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ANALYTICAL STUDY OF DEPRESSION ON PHYSICAL EDUCATION STUDENTS

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ABSTRACTS

Objective: The main aim of this study was to analyse the level of depression in male and female physical education students to investigate gender differences and examine the correlation between age and depression.

Design and Method: An analytical study was performed to determine depression levels among physical education students. A sample of 60 physical education students (30 male and 30 female) with mean ages of 19.73±1.25 and 19.33±1.18 were randomly selected. The "Centre for Epidemiological Studies Depression Scale (CES-D)" had been employed to determine depression. Physical education students' depression levels were analysed using descriptive statistics, and the depression levels of male and female students were compared using the independent sample t-test.

Result: The analysis indicates the female student's CES – D scores were higher than their male peers. These variations highlight the serious mental health issues that female students in physical education experience. The test's p-value of 0.015, which is below the significant 0.05 ($p < 0.05$), indicates a significant difference between the levels of depression in males and females.

Conclusion: In order to ensure holistic development, the study concludes that it is critical to address mental health issues in academic and athletic training contexts, particularly for female students. Additionally, the study recommends the establishment of a mental health support system, including peer support groups, stress management workshops, counselling services, and workshops, in order to lower depression among PE students.

Keywords: Depression, mental health, gender difference, physical education, academic stress.

INTRODUCTION

Sadness, loss of interest or pleasure, guilt or low self-esteem, sleep or appetite problems, exhaustion, and difficulty concentrating are some of the symptoms of depression, a brain illness. One in twenty persons globally is thought to have gone through a depressed episode within the previous 12 months (Kessler &Ustun, 2008). According to predictions made by Jun Zhang and Steven T. (2015) and Haopen Zhang et al. (2024), depression will rank as the primary cause of disease burden by 2030 (WHO, 2008) and, by 2020, second leading cause of disability (WHO, 2001). The aetiology of depression is complicated and includes interactions between social, psychological, and biological factors. People who have gone through trauma, a major loss, or difficult situations are more likely to have difficulties in the workplace and in school, which can worsen the onset of depressive symptoms (WHO, 2023).

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Based on the study of Micah et al.,2021, major depressive disorders are observed to be more common in younger populations than in older adults. Significant depression is more common in people between the ages of 20 and 24 and then becomes less common as people age. It is essential to highlight that college students fall within this specific age group (Mich et al.,2021). In the content of this study, the term "Physical Education students" specifically refers to individuals who are currently enrolled in physical education programs and have not yet attained their degree. Typically, college students fall within the age range of 18-22 years; however, this demographic is not rigidly defined and can be influenced by various factors such as individual learning trajectories, grade advancement or retention, and the specific professional environment of the institution. Contemporary research has shown a considerable increase in the incidence of psychological well-being issues, which include anxiety, depression, and stress, among college students (Falsafi, 2016; Park et al., 2020; Pedrelli et al., 2015). They also experience significant life transitions, including relocating from their families, gaining independence, forming new social connections, and adapting to heightened academic demands (Falsafi,2016; Pedrelli et al., 2015). These challenges are often related to an increase in stress, anxiety, and depression among this demographic.

Additionally, gender differences and age are also one of the factors that influence depression. Although numerous studies have demonstrated the advantageous effects of physical activity on mental health, the research focuses on examining depression among physical education students, the influence of depression on gender differences, and the correlation between age and depression in male and female students.

METHODS

Participants

An analytical study had been carried out to assess depression levels among physical education students. A sample of 60 physical education students (30 male and 30 female) with mean ages of 19.73±1.25 and 19.33±1.18 were randomly selected from the UG students of the Department of PESS, DM College of Science, DMU, Imphal, Manipur.

Study Tools

Depression was measured using the CES-D, a validated instrument. A point scale from 0 to 3 is used to rate each response on this 20-item measure, which asks participants to rate how frequently they experienced symptoms of depression over the previous week, that include restless sleep, poor appetite, loneliness, etc. (0=Rarely or None of the Time, 1=Some or Little of the Time, 2=Moderately or Much of the Time, and 3=Most or Almost All the Time). The researcher gave precise directions on how to fill out the questionnaire prior to the data collection. The researcher ensured sincerity and honest responses while filling out the questionnaire. After the completion, the questionnaire was collected and carefully reviewed to ensure no errors.

