

Self Esteem and Depression in Adolescents: A Comparative Study

Niya N. Jain¹, Mahienoor Z²

¹Student, JB Petit School for Girls.

²Harm Reduction Research and Innovation Centre

Corresponding author: Niya N. Jain

Email – niya.jain@gmail.com

ABSTRACT

Background: The period of adolescence comes with major transitions in life. It could be physical, environmental, psychological, and hormonal in nature. The onset of self-issues has also been observed which is a precursor of depression during this age. The present study aimed at comparing the levels of self-esteem and depression among male and female adolescents.

Methods: The sample of the study consisted of 50 male adolescents and 50 female adolescents. Self-report survey data were collected from adolescents between 12 to 17 years of age. The Rosenberg Self-esteem scale and The Center for Epidemiologic Studies Depression Scale (CES-D) were used. The data was collected and analysed with a t-test.

Results: Level of self-esteem was found to be higher in males than in females ($t= 1.73, p<.05$) and levels of depression are significantly higher in females than in males ($t=-2.74, p<.01$).

Conclusion: Females have low self-esteem and higher depression. On the other hand, males have higher self-esteem and low depression. This research can help customize intervention models in future which will help adolescents cope effectively.

Keywords: Adolescents, Depression, Self-esteem, Self-love

(Paper received – 12th April 2021, Peer review completed – 9th May 2022, Accepted – 8th June 2022)

INTRODUCTION

Adolescence is an important part of an individual's life because of the transition it brings about from childhood to adulthood. Major physical, hormonal, psychological, and environmental changes take place in this phase. It thus becomes essential to study how each factor affects the quality of adolescence individually and along with their components. These significant changes can be a result of the rising mental health concerns experienced by adolescents. Some of the common mental disorders seen in individuals entering their youth are depression, anxiety, and other related disorders. Reportedly, these disorders can co-exist as well. Psychological factors predominantly affect an individual. The most common challenge faced by teens is the idea of self. Self-esteem is one such factor. Self-esteem plays a crucial role in development during the period of adolescence [1]. The concerns related to mood disorders especially depression can be closely linked to the self-esteem and concept of self. Studies have asserted there is a link between various environmental, physiological, and psychological factors and related factors along with other developmental milestones achieved during adolescence.

According to American Psychiatric Association, "Depression is a common and serious medical illness that negatively affects how an individual feels, the way one thinks and acts. Depression causes feelings of sadness and/or a loss of interest in activities an individual would have once enjoyed. It can lead to a variety of emotional and physical problems and can decrease their ability to function at work and at home." It is treatable with the help of pharmacotherapy, psychotherapy, and related techniques [2].

Adolescent depression can be explained in the same manner. Some of the common symptoms include negative and anti-social behaviours, irritability, restlessness, bad mood, aggressiveness, desire or attempts to run away, feelings of not being accepted, lack of cooperation with the family, isolation, carelessness with personal hygiene, and self-care, hypersensitivity with social withdrawal, sadness, anhedonia, and typical cognitions (self-blame, deteriorated self-image, and decrease in self-esteem). Involvement in drugs, substance abuse, and stealing can be seen due to the vulnerability factor prevailing in this age group. Suicidality is also a co-existing concern with symptoms of depression in many adolescents.

Although ample data is available regarding the effects, symptoms, and prevalence of depression in the world, not much research exists to understand the same in the Indian context. However, a considerable number of studies on the prevalence of depression in adolescents are present. A study conducted in Chandigarh attempted to retrospectively study the prevalence of clinically diagnosed depression/ affective disorders in children and adolescents. The study showed that the clinic prevalence of affective disorders was 2%, between 1980–1989, which increased to 6.6% between 1990–1999 and which further increased to 13.49% from 2000 to 2006 [3]. However, a flaw of such studies has been that the sample is primarily collected from urban regions of India. This means that the calculated rates provided are not widespread or community-based. Nandi et al. provided data on the point prevalence of psychiatric disorders in a rural population of West Bengal and reported a lack of depression in children and adolescents [4]. A Bangalore study with over 2000 children and adolescent participants from the urban areas reported psychiatric morbidity of 12.5%. Depression has also been found to be a co-morbid condition in adolescents experiencing symptoms of certain other physiological and psychological concerns [5].

