
**USING PHYSICAL EXERCISE FOR MANAGING
DEPRESSION AND MENTAL HEALTH PROBLEMS
AMONG FEMALE STUDENTS IN TERTIARY
INSTITUTIONS IN NIGER STATE**

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Abstract

This study was meant to examine the perception of female students in selected tertiary institutions on the use of physical exercise for managing depression and mental health problems among females. This study used students in the state Polytechnic, Zungeru and Federal Polytechnic, Bida. Data from stratified random sampling of seventy two (72) married and seventy two (72) unmarried female students as respondents from the population of 4,684 was used with instrument tagged "Using Physical Exercise for Managing Depression and Mental Health Problems" (UPEDMDMHP). This was validated by two experts from the Department of Human Kinetics and Physical Education, Ibrahim Badamasi Babangida University, Lapai in Niger state (Nigeria). Test and re-test method was used to obtain reliability of 0.83, which was found suitable for the study. Two research questions and two hypotheses were formulated and t-test statistical method was used for the result, by adopting likert-type of Strongly Agree, Agree, Disagree and Strongly disagree. The results proved that physical exercise is capable of not only managing depression but can also be used a device for the reduction of diseases, illnesses and maintenance of effective cardiovascular functions that could inject general mental health. Conclusion and recommendations were proffered by advocating regular physical exercise on daily

basis, proposing time-table for exercise, adopting food value consumption and regular medical checkup as measures towards effective management of depression and maintenance of mental health of students.

Key words: Physical Exercise, Depression, Mental Health Problems, Female, Managing Depression.

Introduction

Physical education is the education through physical exercise or physical activities for the development of individual personality physically, morally, mentally, intellectually, spiritually, and socially. Physical fitness and sound mental health constitute the bedrock of any form of soundness or effectiveness, in the body be it intellectual, social or psychological. It was perhaps the concept of achieving a sound mind in a sound body (men sana in corpore sano) through physical activities, that inspired the thinking or philosophy of great educators like Rousseau, Johann, Basedow, Johann Guts Muths, Pestalozzi, to mention a few. (Abone, 2005; Emmanuel, 2009; Kuper; 2009 and Peterson, 2013).

Physiological responses to stress and depression has been one of the etiological factors of hypertension. Hyper-responsivity to laboratory stressors has been associated with coronary heart diseases. There is little reason, therefore, to doubt that the transient hypertension and or transient tachycardia is an expression of the phenomenon of circulatory

hyperactivity under stress or depression, a reduced risk of coronary heart disease and reduction in mortality. Physical exercise can help faster a general base of motor abilities including body coordination, strengthen fitness and also help young people understand age and appropriate concepts about how their body systems work (Women's Sports Foundation, 2000). If motor abilities are not achieved, individuals are less likely to experience cardio-respiratory fitness, master sport skills, participate in organized physical activity, and adopt healthy leisure activities (Welk, Eisenmann& Dolman, 2006).

United States Secretary of Health & Human Services (2000) research found that regular participation in physical exercise helps to build and maintain healthy bones, joint, helps control body weight, lean body muscle, reduce body fats, prevents or delays the development of high blood pressure in people with hypertension, lower risk of cardiovascular disease and reduce feelings of anxiety and depression. The aforementioned directly impact on mental health of individuals. Depression is an emotional state, the hallmarks of which are the feelings of helplessness and hopelessness. It is common for everyone to experience temporary mood swing and normal depressions which is transient and very reactive to situational stressors (Dashe, 2000). The mildest form of depression, usually known as the “blues”, consists of low mood that lasts for less than two weeks. This kind of feeling of depression can be relieved

temporarily by taking part in activities that helps one feel better. When one has the blues, he or she can cope by talking to a friend, going to a good movies or exercising. However, when this sadness continues to hang on, one may have developed a more serious depressive disorder. According to Dashe (2000), there are several categories of disorder which includes : major depression (loss of interest in almost everything including appetite and being dejected); dysthymia (this lasts- up to one month that may give rise to major depressive moods); bipolar mark depression (women who have this suffer from distorted perception and often make poor decisions and behave inappropriately); seasonal effect disorder also called “common cold of mental illness” (this also affects the mental ability as the affected individual thinks contrary as against the normal thinking pathway) resulting in clinical depression which may require the attention of a medical personnel.

Most people complain that female athletes experience menstrual irregularities during endurance training. The result of the studies by Venkatet'al (1982) and Kaidal, Abass and Mashelia (2000) indicate that the pituitary hormones and ovaries of oligomenorrhic athletes responded normally to gonadotrophic stimulation thereby, indicating that such female athletes have the same potential for reproduction as their non-athletic counterparts. Thus, physical exercise does more good than harm in respect of female participation in it. Hence, the purpose of this study.

