

Mental depression among higher secondary students of Muzaffarpur district of Bihar

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Abstract—Mental depression is one of the major psychological issues in this world. Approximately 4.4% of world's population experience depression. It is a common and serious mental disorder which is negatively affects the feeling, thinking and perceiving process of the person, so, it is the most relevant and important concept in the field of Psychology. This study investigates the level of depression among higher secondary students of Muzaffarpur district of Bihar using the mental depression scale developed by L. N. Dubey. The aim of this study was to study the impact of gender, residence and religion on mental depression of higher secondary students of Muzaffarpur districts of Bihar. A total 200 samples participate were selected from muzaffarpur district by using random-cum-purposeful sampling techniques. The collected data were analysed by using t-ratio. This study shows that the no any significant difference between male and female high secondary students, rural and urban higher secondary students and Hindu and Muslim higher secondary students, that means both gender groups, both residential groups and both religious groups higher secondary students having similar level of academic stress.

Index Terms—Mental depression and higher secondary students.

I. INTRODUCTION

Mental depression is one of the major psychological problems in these days. Approximately 4.4% of world's population experience depression. Women are experiencing about 1.5 times more than men. So, this the burning issues in this world.

According to American Psychological Association (2015), 'Depression is described as a common and serious mood disorder that results in persistent feeling of sadness and hopelessness as well as a loss

of interest in activities that one once enjoyed.' Ivanovo et.al, (2020) define as; 'Depression is considered as crucial psychological health indicator is characterized by a combination of physical, psychomotor, emotional and cognitive experiments. Laura Goldman (2025) defines as, 'Depression is a mental health condition that caused chronic feeling of emptiness, sadness, sadness or an inability to feel pleasure. These feeling way seen to happen for no clear reason'.

This study investigates the mental depression levels among higher secondary students in Muzaffarpur district of Bihar. Higher secondary students means a person who is no longer a child and not yet an adult, between the ages of about 13 years and 17 years. In human life, it a critical stage in human development shaping future life, personality behavior, belief, relationship and opportunities for personal growth and exploration.

II. REVIEW OF LITERATURE

Mental depression is a significant concern among higher secondary students, particularly in regions with competitive educational environments. Higher secondary students face various stressors including academic pressure, parental expectations and peer competition, which can adversely affect their mental health and they suffered with depression. This research contributes to the existing literature by providing insights into the mental depression experienced by higher secondary students in a specific geographical context especially in muzaffarpur district of Bihar.

There are so many studies conducted by the researcher on mental depression. Some important

researches and their findings are discussed here. Goodyer (1990) conducted a research on the 'Friendship and recent life events of anxious and depressed school aged children' and found that the association between depression and environmental factors such as exposed to acute stressful events. Thapar & Guffine (1994) conducted a twin study of depressive symptoms in childhood; again Harington (2001) conducted a study on adolescent depression same or different and pointed out, in pre-pubertal children is less common than depression in adolescents or adults and seems to differ to causative, epidemiological and prognostic features. Leaf et.al, (1996) conducted a study on 'Mental health service use in the community and schools: results from the four- community MECA study' and found that the symptoms of depression like mood in stability, reactivity and irritability is frequently missed in adolescent in compare to adults. Angold et.al, (1999) conducted, 'A study on pubertal changes in hormone level and depression in girls' and suggested that depression is directly linked to pubertal changes in hormone brain relations. Ford et.al., (1999) conducted a study on the british child and adolescent mental health survey 1999 and identified that two-thirds of adolescents with depression have at least on co morbid psychiatric disorder and one ten have two or more co morbidities. Lewinsohn et.al, (2000), Freguson et.al, (2005) and Klein et.al, (2009) conducted longitudinal studies of adolescents with sub-syndrome depression and found that they are at increased risk of later full-blown depressive disorder. Kessler et.al, (2001) conducted a study on the topic mood disorders in children and adolescents: an epidemiological perspective and pointed out that the prevalence of depression in children is low with no sex difference. Again Kessler et.al, (2001) studied on, 'Mood disorder in children and adolescents: an epidemiological perspective' and found that the depression in children is relatively infrequent and rising substantially throughout adolescence'. Green et.al., (2004) also found such types of results in their mental health study in Great Britain, Palgrave Mac Millan, Basingstoke, UK. Rice et.al.,(2002) studied on 'The genetic etiology of childhood depression' and found that the rates of depression increased of parents who have faced depression three to four times in comparison to healthy parents. Fleitlich-Bilyk & Goodman (2004) conducted 'A study on prevalence