After knowing the present situation, it becomes essential to understand the various factors that play a role in the development of depression in adolescents. Many studies have reported that biological abnormalities have been detected in people experiencing mood disturbance. Norepinephrine and serotonin have been found to largely affect the pathophysiology of depressive disorders. Also, dopamine plays a role in the reduced activity levels detected during a depressive phase. Acetylcholine, GABA, NMDA, etc. also play a vital role. Through advanced imaging techniques and scans, it has been observed that consistent abnormalities prevail in the subcortical regions of the brain such as basal ganglia, the thalamus, and the periventricular regions. A PET scan suggested that depression leads to decreased anterior brain metabolism. Genetic factors play an equally important role in the development of depression [6]. Depression is the most common form of mood disorder that generally passes the offspring. Twin studies have indicated that not only do genetics play a role but also environmental and existing stressors can lead to the development of depression and related symptoms. Adolescents experiencing depressive symptoms have been found to be more prone to developing symptoms of OCD, and borderline personality as they grow older. Multiple types of research suggest that socioeconomic factors play a crucial role in the development of depression as well. Poor financial stability, poor academic performance, unhealthy family environment, single parents, etc are some factors that can play a role as well.

The self-esteem of a person is a general assessment of their worth expressed as a positive or negative attitude towards them. It is a part of Rosenberg's Self-concept, which he describes as "the total of individual emotions and experiences in relation to himself as an object" [7]. In addition to self-esteem, self-concept encompasses self-efficacy, self-identification, and self-efficacy. Adults' self-esteem is a consistent trait, and the study's experimental design has little effect on it. Self-esteem is a permanent trait of an individual and it's challenging to be misled by a narcissism and boasting study's experimental methodology. In 1969, Nataniel Brenden described self-esteem as the need to see oneself as capable of overcoming basic life challenges and deserving pleasure. Some refer to this two-factor approach as a definition that limits self-esteem to competence and value alone. Branden's self-esteem descriptions are as follows: Self-esteem is a fundamental human need; it is an inherent part of the life process, necessary for good and balanced self-development, and necessary for survival. Self-esteem is a necessary and inevitable outcome of a person's actions. Self-esteem is an overall assessment of the individual's worthiness, expressed in a positive or negative orientation towards them [8]. Self-esteem is a complicated of, or a backdrop to, a person's ideas, feelings, and behaviours. Self-esteem is an aspect of our personality, and in order to maintain or improve it, we would have to have a sense of self-worth derived from life difficulties that illustrate our accomplishments. Self-awareness and self-knowledge are two components of self-esteem. It includes the person's judgments of their own abilities, attitudes, and

