



# A Study On How Socio-economic Status and Impulse Control Varies In Terms of Their Levels Of Depression (At Risk, Vulnerable And Non-depressed) among Adolescent Students

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## Introduction

Adolescence is the most critical phase of development characterized by significant emotional, cognitive, and social changes; it is the transitional period from immaturity to maturity. During this transactional phase, adolescents used to face increased psychological vulnerability, increasingly marked challenges of academic stress, social media influence, family issues, and identity struggles. These stressors, along with hormonal changes and a developing sense of self, make teenagers vulnerable to mental health issues, are including depression - being one of the most prevalent concern. Depression among adolescents now days is not only a growing public health concern but also a complex manifestation of varying degrees—ranging from at-risk to vulnerable states of depression.

Adolescence as a transformative stage of development faces more complex issues with impulse control—the ability to resist immediate temptations or urges in favor of long-term goals and socially appropriate behavior. Impulse control is closely related to neurobiology of brain functioning, particularly the development of the prefrontal cortex, the development of which continues to evolve mainly into early adulthood. Hence adolescents often go through impulsive behaviors such as risk-taking, aggression, or difficulty delaying gratification.

In this context the interconnections between socio-economic backgrounds and impulse control capacities have become essential to analyze. The adolescents' differ across varying levels of depression—namely, at risk, vulnerable, and non-depressed. Understanding these relationships can provide valuable insights into the socio-psychological perspectives of adolescent mental health and contribute to the development of intervention strategies that promote emotional resilience and behavioral self-regulation among adolescents.

Depression is a common mental disorder characterized by depressed mood, loss of interest Or pleasure, feelings of guilt or low self-esteem, disturbed sleep and appetite, low energy, poor Concentration. According to The Penguin Dictionary of Psychology (1985) Depression, in psychology, is a mood or emotional state that is marked by feelings of low self-worth or guilt and a reduced ability to enjoy life. A person who is depressed usually experiences several of the following symptoms: feelings of Sadness, hopelessness, or pessimism; lowered self-esteem and heightened self-depreciation; a decrease or loss of ability to take pleasure in ordinary activities; reduced energy and vitality; slowness of thought or action; loss of appetite; and disturbed sleep or insomnia. The World Health Organization (WHO) has observed that over 300 million people have been affected by depression accompanied by a high risk of suicide among the age group of 15-29. Cross national study by Evelyne Boromet et.al(2001) observed that major depression has become serious public-health problem all over the world at present and it is associated with socio-economic condition. Depression has become an overburdening problem now a day for society because of its negative outcomes for both the affected person and family.

Impulsivity is a key concept for pathological states, especially among adolescents. Low levels of self regulation are reported to be connected to higher levels externalizing and internalizing problem behavior in childhood and adolescence (Eisenberg et al.,2005; Finkenauer et al. ,2005). More specifically depressed children and adolescents tend to report lower levels of self regulation than non-depressed youth ( Lengua,2003 ).On the other hand high levels of self-regulation have also been linked to positive behavior, such as prosocial behavior and academic achievement. Silk et al. (2003) in their study reported that the adolescents who recorded more intense emotions and poor regulation of those emotions reported more depressive symptoms. Hence impulse control measure was considered as the most appropriate variable to assess.

Considering the effects of depression among adolescent students and the effect of impulse-control and the socio-economic context, this study tried to explore the relationship between impulse-control and socio-economic status in terms of levels of depression. As a step in this direction, the present study has focused on following parameters of research objectives.

### **Objectives**

1. To examine the nature of depressive symptoms of the students in terms of WHO Depression Symptoms Checklist.
2. To categorize the students in terms of their level of depression (at risk, vulnerable and control).
3. To study the nature of impulse-control of the students in terms of their levels of depression (at risk, vulnerable and control).
4. To study the nature of socio-economic status of the student group in terms of their levels of depression (at risk, vulnerable and non-depressed).

## **Method**

### **1.variables**

#### **Depression-**

According to American Psychological Association( 2001),Depression is the most common mental disorder. Depression is more than just sadness. People with depression may experience a lack of interest and pleasure in daily activities, significant weight loss or gain, insomnia or excessive sleeping, lack of energy, inability to concentrate, feelings of worthlessness or excessive guilt and recurrent thoughts of death. A depressive disorder is that involves the body, mood, and thoughts. It interferes with daily life, normal functioning, and causes pain for both the person with the disorder and those who care about him or her.

As per DSM5 Depression otherwise known as major depressive disorder or clinical depression is a common and serious mood disorder. Those who suffer from depression experience persistent feelings of sadness and hopelessness and lose of interest in activities they once enjoyed. Aside from emotional 24 problems caused by depression, individual can also present with a physical symptom such as chronic pain or digestive issues. According to ICD 10 depression is characterized by low mood, lose of interest in everyday activities, reduction in energy.