Scoring Criteria

More severe depressive symptoms are indicated by higher scores. Scores for depression range from 0 to 60. Students with a score of 16 or greater considered to be to have depressive symptoms because that was the cutoff for clinical depression.

Statistical Technique

An independent t-test had been performed to contrast the depression levels of male and female students and to examine the depression levels of physical education students using descriptive statistics.

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RESULT AND DISCUSSION

The collected were analyzed to assess the level of depression of male and female physical education students of the Department of PESS, DM College of Science. The findings are summarized below.

Table 1

Descriptive Statistic of Male and Female Students on the Depression Scale

Descriptive Statistic					
Depression Scale	Group	N	Mean	Std. D	Min ± Max
	Male	30	19.13	4.59	10 ± 30
	Female	30	23.30	7.74	10 ± 44

According to Table 1, mean and standard deviation of the depression scale for male and female students are 19.13 ± 4.59 and 23.30 ± 7.74, respectively. The data indicate that female students have more depression symptoms on average than male students. The higher standard deviation in females also suggests that some females experience significantly higher depression symptoms while others may have milder symptoms, contributing to a broader distribution of scores.

Table 1 also revealed the minimum and maximum of the male students' depression scale are 10 points and 30 points, which created a 20-point length. Furthermore, the minimum and maximum of female students' depression scales are 10 points and 44 points, which created a 34-point length. It indicates that some of the female students have severe depression symptoms.

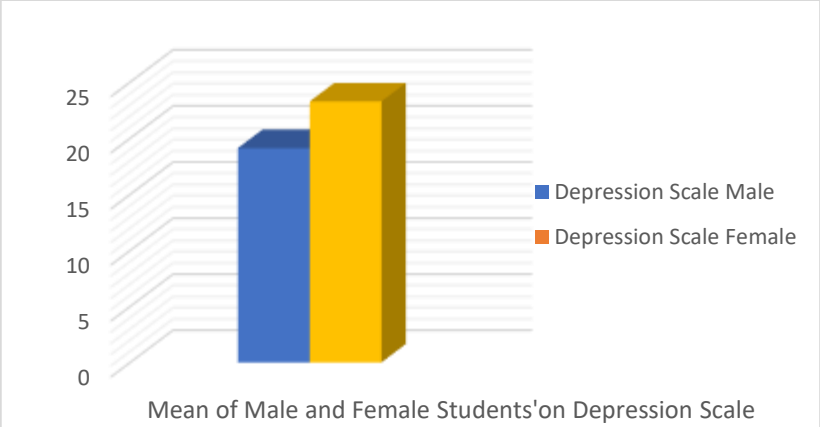

Figure 1: Graphical representation of the Mean of Male and Female Students on the Depression Scale

Table 2: Overall Depression (CES – D) Prevalence (Both male and Female)

Overall Depression Prevalence				
otal Participant	epression	ercentage	o Depression	ercentage
60	42	70%	18	30%

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Table 2 indicates that out of 60 participants, 42 (70%) students have depression from mild to severe symptoms and 18 (30%) students have no depression to mild symptoms. With both groups, 70% of the students had mean scores above the cutoff of score 16 clinical depression. Therefore, overall, the students of physical education students have depression.

Figure 2: Graphical representation of overall Depression Prevalence

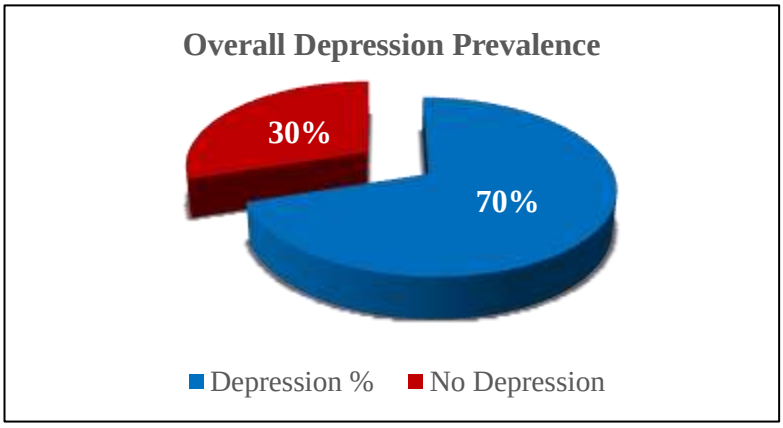

Table 3: Comparison of Depression (CES – D) between male and Female Physical Education students