of child and adolescent psychiatric disorders in southeast Brazil' and suggested that the higher rate of depression in adolescents in low-income and middle income countries. Kessler et.al., (2005) studied on 'Life time prevalence and age of onset distributions of DSM-IV disorders in the national co morbidity survey replication and pointed out the prevalence of depression among adolescents increase with age. Freguson et.al, (2005) conducted a study on 'Sub threshold depression in adolescence and mental health outcomes in adulthood' and suggested that depression predicts a range of mental health disorder in adolescents. Dunn et. al., (2006) and Levinsohn et.al, (2000) conducted a longitudinal study and found in follow-up studies 50-70% of patients who remit develop subsequent depressive episodes within 5 years. Dunn et.al, (2006) and March et.al, (2004) conducted a longitudinal studies of community and clinic-based population samples suggest that 60-90% of episodes of depression in adolescents remit within a year. Lupez et.al., (2006) studied on 'Global burden of disease and risk factors and pointed that one half of Adolescents experience a form of mental disorders by 14 years of age. Thapar & Rice (2006) conducted research on twine studies in pediatric depression becomes increasingly heritable from childhood to late adolescence. Hyde et.al., (2008) conducted, 'A study on the ABCs of depression: Integrating affective, biological and cognitive models' to explain the emergence of the gender difference in depression and finding is the emergence of a strong female preponderance in the prevalence of depression in adolescents after puberty. Jones (2008) conducted research on 'Responding to the needs of children in crisis' and found that association between psychosocial stressors and depression could show the effects of unmeasured confounders and reverse causation findings with different research designs consistently show genuine causal risk effects. Soares et.al, (2008) studied on the topic 'Reproductive hormones sensitivity and risk for depression across the female life cycle: a continuous of vulnerability' and found that the hormonal changes above rarely produce the behavioral or neural signs of depression. Windfuhr (2008) studied on 'National confidential inquiry into suicide and homicide by people with mental illness' and indicated that depression is one of the most frequent condition among adolescent mental health disorders and it is indicated as one of the most

alarming new morbidities. Windfuhr et. al., (2008) conducted a study on, 'National confidential inquiry into suicide and homicide by people with mental illness, suicide in Juveniles and adolescent in the United Kingdom' and point out that the depression is a major risk factor for suicide and more than half of adolescent suicide victims reported to have a depression at the time of death in adolescent.. Hawton et.al., (2009) studied on suicide and pointed out the depression is a major risk factor for suicide and more than 50% of adolescents suicide victims were reported to have a depressive disorder at the time of death. Anita Thaper et al., (2012) conducted a study on 'Depression in adolescent' and Identified that the knowledge gap with regard to relapse prevention in also noticeable. Avenevoli et. al., (2015) point out in his study that more than 40% of people with depression experience onset before adulthood, depression remains undetected and most are untreated. Mulhen (2018) studied on major depressive disorder in children and adolescents and stated that depression is a complex condition of unclear causation. Annamaria Petito et.al, (2020) studied on the burden of depression in adolescents and the importance of early recognition and pointed out the mental health disorder are frequent during the developmental years, particularly in adolescents. Goodman (2020) studied the intergenerational transmission of depression and Lipsk et.al., (2022) conducted a study on 'Adverse childhood experience the serotonergic system and depressive and anxiety disorders' and found that genetic and environmental factors interact with each other in complex pathways to increase risk of depression among adolescents & children. Green et.al, (2020) studied on 'Competency of future pediatricians caring for children with behavioral and mental health problems' and reported that lack of confidence in their ability to care for adolescents with depression. Leslie Miller et.al, (2021) studied on 'Depression in adolescents' and stated that depression in adolescents is increasing at a greater rate than in adults.' Van Dijk et.al.,(2021) conducted a study on, 'Association of multigenerational family history of depression life time depressive and other psychiatric disorders in children result from adolescent brain cognitive development study' and found among older children, family history of depression is associated with a three to five fold increased risk of depression. Orlando

