### DISCUSSION

All sub-scales measured and scored under weekly leisure time exercise (WLTE) i.e. (time spent on physical activity and physical activity status for both Njala University (NU) and Eastern Polytechnic (EP)), more students responded to the following: “(two to three times a week)” for frequency of physical activity or exercise outside college; “(two days a week)” for physically active for a total of at least 60 minutes per day past 7 days; “(approximately an hour)” for duration of physical activity or exercise per hour outside college; “(average)” estimated for physical activity level; “(not enough PA)” for have enough physical activity at present; and “(pressure study no time)” for reason(s) for not enough physical activity.

In a comparative mean rank for weekly leisure time exercise by institution and sex, the greater majority of respondents mostly from Njala University (NU) and Eastern Polytechnic (EP) found under sex recorded more positively with satisfactory values to all factors measured under time spent on physical activity and physical activity status. However, in the final analysis, the sex compared to the institution (combined), recorded the greater majority of unsatisfactory values, which is a clear demonstration that the respondents were at greater risks of the potential health risk factors associated with physical inactivity at the time of the evaluation process, which according to reports from Gremeraus, V. et al. (2012), physical exercise is important for maintaining physical fitness and can contribute to maintaining a healthy weight, regulating digestive health, building and maintaining healthy bone density, muscle strength, and joint mobility, promoting psychological well-being, reducing surgical risks, and strengthening the immune system. Gremeraus, V. et al. (2012) continue in their report that, exercise may increase life expectancy and the overall quality of life.

### CONCLUSION AND RECOMMENDATION

It was concluded that there were significant differences recorded between institution (Njala University and Eastern Polytechnic) and sex (male and female) with weekly leisure time exercise when compared. The greater majority of respondents with respect to time spent on physical activity recorded high value for “physical activity 2-3 times a week”, with a “frequency of 2 days a week”, and for an “approximate duration of about an hour”. With respect to physical activity status, the greater majority of respondents recorded high value for “physical activity level on the average”, with “not enough physical activity at present” and reason being “study pressure no time”. In the final analysis when combined, the greater majority of respondents under sex and institution, recorded insignificant test values with respect to both time spent on physical activity and physical activity status.

It was recommended that, a mandatory course or programme in health and physical education or literacy be instituted in schools and colleges to help educate all pupils and students especially in the junior high schools, senior high schools and public health education sector whether colleges have a structured programmes designed to encourage students’ participation in physical activity for the state of their holistic wellbeing (cognitive, psychomotor and affective) and on outside campus, which as reported by DeLong, L. L. (2006) has key aspects needed to refer the college population to test the effectiveness of programs designed to promote physical activity.

### REFERENCES

Programme on Motor Fitness of Primary School Pupils in Sierra Leone; Journal of Nigeria Association for Physical, Health Education, Recreation, Sport and Dance: 2(1) 100-106.