*

Independent t-test				
Groups	**N**	**an ± SD**	**df**	**p-value**
Male	30	13 ± 4.59	58	0.015*
Female	30	3 ± 7.74		

Significant at 0.05 level

Table 3 compares the depression levels of male and female physical education students. Male and female mean ± standard deviations are 19.13 ± 4.59 and 23.3 ± 7.74, respectively. The degree of freedom is 58, and the total number of participants is 60. The result shows that p – the obtained from the test is 0.015, which is less than the significant 0.05 ($p < 0.05$), indicating that the levels of depression in men and women differ significantly. The greater mean of female physical education students suggests that gender may influence the measured variable.

DISCUSSION ON FINDINGS

A significant variation in depression levels between male and female physical education students at DM College of Science, DMU was observed upon analysis of the data ($p > 0.05$). With a wider range of minimum and maximum scores, the study showed that female students in physical education have a higher mean depression scale than their male counterparts, suggesting that some of them suffer from severe symptoms of depression. One possible reason can probably be explained by the higher emotional sensitivity often noted in females, and they experience appearance-related social pressure, heightened in sports and

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physical education environments. These pressures can lead to body dissatisfaction and low self – esteem contributing to depression (Tiggermann,2012). Studies demonstrate that women are more prone than men to experience stress mood swings, and emotional instability (Nolen-Hoeksema, 2012; Hyde et al., 2008). Thus, women may find it difficult to manage stressors and life challenges effectively, which makes them more vulnerable to depression.

The findings of Wenjuan Gao et al. (2019), who discovered that female students had significantly greater depression scores than male students, are in line with the findings of this study. Similarly, Kuehner (2017) investigated the greater incidence of depression in women compared to men and identified biological, psychological, along with social factors as the cause. Changes in hormones, especially in estrogen and progesterone, are also important contributors to the regulation of mood and emotions, and therefore, women suffer from more depression symptoms than men (Albert, 2015). In addition, expectations due to culture and social norms, as well as gender expectations, can cause depression to be more common in female students.

Furthermore, cultural expectations and gender norms are responsible for the higher occurrence of depression among female students. Women frequently experience social pressure to deal with studies, family, and interactions with others, which can cause stress and anxiety (Hyde et al., 2008). Instead of internalizing stress as depressive symptoms, men are more prone to externalize it through actions (Nolen-Hoeksema, 2012).

The current study's findings are also consistent with a survey study under the heading of "Emotional Health and Psychological Well-Being" that was carried out in 2016. According to the survey study, female students had a larger proportion (%) of depression and were more prone than male students to experience it. On top of that, Salk, Hyde, and Abramson (2017) establish in a meta-analysis that the global depression prevalence rates are above average for women across cultures and demographics, with females suffering more than males during adolescence and adult years.

Despite the observed gender differences, the overall depression (CES-D) score of male and female students shows that about 70% of the students had symptoms of depression. This implies that depression affects many physical education students, both male and female. Targeted mental health interventions, like peer support groups, stress management courses, and counselling services, are essential to enhancing students' emotional well-being because depression symptoms are so common.

CONCLUSION

The present study provides a level of depression of male and female physical education students of DM College of Science, DMU. According to the survey, female students had higher rates of depression than their male counterparts. Therefore, it may be said that female students in the physical education department are more depressed than their male counterparts. Additionally, mental health education should be incorporated into college-level physical education curricula, emphasizing self-care, stress management, and seeking support when necessary. When it involves recognizing signs of distress and pointing students in the direction of appropriate mental health resources, faculty and instructors may be quite helpful.

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Conflicts of Interest

The Author has no conflicts of interest to declare

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