Research Paper EDUCATION

Prevalence of Depression Among Adolescents: A Comparative Analysis

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ABSTRACT

The present study was attempted to find out the prevalence of depression among adolescents. A sample of 300 adolescents was selected from Government Model Senior Secondary Schools of Chandigarh by using stratified random sampling technique. Beck Depression Inventory-II (Beck, Steer & Brown, 1996) was used to measure depression. To find out the prevalence of depression percentages were calculated and t-test was used to check the significant gender and stream differences on depression. The result showed that 55% adolescents were depressed. It was found that depression was more prevalent among girls than boys. Depression was more prevalent among arts students as compared to science and commerce students. Also, significant gender differences were observed on depression and it was favoured by girls. Also results indicated that arts students were more depressed as compared to science and commerce students. The results indicated a clear picture of prevalence rate of depression among adolescents.

KEYWORDS Depression, prevalence and adolescents.

INTRODUCTION

Depression during the teen years comes at a time of great personal change when boys and girls form their identity apart from their parents, grappling with gender issues and emerging sexuality, and make their own independent decisions for the first time in their lives (Weissman et al., 1999; Shaffer et al., 1996). According to Diagnostic and Statistical Manual of Mental Disorders (DSM-V) (American Psychiatric Association, 2013), depression is a mood disorder characterized by the presence of sad, empty or irritable feelings, accompanied by somatic and cognitive changes that significantly affect the individual's capacity to function.

The prevalence of depression increases during the age of 15 through 18 (Joseph, 2011; Birmaher, Ryan, Williamson & Brent, 1996; Petersen et al., 1993). Research in the last decade has shown that rates of depression increased from 8 to 20% (Gorenstein, Andrade, Zanolo & Artes, 2005; Steinhausen & Metzke, 2000). Cyranowski, Frank, Young and Shear (2000) found that prepubescent boys are more likely to be depressed than girls but during adolescence between the age of 11 and 13 years, this trend in depression rates is reversed. By the age of 15, girls are depressed approximately twice than the boys and this gender gap persists for the next 35 to 40 years.

Harrington (1998) found that even relatively mild depressive symptoms can result in impaired functioning. Female students felt more depression as compared to males (Verma, Jain & Roy, 2014; Black, Roberts & Li-Leng, 2012; Mohanraj & Subbaiah, 2010; Nair, Paul & John, 2004; Ganguli, 2003; Piccinelli & Wilkinson, 2000; Essau & Petermann, 2000) but Kumar, Jain and Hegde (2012) found that males (53.7%) were more depressed as compared to females (46.3%). Black et al. (2012) reported that 18% adolescents screened positive for depression, 41% reported low mood much of the time and 20% showed occasional mood disorder or more frequent self-harm.

In West Bengal, prevalence rate of depression among adolescents was found to be 45.3%, which was mostly of the mild type (34%), 6% moderate and 5.3% severe type depression (Gupta & Basak, 2013) and in Delhi the prevalence of depression was 84% and 54% exhibited moderate to severe depression. It was also found that most common symptom of depression was self-blame and feelings of worthlessness (Armstrong et al., 2013). Sidhu and Singh (2012) observed that 30% females and 36% males in late childhood showed signs of minor depression. Also it showed that 2% females and 1.2% males exhibited signs of major depressive disorder.

NEED OF THE STUDY

Adolescence is the stage of development and dilemma. Adolescents have to made decisions about their personal life and career. Many times these decisions create confusion and lead to stress, indecision or negative thoughts about self and helps in the development of depression. Literature reviewed in the present study indicated that depression is more prevalent among adolescents with preponderance of girls over boys. Hence, present study is an attempt to explore the present prevalence rate of depression among adolescents in Chandigarh.

DELIMITATIONS

Following were the delimitations of the present study:

1. The study was delimited to Government Model Senior Secondary Schools (co-educated) of Chandigarh only.
2. The study was delimited to XI standard students only.

OBJECTIVES

For the present study following objectives were framed:

1. To estimate the prevalence of depression among adolescents (gender wise and stream wise).
2. To find out the gender difference on the variable of depression.
3. To find out the stream differences on the variable of depression

HYPOTHESES

On the behalf of above stated objectives following hypotheses were formulated:

1. There is no significant gender difference on the variable of depression.
2. There are no significant stream differences on the variable of depression.

METHODOLOGY

Design of the Study

For the present study descriptive survey method was employed to find out the prevalence of depression among adolescents.

Sample

A sample of 300 adolescents comprised of 150 boys and 150 girls studying in XI standard pursuing science, arts and commerce streams from Government Model Senior Secondary Schools of Chandigarh was drawn by using stratified random sampling technique. There was no clinical history of adolescents.

Tool used

For the collection of data Beck Depression Inventory-II (Beck, Steer and Brown, 1996) was used to measure depression among adolescents aged 13 year or older. It has 21 items. Each item is rated on a 4-point scale ranging from 0 to 3. Content validity and construct validity was established. The test-retest reliability for BDI-II was 0.93.

Procedure

For the collection of data a prior permission was taken from the school principals. Investigator explained the purpose of the present study to adolescents and they were assured that their responses and information given about them will be kept confidential and used for research purpose only. After assurance Beck Depression Inventory-II was administered to adolescents with a time period of ten minutes.

Statistical Techniques to be employed

Percentages were calculated to find out the prevalence of depression and t-test was used to check the significant gender and stream differences on depression.