values, as well as their own strengths and weaknesses. Its development begins at birth and continues to evolve throughout time as it is influenced by experience. During various stages of human development, a kid becomes aware of one or more aspects of their own self. First, the youngster becomes aware of his or her strengths and capabilities followed by other personal characteristics at a later stage. When all moral and cultural benchmarks for judgment have been acquired, the procedure begins. This is due to the complexities and ambiguity of the outcomes of the expression of human attributes. Children grow aware of their distinctive quirks and characteristics as a result of their relationships with people and peers. In adolescence, this process of self-awareness is at its peak. Self-awareness is incomplete without self-esteem. It is important in the development of a teenager since it is linked to mental wellbeing and the definition of life objectives. The boundaries of the adolescent's contact with the outside world are defined by activities pertaining to the formation and growth of self-esteem, which further promote the growth of their proficiency and the quality of their activities. These operations ought not to be haphazard; they ought to be smooth in order for the adolescent to develop enough self-esteem. The more realistic the scenario, the more flexible the adolescent. Depression is commonly related to low self-esteem. Pessimism, sense of failure, self-dislike, social retreat, and physical concern are among the features of depression [9]. According to Coopersmith people with poor self-esteem are more likely to experience anxiety, self-hatred, psychosomatic symptoms, and depression. Self-esteem is variously defined by psychologists, even though most agree that it is a subjective and complex assessment of an individual's sense of self-worth. Self-esteem is defined by Coppersmith as "the individual's assessment of himself that he or she makes and keeps on a regular basis. It shows approbation or disapproval and reveals how capable, significant, successful, and deserving the individual considers himself to be" [10]. Richardson (1987) used the Coppersmith Self-esteem Inventory to assess the self-esteem in 385 Caribbean middle-class 16-year-olds (189 boys and 196 girls). When compared to the results of similar studies conducted in the United States of America and India, the American and Caribbean samples have a lot in common in terms of self-esteem. There were significant disparities between the Caribbean and Indian samples, with Caribbean teenagers scoring higher on overall self-esteem than Indians [11]. This means that self-esteem is highly impacted by more than psychological factors. Research has also shown that individuals belonging to certain racial groups are more prone to being diagnosed with mood disorders like depression. Birnford et al. (2005) found that boys were more likely than girls to indicate high self-esteem in all grades (all $p < 0.001$). African-American (OR = 2.06) or Hispanic (OR = 1.52) race/ethnicity, positive family communication (OR = 3.03), safety (OR = 1.50), and high self-esteem (OR = 3.03) were the characteristics that predicted high self-esteem in grade 12. Above-the-federal-poverty-line family income (OR = 1.50), positive family communication (OR = 2.40), safety (OR = 1.41), religious community (OR = 1.21), and high self-esteem (OR = 3.01) were all variables for boys (all $p < 0.05$). According to their findings, adolescent girls had lower self-esteem than boys. They also suggested that adults can help teenagers develop self-esteem by fostering positive communication in supportive and loving interactions [12].

A study by Battle attempted to establish a link between low self-esteem and depression in his research. On one occasion, the Canadian Self-esteem Inventory for Adults and the Depression Inventory were administered to 43 males and 86 females participating in an introductory educational psychology course. For the entire sample, the correlation between self-esteem and depression was 0.55. For males, it was 0.53, and for females, it was 0.56. Such moderate results show that students with higher self-esteem tended to have lower depression scores, corroborating earlier research that suggests depression is linked to poor self-esteem [10]. Another study aimed to predict male and female college students' self-reported levels of self-esteem and despair. Social connectivity, social competence, and social support were hypothesized to play a key role. A total of 272 college students were used to test the mediator model. For both males and females, structural path studies backed up the concept. Immediate connections from social support or social competence to psychological outcomes were more strongly supported than indirect ones through the intermediary variable of social connectivity. An alternate model was then built based on the findings of the original model to explore the idea that social connectivity and social competence represent a broader underlying dimension, general social well-being. The new model's findings confirm the distinction between social connectivity and relationship support [13].

Sharma and Agarwal investigated the association between self-esteem, collective self-esteem, and depression in a study. Another goal was to investigate the role of self-esteem and communal self-esteem in the prediction

of depression. Beck Depression Inventory, Rosenberg Self-Esteem Inventory and Luhtanen and Crocker's Collective Self-Esteem Inventory were used to assess depression, self-esteem, and collective self-esteem. A total of 200 people between the ages of 17 and 23 were chosen from Agra for the study. The study found a strong positive correlation between self and collective self-esteem, as well as a significant negative correlation between self-esteem and depression. Collective self-esteem was also discovered to be a strong predictor of depression. According to this study, having a healthy capacity for self and high collective self-esteem not only avoids depression but also promotes good personality traits [14].