Statement of the Problem

Writers such as (Udoh&Ajala(2005), Abdullahi& Bello (2008) and Peterson (2013) identified various issues that causes worry to students in tertiary institutions to include interpersonal relationship among friends, academic activities, lectures, assignments, tests and examinations. Bello &Abdullahi (2010) also mentioned that in tertiary institutions, students are faced with problem of courtship, marriage, family, school clubs and societies. They added that some students are unable to relate well with others and therefore cannot keep close relationship. Abdullahi& Bello (2008) further stated that issues bothering students in tertiary institutions are psychological in nature and relate to self-concept, emotional state, identity and decision making, as well as some students being unable to understand themselves. Some of them (students) feel inferior, disliked, fatigued, upset, disturbed because of economic or financial situation . Any or all of the above can constitute depression and mental health problem for individual students.

This study is therefore aimed at examining the perception of female students in tertiary institutions on the use of physical exercise for managing depression and mental health problems and also how to enhance their mental fitness and well-being .

Research reports such as that of (Abone, 2005;

Maiwada 2008; Kuper, 2008 & Sayita, 2010) have shown that exercise reduces psycho-metrically excess symptoms of depression and that regular participation in exercise, like running, significantly reduces depression. Similarly, walking, cycling and several other activities have been reported by Peterson (2013), Richards (2006) Ohiha & Audu, (2015) to significantly reduce depression. However, running and walking appeared to be the two (2) types of physical exercise most often associated with significant reduction in depression. It should also be noted that researchers have not yet identified any particular exercise as being superior to other kinds in its potential to reduce depression (Abone, 2005, Emmanuel, 2009) . Both aerobic and anaerobic exercises programmes seem to be equally effective (Dashe, 2000). Dashe (2000) emphasized further that effects of exercise on the individual depends on the duration of its practice, frequency and intensity. He also explained that exercise on depression can retain one's vitality, vigor and independence as one feels better physically and emotionally, sleeps well, increases positive feelings such as self-esteem, increase in one's network of friends, acquaintance and free of social isolation. This paper highlights the use of physical exercise to manage depression and to bring about good mental health. According to Abubakar (2008) & Maiwada (2008), mental health is a quality, resulting from the satisfaction of one's need through personal and social adaptations to environment.

They went further to say that it enhances the ability to face challenges, tasks, responsibilities, duties, cope with one's emotion maturely and skillfully, work efficiently, find satisfaction and to contribute to the improvement of the society.

Purpose of the Study

The main focus of this study is to research into the use of physical exercise for managing depression and mental health problems among female students in selected tertiary institutions in Niger state. This is to encourage the students to take part in regular exercise in order to enhance their competence and well being in their daily activities in and outside the campus

Research Questions

Based on the statement of the problem, the following research questions are formulated to guide this study.

What are the perception of students on the use of physical exercise for managing depression and mental health problems on the basis of institution location?

What are the perception of students on the use of physical exercise for managing depression and mental health problems on the basis of marital status?

Research Hypotheses

The following research hypotheses were formulated to guide the study:

There is no significant difference between the perception of students on the use of physical exercise for managing depression and mental health problems on the basis of institution

There is no significant difference between the perception of students on the use of physical exercise for managing depression and mental health problems on the basis of marital status.

Methodology

A survey descriptive research method was adopted using a four–point likert type questionnaire. This method was used because the situation required a survey on the field which made the researcher to only collect the data based on the existing problems. This involved the collection of data on the variables (students from different institution including unmarried and married respondents) present in the study. The study was to determine the perception of students from Federal Polytechnic, Bida and State Polytechnic, Zungeru. The data collected were used to describe and interpret the existing situation.

The population for this study consists of 6,398 students in the two institutions. However, since it was not possible to reach all students, a sample size using a random

sampling technique was adopted. Thus, a total of one hundred and forty four (144), made up of seventy two (72) from Federal Polytechnic Bida and the same number for the state Polytechnic. The respondents comprises both married and unmarried for the surveyed.

A-15 item questionnaire titled “Using Physical Exercise for Managing Depression and Mental Health Problems” (UPEM DMHP) was validated by two experts in the Department of Human Kinetics and Physical Education, Ibrahim Badamasi Babangida University, Lapai, Niger State. It was thus, found suitable for use for the study. The items were generated from the literature reviewed. The questionnaire contained the adopted four –points likert type: Strongly Agree (SA), Agree (A), Disagree (D) and Strong Disagree (SD). To ensure the reliability, a test re-test method was adopted within an interval of two weeks, using the Pearson Moment Correlation Coefficient, which stood at 0.83, at 0.05 level of significance.

Research Question One

What are the perception of students on the use of physical exercise for managing depression and mental health problems on the basis of institution?

Answering this, from the analysis, out of seventy two (72) respondents from Federal Polytechnic Bida, 42 (56.34%) conceded with the items (positive), while the remaining 30

(41.66%) did not. On the part of State Polytechnic Zungeru, out of seventy two(72), 34 (47.22%) responded positively to most of the items in the questionnaire, while the remaining 38(52.77%) disagreed.

Thus, the number of respondents who attested to the items positively from Federal Polytechnic were more than those from the State Polytechnic.