Depression by WHO, is a common mental disorder that presents with depressed mood, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, low energy, and poor concentration.

#### **ImpulseControl**

Impulsivity is a key concept for pathological states, especially among adolescents. Low levels of self regulation are reported to be connected to higher levels externalizing and internalizing problem behavior in childhood and adolescence (Eisenberg et al.,2005; Finkenaue et al ,2005). More specifically depressed children and adolescents tend to report lower levels of self regulation than non-depressed youth (Lengua,2003). On the other hand high levels of self-regulation have also been linked to positive behavior, such as prosocial behavior and academic achievement. In the present study the concept of Impulse control of Shrivastava & Naidu,1983) was used as measuring variable.

Silk et al (2003) in their study asked adolescents to report their mood states at random hours of the day. The results of their study revealed that adolescents who recorded more intense emotions and poor regulation of those emotions reported more depressive symptoms. Hence impulse control measure was considered as the most appropriate variable to assess. Researches had shown that impulsivity in childhood and adolescence has been related to poor anger control and aggressive behavior (Musher- Eizemanetal.,2004). Researches had also shown that individuals with high levels of depression are characterized by longer duration of negative moods and emotional states than non-depressed individuals (Peeters et al ,2003).

## 2. Tools Used

### A. Depression symptom check list (DSE), (WHO, 2007) :-

The check list contains 12 items of depressive symptoms. Answering positively to 6 or more of the 12 items indicates the risk of developing depression. The check list has been used for screening adolescents with depressive symptoms. The check list developed by **WHO**, containing easy, integrative and brief array of symptoms selected to meet the criteria for the present purpose. It has been used as a screening measure in addition to **Beck Depression Inventory**.

### B. Beck Depression Inventory (BDI) ( locally adapted Bengali version ) :- ( Basu et al., 1995 )

The locally Bengali version of Beck Depression Inventory was used to assess the depression level of the students. The Beck Depression Inventory is a unidimensional instrument to assess depression. Beck described the inventory as an instrument designed to measure the behavioural manifestations of depression (Beck et al. , 1961). The inventory measures cognitive, behavioural, affective and somatic aspects of depression. It consists of 21 symptoms attitude categories which were clinically derived and judged Beck and his associates as symptoms of depression. The symptoms categories are as follows :- Mood Pessimism, sense of failure, lack of satisfaction, guilt feeling, sense of punishment, self- hate, self- accusation, self-punitive wishes, crying spells, irritability, social withdrawal, indecisiveness, body images, work inhibition, sleep disturbances, fatigability, loss of appetite, weight loss, somatic preoccupation and loss of libido. Each category represents a characteristic manifestation of depression of which is to be rated by using a series of four point ordinal scales.

The adapted version of the scale ( Basu et al., 1995 ) ensured the suitability of the scale for the normal Indian population. There are four response categories for each item. Each response category has a weighted score ranging from 0 to 3 respectively. The reliability coefficient determined by Cronbach's alpha is reported to be 0.86 .

### C. General information and Socio-economic Status Schedule

Altogether it has 34 items. This involved question furnishing the information of age, sex, area of living, type of family, number of family members, birth order of child, socio-economic status, class, stream of education, name of the institution, examination result etc.

### D. Impulse Control Scale ( ICS) ( Srivastava & Naidu , 1983 )

It is a five point rating scale of 65 items which yielded 4 clusters, negative affect index -1, negative affect index -2 , positive and undifferentiated emotions index and endurance index. The score of each category of impulse control was determined by adding the scores of each items of each category.

**Negative affect index 1-** This category includes the items related to control of fear, anxiety, grief and ability to concentrate and control thought.

**Negative Affect Index 2—** the category includes immediate gratification of psychological needs which have been measured through the items related to control of anger, reaction to ego threat and experience of humiliation.

**Positive and undifferentiated emotions index :** Items regarding positive emotions, undifferentiated emotions and unclassified emotions are measured through this index.

**Endurance and persistence index:** the index reflects persistence and physical distress of the respondents.

The dimensions of impulse control measure were found suitable to explore the hidden or camouflaged affective state of adolescents. Thus the adolescents who could manage to limit their depressive symptoms below the cut point were thus further screened on the basis of this tool. The criteria point of inclusion into the second clinical category was determined transparently in terms of depression symptom checklist and Beck Depression Inventory along with the statistically measure of impulse control and operationally defined as 'vulnerable' to depression group for the investigation.

**Reliability :** The scale the test retest reliability coefficient of correlation as 0.76. By spearman Brown prophecy formula the split half reliability was reported to be 0.73.

**Validity :** Construct validity of the scale has been reported to be determined by comparing Impulse Control scale with Hindi adaptation of Rosenzweig's Picture Frustration study and with Hand Tremor Experiment.