A cross-sectional comparative survey research design was carried out at a government high school in Bangalore city. The method utilized was a simple random sampling procedure. For the study, 200 children were recruited, including 100 children from each alcoholic and non-alcoholic parent. A modified screening technique was used to detect children of alcoholics (COA). In terms of anxiety, depression, self-esteem, separation anxiety, social phobia, obsessive-compulsive issues, and physical injury, the results demonstrate that there is a statistically significant difference between the COA and non-COA groups. According to the findings, children of alcoholics had higher rates of anxiety, depression, and low self-esteem than children of non-alcoholics [15]. Certain studies also aim to study depression in relation to self-esteem while keeping the acne experienced by adolescents due to hormonal changes. The vast range of factors affecting self-esteem can be considered predictors of depressive symptoms by adolescents. Available data have suggested that self-esteem and depression play an important interconnected role alongside other challenges faced by adolescents considering their circumstances which can further be divided into cultural, parental, physical, genetic, etc. The rationale of this article is to assess the comparison of self-esteem and depression in male and female adolescents as these two concepts are often ignored considering that it is habitual in teenage. A light on psychological spectrum is necessary.

METHODOLOGY

Hypotheses

Hypothesis 1: Female Adolescents will have higher scores on depression as compared to male adolescents.

Hypothesis 2: Female Adolescents will have lower scores on self-esteem as compared to male adolescents.

Participants

The sample consisted of 100 adolescents within the age range of 12 to 17 years. Of the 100 participants; 50 were male and 50 were female. The criteria for the research entailed those adolescents who understand the English language will be part of the study.

Variables

The research has one independent variable with two levels - Male Adolescents and Female Adolescents.

The research has two dependent variables - Self Esteem and Depression.

Design

This research is a survey designed using questionnaires.

Instruments

Demographic information along with the consent, Rosenberg self-esteem scale and The Center for Epidemiologic Studies Depression Scale (CES-D) were used for data collection.

Demographic information included questions relating to the participant's name initials, age, gender, standard or grade.

The Rosenberg Self Esteem scale was developed by Rosenberg in 1979 to assess self-esteem. This scale contains 10 items with a combination of positively and negatively worded statements. The person is asked to mark the following options: strongly agree, agree, disagree, strongly disagree. The scale has fairly good reliability and validity and is globally available [16].

The Center for Epidemiologic Studies Depression Scale (CES-D) was developed by the Center of Epidemiologic Studies and published by Radolf in 1977. This scale is an indicative tool for assessing

depression among children and adolescents ranging from 6 to 17 years. It is a 20-item questionnaire to which the respondent is to mark on a 4 point scale (0 = Rarely or None of the Time, 1 = Some or Little of the Time, 2 = Moderately or Much of the time, 3 = Most or Almost All the Time). The reliability and validity of the scale are very good [17].

Procedure

50 male and 50 female adolescents were selected for the study. The data was collected using the survey method. The data collection was carried out by online forms. The participants were required to fill out a consent form and demographic details prior to the administration of the tests.

After collection of the survey, data were scored, coded, entered into an excel spreadsheet and verified to minimize errors. The data was further statistically analysed. This research aimed at finding whether or not adolescents are prone to depression and have self-esteem issues. The research does not aim at providing intervention in cases of observed issues. However, if there is an area of concern is identified; the responsible person will be informed so that they can take the necessary steps.

RESULTS

From table 1, it can be observed that the mean values of males and females differ. The value is -2.74 which is significant at a 0.01 level. Hence the hypothesis “Female Adolescents will have higher scores on depression as compared to male adolescents” is accepted.

From table 2, it can be observed that the mean values of males and females differ. The t value is 1.733 which is significant at a 0.05 level. Hence the hypothesis “Female Adolescents will have lower scores on self-esteem as compared to male adolescents” is accepted.