et.al, (2022) conducted a study on 'Dietary patterns and internalizing symptoms in children and adolescents: a meta analysis' and found that unhealthy lifestyle factors are associated with increased depressive symptoms among children and adolescents. Daphne J Korczak et.al, (2023) studied 'Diagnosis and management of depression in adolescents' and suggested that depression is common among adolescent in Canada and has the potential to negatively affect long term function and quality of life. Liu et.al., (2020) studied 'Changes in the global burden of depression form 1990 to 2017' and pointed that depression is common a leading cause of disability and major contributor to the overall global burden of disease.

The above scenario clearly indicates that very few studies were carried out on this topic, so this study investigates the mental depression among adolescents in Muzaffarpur district of Bihar with the help of reliable tools.

III. OBJECTIVE OF THE STUDY

In the above context, the present study proposed to examine the following research objectives:

- 1). To study the impact of gender i.e, male and female on mental depression among higher secondary students of muzaffarpur district of Bihar.
- 2). To study the impact of residence i.e, Rural and Urban on mental depression among higher secondary students of muzaffarpur district of Bihar.
- 3). To study the impact of religion i.e, Hindu and Muslim on mental depression among higher secondary students of muzaffarpur district of Bihar.

Hypotheses of the study

The hypotheses of this study are given below:

- H1. There is significant difference in mental depression level between male and female higher secondary students of Muzaffarpur district of Bihar.
- H2. There is significant difference in mental depression level between Rural and Urban higher secondary students of Muzaffarpur district of Bihar.
- H3. There is significant difference in mental depression level between Hindu and Muslim higher secondary students of Muzaffarpur district of Bihar.

IV. METHODOLOGY

This study uses the quantitative analysis of the data collected from adolescents of Muzaffarpur district of Bihar. A cross sectional study was carried out after taking permission from college administration and convenient sampling procedure was followed to select the participants was taken before the study.

A). Research Design:

The research design of this study was quantitative research design.

B). Sample:

In this study total 200 adolescents were selected from different colleges of Muzaffarpur district of Bihar by using random cum purposive sampling techniques. The sample is divided two gender groups i.e., Male and Female and each group represented by 100 adolescents. The male and female has been further subdivided into two residential groups i.e., Rural and Urban and each group represented by 100 adolescents. Again further subdivided into two religious groups i.e., Hindu and Muslim and each group represented by 100 adolescents.

C). Inclusion Criteria:

- 1). Age between 15-20 years was included.
- 2). Minimum educational qualification of sample was intermediate and graduate.
- 3). Hindu and Muslim students by religion were included.

D). Exclusion Criteria:

- 1). Age below 15 Years and above 20 years excluded.
- 2). Education qualification below intermediate and above post graduate excluded.
- 3). Sikh and Christians by religion was excluded.

E). Tools

The following tools were used in this research

- 1). Personal Data Questionnaire (PDQ): This PDQ was prepared by researchers himself for collecting the detailed information regarding participants

including their name, age, gender, religion, residence, qualification, name of college, name of father and address etc.

- 2). Mental Depression Scale (MDS): This scale is developed by Prof. L. N. Dubey. It is a self-administering scale and it is designed to measure the level of mental depression of college students. This scale consists of 50 items, every items has two answers 'yes' and 'no'. 'Yes' indicates mental depression and 'no' indicates no depression. Allot one mark for 'yes' and zero marks for 'no'. High score on scale denote extremely high mental stress with low score shows very low mental depression. The MDS has been administered on an individual as well as in group both. The MDS can normally be completed in about 04 to 12 minutes. The reliability of this scale is 0.64 by test retest method and 0.69 by split half method. The validity of this scale is 0.41 with depression inventory developed by S. Krim and 0.39 by behavior rating scale by teachers and parents respectively.