Research Question Two

What are the perception of students on the use of physical exercise for managing depression and mental health problems on the basis of marital status?

From the analysis, out of one hundred and forty four (144) fifty four 54 (37.50%) married respondents did not agree with the items while the remaining ninety (90) (62%) unmarried from the two institutions conceded, with the use of physical exercise for managing depression and mental health problems on marital status.

Research Hypothesis One

There is no significant difference between the perception of students on the use of physical exercise for managing depression and mental health problems on the basis of institution

Table One: shows the t-test analysis on the use of physical exercise on the basis of institutions

Variables	N	X	SD	Df	t-cal	t-crit.
Federal Polytechnic	72	94.88	35.67			
State Polytechnic	72	86.96	33.39	71	16.246	1.99

The above table shows that the calculated t-value of 16.246 was greater than the critical value of 1.99 at 0.05 level of significance. This implies that there was significant difference and therefore the hypothesis was rejected since the t-critical was less than the t-calculated.

Research Hypothesis Two

There is no significant difference between the perception of students on the use of physical exercise for managing depression and mental health problems on the basis of marital status.

Table Two: Shows the t-test analysis on the use of physical exercise on the basis of marital status.

Variables	N	X	SD	Df	t-cal	t-crit.
Married	72	94.88	35.67			
Unmarried	72	82.00	33.79	71	24.568	1.99

The result as shown in table two above indicated that the calculated t-value of 24.568 is greater than the critical t-value of 1.99. Based on this result, the null hypothesis was rejected.

Discussion

From the analysis, out of 72 respondents from the Federal Polytechnic, 42 (58.34%) conceded with the items while the remaining 30 (41.62) did not. Likewise in the State Polytechnic, out of 72 respondents 38 (52.77%) did not agree

with the items. This implies that the number of respondents in the Federal Polytechnic was more than that of those in the State Polytechnic. On the other hand, out of 144 of the total respondents from both Federal and State Polytechnic, 90 (61%) of unmarried acceded with the statements on the use of physical exercise for managing depression and mental health problems.

Based on the analysis of hypotheses one, the calculated t-value of 16.246 was greater than the critical value of 1.99 at 0.05 level of significance. This implies that there was significant difference and therefore the hypothesis was rejected. This result is in line with the report of the studies conducted by Abone (2005), Emmanuel (2009), Kuper (2009) & Peter (2013) who submitted that athletes who practice physical exercise acknowledged that its good for managing depression. Bello & Abdullahi (2010) noted that regular exercise does not only manage depression but also maintain the mental health of people with HIV/AIDs. The result of this study is not a surprise because the students of the Federal Polytechnic are more involved in regular physical exercise than their counterparts in the State Polytechnic as a result of human and material resources available in the Federal Polytechnic for training. The Federal Polytechnic do participate in the Nigeria Polytechnic games (NIPOGA) competition involving male and females

In respect of the analysis of hypothesis two, the

calculated t-value of 24.568 is greater than the critical t- value of 1.99. thus, the null hypothesis was rejected . This result is in corroboration with that of Wakat el al (1981), Kaidal, Abass&Mashelia (2000) Udoh&Ajala (2005), Encarta (2006) & Peterson (2013). The above researchers confirmed that adolescents who are not married do participate more in physical exercise than the married ones . This is perhaps the reason why the unmarried respondents conceded with items in the questionnaire on the use of physical exercise for managing depression and mental health problems.

Conclusion

From the findings, it was discovered that the respondents from Federal Polytechnic are more regular in physical exercises and more positive in their perception on its use for management of depression and mental health problems than the respondents from the State Polytechnic. It was also discovered that the unmarried male and females had ample knowledge about the use of physical exercise than their married counterparts. This could be attributed to the fact that unmarried students devote more time to physical exercise than the married folk. There is likelihood that unmarried students who participate in regular physical exercise knows it's impact on their mental health than the married ones. Since physical exercise is meant to manage the depression and mental health problems of individuals, irrespective of institution or marital

status, it is pertinent to engage in regular physical exercise so as to enhance the individuals well-being.

Recommendations

Based on the findings of this study, the following recommendations are proffered:

1. Regular physical exercise should be practiced by every individual so as to ameliorate depressive situation and condition in which students always find themselves such as academic work load, assignments, tests, examination and problems of interpersonal relationship.
2. Sports psychologists, sports masters and coaches should be posted to all educational institutions so as to encourage and train students in order to benefit from the therapeutic of physical exercises.
3. All female students (married or unmarried) should engaged in regular physical exercise so that they can feel it's impact just like their male counterparts.
4. Advocacy champagne should be launched by sport specialists through the media so as to enlighten the public on the use of physical exercise.
5. Adequate sports equipment and avenues should be provide for both students and staff to be engaged in various games and sports so as to derive the benefits attached to it participation.
6. Orientation for new intakes, workshops and

conferences for staff and student should be embarked upon so as to create awareness on the use of physical exercise for managing depression so as to mitigate mental health problems among individuals.

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