Table 1: Mean, SD and t-value for depression of male and female adolescents

Variables	Gender	N	Mean	SD	t
Depression	Male	50	21.84	8.11	-2.74*
	Females	50	27.62	12.47	

*significant at 0.01 level

Table 2: Mean, SD and t-value for self-esteem of male and female adolescents

Variables	Gender	N	Mean	SD	t
Self Esteem	Male	50	25.86	4.65	1.733
	Females	50	24.12	5.36	

*significant at 0.05 level

DISCUSSION

The findings in this study add specificity to recent research that points to the importance of gender-based differences in responsiveness to stress which is an underlying factor in depressive symptoms among adults [18]. Females are generally sensitised to the family environment. Especially, in underdeveloped countries, females do not have much freedom to live as per their wishes. A South Indian study by Subbaiah also confirms the prevalence of depression symptoms during adolescence [19]. According to a study in 1991, 378 teenagers (39.2%) were non-depressed, 358 (37.1%) were mildly depressed, 187 (19.4%) were moderately depressed, and 41 (4.3%) were seriously depressed. Among the 21 depressive symptoms on the BDI, emotional manifestations of depression such as sorrow, impatience, self-accusations, and weeping episodes predominated in the current sample of teenagers over cognitive, behavioural, and physical manifestations of

depression. They discovered that a larger proportion of females (27%) than boys experienced moderate to severe depression (21 per cent). There was a link between age and depression, with older teenagers experiencing more depression [20]. According to Piccinelli and Wilkson (2000), gender differences in depressive illnesses are true, despite the fact that noticeable variables may increase a female's prevalence to some extent. It ought to be noted that unpleasant childhood experiences, depression and anxiety disorders in childhood and adolescence, social roles with associated unfavourable experiences, and psychological characteristics are connected to sensitivity to life events and coping abilities are all likely to be implicated. However, genetic and biological variables, as well as a lack of social support, have little or no influence on the establishment of gender disparities. According to demographic statistics, women outnumber men in the prevalence, incidence, and morbidity risk of depressive disorders. The increased risk for females varies by diagnostic subtype, but is, however, significant for major depression, dysthymia, atypical depression, and seasonal winter depression. Furthermore, age is a significant determinant, with females experiencing greater rates of depression from puberty through adulthood, as opposed to a higher prevalence until early adolescence [21].

With the help of prevailing literature, the association between gender and global self-esteem in adolescence was highly noticeable and was well established, with boys routinely outperforming girls. Quatman and Watson reported similar data in their attempt to interpret gender variations in teenage self-esteem in terms of its constituent pieces. Boys had somewhat better global self-esteem scores than females, by 0.22 standard deviation units, as expected [22]. A study also suggested that females have lower self-esteem than boys, regardless of the domains considered. Differences in self-esteem in regard to looks and athletic performance were more pronounced. There was no significant shift in the growth of self-esteem, particularly when considering the worldwide perspective. A component analysis of the data revealed that females' self-esteem is expectedly more global and less domain-specific, whereas boys tend to isolate the academic and behavioural aspects of their experience from the social. In females, global self-esteem has had a greater effect on the level of melancholy mood than in boys [23]. Descriptive cross-sectional research was carried out on young individuals aged 20 to 25 years who were enrolled in continuing education and lived in Raipur, Uttar Pradesh, India. All of the young adults in the neighbourhood were considered. A total of 203 respondents were chosen, with 110 male respondents and 93 female respondents. Men's self-esteem was shown to be substantially greater than women. Factors such as respondent's education, respondent's mother's education, family income, caste, and a number of siblings were all related to self-esteem. According to the study, the attitudes of family members toward female children should be modified in order to improve gender neutrality at home and in society as a whole. The results obtained from this study are henceforth, in line with the findings of previous research [24].

CONCLUSIONS

There is a significant difference in depression between male and female adolescents, females have a higher level of depression than males. There is a significant difference in self-esteem between male and female adolescents, males have higher levels of self-esteem than females. The present study is beneficial for the male and female adolescents and future researchers to design the intervention based on the needs of the participants depending on their gender.