RESULTS

Interpretation of results have been done hypothesis wise:

Table 1: Prevalence of Depression among Adolescents

Characteristic		No. of Subjects	Non-Depressed N (%)	Depressed N (%)	Severity of Depression N (%)		
					Mild	Moderate	Severe
Gender	Boys	150	75 (50%)	75 (50%)	26 (17.3%)	30 (20%)	19 (12.7%)
	Girls	150	60 (40%)	90 (60%)	32 (21.3%)	33 (22%)	25 (16.7%)
Stream	Science	100	49 (49%)	51 (51%)	19 (19%)	20 (20%)	12 (12%)
	Arts	100	34 (34%)	66 (66%)	23 (23%)	25 (25%)	18 (18%)
	Commerce	100	52 (52%)	48 (48%)	16 (16%)	18 (18%)	14 (14%)
Total Sample		300	135 (45%)	165 (55%)	58 (19.3%)	63 (21%)	44 (14.7%)

Table 1 represents the prevalence of depression among adolescents. From the table 1 it was found that 50% boys were depressed and 50% were non-depressed. Also, it was found that 17.3% were mildly depressed, 20% were moderately depressed and 12.7% were severely depressed. In case of girls, 40% were non-depressed and 60% were depressed. Among the girls 21.3% exhibited mild depression, 22% exhibited moderate depression and 16.7% exhibited the symptoms of severe depression. Among the boys and girls, depression was more prevalent in girl adolescents.

Also, Table 1 represents the prevalence rate of depression among science, arts and commerce stream adolescents. In case of science students the prevalence rate was 51% in which 19% were mildly depressed, 20% were moderately depressed and 12% were severely depressed. In case of arts stream, 66% students were depressed in which 23% exhibited mild depression, 25% exhibited moderate depression and 18% showed the symptoms of severe depression. In commerce stream, 16% adolescents showed mild depressive symptoms, 18% showed moderate depression symptoms and 14% showed the symptoms of severe depression. The results demonstrated that depression was more prevalent among arts students (66%) as compared to science students (51%) and commerce students (48%).

Overall on total sample it was observed that 55% adolescents were depressed and 45% were non-depressed. Among the depressed adolescents, 19.3% were having the symptoms of mild depression, 21% showed the symptoms of moderate depression and 14.7% exhibited the symptoms of severe depression. Above discussion showed that most of the students were suffering from moderate depression in case of total sample, boys, girls, science stream, arts stream and commerce stream.

Table 2: Comparison of Boy and Girl Adolescents on the Variable of Depression

Variable	Boys			Girls			t-ratio
	N	Mean	S. D.	N	Mean	S. D.	
Depression	150	15.41	9.896	150	18.06	10.576	2.24*

***p<0.05**

From the table 2 it is evident that significant gender difference (t = 2.24, significant at 0.05 level) was observed on the variable of depression. It also showed that girl adolescents (M = 18.06) were more depressed as compared to boy adolescents (M = 15.41). Thus, the null hypothesis, "There is no significant gender difference on the variable of depression" stands rejected.

Table 3: t-ratio for Science, Arts and Commerce Stream Adolescents on the Variable of Depression

Streams	Science (N = 100) M = 15.61, S. D. = 9.67	Arts (N = 100) M = 19, S. D. = 11.529	Commerce (N = 100) M = 15.59, S. D. = 9.317
Science	-	2.25*	0.02
Arts		-	2.30*
Commerce			-

***p<0.05**

Table 3 presents the stream differences on the variable of depression. It was found that science students were significantly differed from arts students on depression (t = 2.25, significant at 0.05 level) but not with commerce students (t = 0.02). Also, significant differences were observed between arts and commerce stream adolescents on depression (t = 2.30, significant at 0.05 level). The above results demonstrated that arts stream students (M = 19) were more depressed as compared to science (M = 15.61) and commerce (M = 15.59) stream adolescents. Thus, the null hypothesis, "There is no significant difference between science and arts stream adolescents on the variable of depression" and "There is no significant difference between arts and commerce stream adolescents on the variable of depression" stands rejected. But the null hypothesis, "There is no significant difference between science and commerce stream adolescents on the variable of depression" stands accepted.

DISCUSSION

The results of the current study demonstrated that depression was more prevalent among girl adolescents than boy adolescents. Also, similar trends have been reported by Verma et al. (2014), Black et al. (2012), Mohanraj and Subbaiah (2010), Nair et al. (2004), Ganguli (2003), Piccinelli and Wilkinson (2000). Result of the present study showed that significant gender difference was observed on depression. Similar results have been reported by Tiwari and Ruhela (2012), Fonseca-Pedrero, Paino, Lemos-Giraldez and Muniz (2011), Asal and Abdel-Fattah (2007). Sharma (2012) supports the result that arts stream adolescents were more depressed than the science and commerce stream adolescents.

MAIN FINDINGS OF THE STUDY

- Depression was more prevalent among adolescents as 55% adolescents were depressed. The prevalence rate of depression was more among girl adolescents than boy adolescents. Also, it was found that depression was more prevalent among arts stream adolescents than science and commerce stream adolescents.
- Boy and girl adolescents showed significant difference on the variable of depression and it was favoured by girls.
- Arts stream adolescents exhibited high level of depression as compared to science and commerce stream adolescents.

CONCLUSION

Results of the present study demonstrated that depression was found to be more prevalent among adolescents. It was found that 55% students were depressed which indicated that more than half percent of adolescents were suffering from depression with different levels. Also, gender and streams have significant effect on depression level. Girls were more depressed as compared to boys and rate of depression was more among girls. Arts students were more depressed as compared to science students who were more depressed than the commerce students. It is suggested that bias free environment should be provided to adolescents being a girl or boy. Also, parents and teachers should give due respect to their wards career choices whatever they have made and show co-operation with adolescents because gender discrimination and discrimination on the basis of study always leads to bad mental health. Hence, it is the duty of parents and teachers to provide bias free environment to adolescents for their well being.

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