### **3. Sample**

A group of 150 higher secondary students from 2 schools in Kolkata district of West Bengal were drawn equiproportionally from two stream of education ( Science stream and Humanities stream ). They were selected randomly by following some inclusion criteria ( age range 17 to 19 Years and mother tongue Bengali , upper middle class family background) and exclusion criteria ( Shifting of stream, History of any gap in course of studies, History of any chronic disorder and records of any indiscipline behavior ). The sample of present study was categorized under 3 levels of depression i.e. control, vulnerable and at risk by administering WHO Depression symptom checklist and Beck Depression Inventory. 6 or above for Depression symptom checklist and 19 or above Beck Depression Inventory was designated as depression at risk group, 3-5 score for Depression Symptom Checklist and 5 to 18 for BDI was designated as vulnerable group, 0 to 2 of Depression Symptom Checklist and 0 to 4 of BDI was designated as control group.

### **4. Procedure**

Data were collected from the sample group by using the above mentioned tools and considering the ethical issues as follows :-

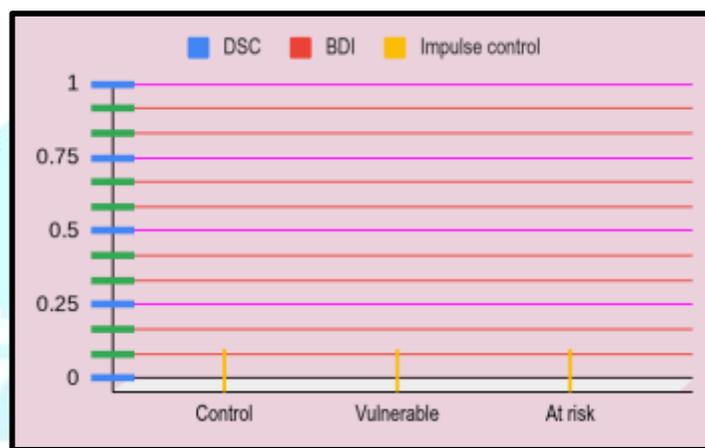
1. Informed consent was obtained from all students
2. Confidentiality of information was ensured.
3. Date and time for data collection were decided as per convenience of school authorities.

Quantitative analysis ( Percentage, Chi-square, one way ANOVA ) were done.

### 5. Result and Interpretation

**Table -1: Means & SDs of Depression Symptom Checklist, Beck Depression Inventory & Impulse-control of the three groups of students**

Scales	Control	Vulnerable	At risk
<b>DSC</b>	M=.948 SD=.585	M=4.33 SD=.707	M=9.200 SD=1.483
<b>BDI</b>	M=2.323 SD=1.127	M=13.000 SD=2.783	M=26.400 SD=7.536
<b>Impulse control</b>	M=16.200 SD=1.483	M=24.444 SD=3.02	M=35.217 SD=2.699

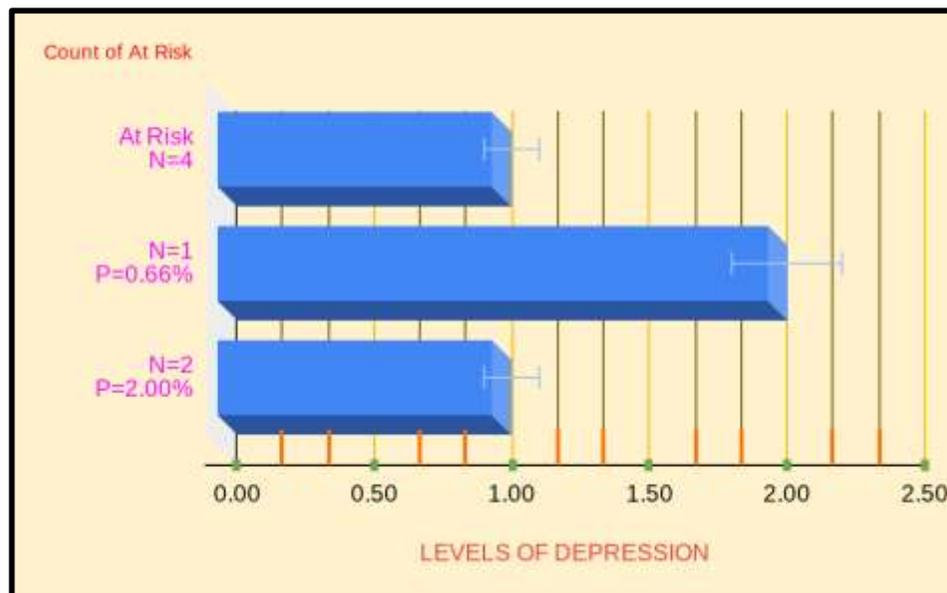


### Profile of Socio-Economic Status among adolescent students in terms of their levels of Depression.

**Table 5.2. Percentage & chi square values of Socio-economic status (SES) of the students in terms of their level of depression(non-depressed,vulnerable and at risk).**