REFERENCES

1. Manning MA. Self-concept and self-esteem in adolescents. *Student Serv* 2007;2:11-5.
2. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)*, Fifth edition. 2013.
3. Grover S, Raju VV, Sharma A, Shah R. Depression in Children and Adolescents: A Review of Indian studies. *Indian J Psychol Med* 2019;41(3):216-27.
4. Nandi DN, Banerjee G, Mukherjee SP, Ghosh A, Nandi PS, Nandi S. Psychiatric morbidity of a rural Indian community: changes over a 20 year interval. *Br J Psychiatry* 2000;176(4):351-6.
5. Srinath S, Girimaji SC, Gururaj G, Seshadri S, Subbakrishna DK, Bhola P, Kumar N. Epidemiological study of child & adolescent psychiatric disorders in urban & rural areas of Bangalore, India. *Indian J Med Res* 2005;122(1):67-79.

6. Kaltenboeck A, Harmer C. The neuroscience of depressive disorders: A brief review of the past and some considerations about the future. *Brain Neurosci Adv* 2018;10.
7. Gecas V. The Self Concept. *Ann Rev Sociol* 1982;8:1-33.
8. Minev M, Petrova B, Mineva K, Petkova M, Strebkova R. Self-esteem in adolescents. *Trakia J Sci* 2018;16(2):114-8.
9. Sajatovic M, Chen P, Young RC. Rating scales in Bipolar depression, *Clinical Trial Design Challenges in Mood Disorders* 2015;9:105-36.
10. Battle J. Relationship between Self-Esteem and Depression. *Psychol Rep* 1978;42(3):745-6.
11. Richardson AG. Differences in Adolescents' Self-Esteem across Cultures. *Psychol Rep* 1987;61(1):19-22.
12. Birndorf S, Ryan S, Auinger P, Aten M. High self-esteem among adolescents: Longitudinal trends, sex differences, and protective factors. *J Adolesc Health* 2005;37(3):194-201.
13. Williams KL, Galliher RV. Predicting Depression and Self-Esteem from Social Connectedness, Support, and Competence. *J Soc Clin Psychol* 2006;25(8):855-74.
14. Sharma S, Agarwala, S. Contribution of Self-Esteem and Collective Self-Esteem in Predicting Depression. *Psychol Thought* 2013;6(1):117-23.
15. Omkarappa DB, Rentala S. Anxiety, depression, self-esteem among children of alcoholic and non-alcoholic parents. *J Fam Med Prim Care* 2019;8(2):604-9.
16. Rosenberg M. *Conceiving the Self*. New York: Basic Books 1979.
17. Radloff LS. 'The CES-D scale: A self-report depression scale for research in the general population. *Appl Psychol Measurement* 1977;1:385-401.
18. Gunnar MR, Frenn K, Wewerka SS, Van ryzin MJ. Moderate versus severe early life stress: Associations with stress reactivity and regulation in 10-12-year-old children. *Psychoneuroendocrinology* 2009;34(1):62-75.
19. Subbaiah, K. Prevalence of Depressive Symptoms among Urban Adolescents of South India. *J Indian Assoc Child Adolesc Ment Health* 2010;6(2):33-43.
20. Petersen AC, Sarigiani PA, Kennedy RE. Adolescent depression: Why more girls?. *J Youth Adolesc* 1991;20: 247-71.
21. Piccinelli M, Wilkinson G. Gender differences in depression: Critical review. *Br J Psychiatry* 2000;177(6): 486-92.
22. Quatman T, Watson CM. Gender Differences in Adolescent Self-Esteem: An Exploration of Domains. *J Genetic Psychol* 2001;162(1):93-117.
23. Bolognini M, Plancherel B, Bettschart W, Halfon O. Self-esteem and mental health in early adolescence: development and gender differences. *J Adolesc* 1996;19(3):233-245.
24. Nupur C, Mahapatro M. Gender differences in self-esteem among young adults of Raipur, Uttar Pradesh, India. *Austin J Women's Health* 2016;3(1):1018-25.

Acknowledgements – Nil

Conflict of Interest – Nil

Funding – Nil