E). Procedure:

Data were collected through self-administered questionnaires. After contacting the prospective participants and taking their consent, the Mental Depression Scale along with Personal data questionnaire were given to higher secondary students of Muzaffarpur district. The purpose of the study was explained and proper information was given to them. The students gave their responses separately. After the screening the procedure was completed.

F). Ethics:

The participants were assured of confidentiality and anonymity.

G). Statistical Analysis:

The collected data were analyzed by using statistics tools like- mean, standard deviation and t-test.

V. RESULT AND DISCUSSION

The finding of the study has been tabulated in table- I, II & III respectively

Table – I

Comparison between male and female higher secondary students on mental depression scores

	N	M	SD	t	<P
Male	100	23.67	9.32	.41	NS
Female	100	24.13	6.12		

Table- I shows that mental depression of male and female higher secondary students. The N, M and SD score of male higher secondary students are 100, 23.67, 9.32 and the N, M and SD score of female higher secondary students are 100, 24.13, 6.12 respectively. The difference between both means score are found no significant at any level.

Thus, the hypothesis i.e., 'There is significant difference in mental depression level between male and female higher secondary students of Muzaffarpur district of Bihar' is not supported by the findings. This finding indicates that there is no any difference between both male and female higher secondary students on their mental depression scores.

Table – II

Comparison between Rural and Urban higher secondary students on mental depression scores

	N	M	SD	t	<P
Rural	100	22.96	7.43	1.37	NS
Urban	100	24.47	8.23		

Table- II shows that mental depression of Rural and higher secondary students. The N, M and SD score of rural higher secondary students are 100, 22.96, 7.43 and the N, M and SD score of urban higher secondary students s are 100, 24.47, 8.23 respectively. The difference between both means score are found no significant at any level.

Thus, the hypothesis i.e., 'There is significant difference in mental depression level between rural and urban higher secondary students of Muzaffarpur district of Bihar' is not supported by the findings. This finding indicates that there is no any difference between both urban and rural higher secondary students on their academic scores.

Table- III

Comparison between Hindu and Muslim higher secondary students on mental depression

	N	M	SD	t	<P
Hindu	100	24.27	7.43	.88	NS
Muslim	100	23.35	7.73		

Table-III shows that mental depression of Hindu and Muslim higher secondary students. The N, M and SD score of Hindu higher secondary students are 100, 24.27, 7.43 and the N, M and SD score of Muslim higher secondary students are 100, 23.35, 7.73 respectively. The difference between both means score are found no significant at any level.

Thus, the hypothesis i.e., 'There is significant difference in mental depression level between Hindu and Muslim higher secondary students of Muzaffarpur district of Bihar' is not supported by the findings. This finding indicates that there is no any difference between both Hindu and Muslim on their mental depression scores.

VI. FINDINGS OF THE STUDY

The findings of this study are as follows:

- 1).Both male and female adolescents having a similar level of mental depression.
- 2).Both rural and urban adolescents having a similar level of mental depression.
- 3).Both Hindu and Muslim adolescents having a similar level of mental depression.

VII. CONCLUSION

The findings indicate that the mental depression is common among higher secondary students in Muzaffarpur with no significant difference between male and female higher secondary students, rural and urban higher secondary students and Hindu and Muslim higher secondary students at any level. Mental depression is not affected by the gender, residence and religion. Further research could explore the factors contributing to mental depression and develop strategies to mitigate its impact.

VIII. LIMITATIONS AND SUGGESTION

This study was conducted to the best of the researcher's quality and ability. The researchers take small size of sample, so extensive research should be conducted in future studies in this field and generalised the obtained results in large population. This study can be done by data collection from another district and state for universal acceptance.

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