Component Areas	Levels of Depression			Chi-square
	Non-depressed N=122	Vulnerable N=24	At Risk N=4	
High	N=67 P=44.00%	N=4 P=16.66%	N=1 P=0.66%	9.480 Significant
Medium	N=43 P=28.57%	N=6 P=4.00%	N=1 P=0.66%	
Low	N=12 P=8.00%	N=14 P=14.00%	N=2 P=2.00%	

\*Chi Square value is significant at 0.05 level



The obtained results in the above table (table 5.2) reflected that majority of students under non depressed group ( N=67, P= 44.00%) students under and vulnerable group (16.66%) came from family with high socio-economic status followed by at risk (0.66%) group from family with poor socioeconomic status. Chi-square value ( $\chi^2 = 9.480$ ) for socio-economic status difference on groups of students in terms of their levels of depression was significant. Present trends of results may be attributed that lower family income restricts students from various accessibility of internet, extra curricular activities, etc to channelize the academic pressure. Moreover, low family income and poor academic background of parents develop a sense of inferiority among adolescents resulting in social isolation, distance from peer grouped thus developing a risk for depression.

The present findings of association between socio-economic status and depression was supported by the study of Baviskar et.al. (2013) on socio-demographic factors and their association with depression among precollege students of urban areas of India. Increasing stress related to family's socio-economic status of school students increasing their vulnerability towards depression. The study concluded that the socio-economic status has a significant relationship with depression among school students. The present findings also supported by family income and such income related consequences of social differences might originate significant impact on adolescent to promote the tendencies towards depression symptoms. Lower income along with lower standard of life would be a reason behind promotion of sadness and unhappiness among adolescents for a long time which might acted as a cause of depression in many students. Patel in 2001 also found that students belonging from lower living slandered of life were more prone to depression. Such a situation demand the promotion of economic empowerment among the community people which will be indirectly helpful for prevention and control of depression among adolescent students.

## Profile of Impulse-control among Adolescent Students

TABLE 5.2.: Mean(M), Standard Deviation(SD), 'F' ratio and 't' values For Impulse-control Scores of students (N=150) Under Three Levels of Depression (Non-depressed, vulnerable and at risk).

Component areas	Levels of depression						F values	t values		
	Non-depressed		Vulnerable		At risk			t values b/w non-depressed & vulnerable	t values b/w vulnerable & at risk	t values b/w non-depressed & at risk
	Mean	SD	Mean	SD	Mean	SD				
Impulse-control	83.69	5.51	57.83	4.67	34.5	6.35	647.82*	12.32*	7.65**	18.83**
Negative Affect Index I	20.52	1.39	14.42	1.57	8.52	1.57	597.13*	11.35*	6.91**	19.13**
Negative Affect Index II	21.11	1.81	14.27	1.33	8.44	2.03	417.58*	10.08*	6.25**	14.82**
Positive & undifferentiated emotions Index	21.06	1.39	14.15	3.37	8.71	1.74	375.8**	9.10**	2.49**	14.16**
Endurance & persistence Index	20.98	1.39	14.15	1.49	8.90	1.74	598.31*	12.43*	6.03**	18.33**

\*\*=significant at 0.05

To achieve objective 3 the collected data on Impulse-control scale were treated for mean values, 'F' ratio value and 't' values. The obtained results showed in (table 5.2) reflected that the students of at risk group had exhibited lowest mean scores on Impulse-control scale (M=34.5) than that of their two groups. Students of vulnerable group scored lower mean (M=57.83) than that of non-depressed group (M=83.69) on the measure. Table also indicated that students of 'at risk' group scored relatively high on positive & undifferentiated affect index (M=8.71) and endurance & persistence index (M=8.90) than that of the negative affect index I (M=8.52) and II (M=8.44); whereas students of vulnerable group had relatively high score on negative affect index I (M=14.42) and non-depressed group had comparative high score on negative affect index II (M=14.27). Mean values and ANOVA results for impulse-control scale score of adolescent students (table-

5.2) indicated that the nature of Impulse-control indexes ( $M=83.69$ ;  $F=647.82$ ) along with all its determinants i.e., negative affect Index I ( $F=597.13$ ;  $t_1=12.32$ ,  $t_2=7.65$  and  $t_3=18.83$ ), negative affect Index II ( $F=417.58$ ;  $t_1=10.08$ ,  $t_2=6.25$  and  $t_3=14.82$ ), positive & undifferentiated emotions Index ( $F=375.8$ ;  $t_1=9.10$ ,  $t_2=2.49$  and  $t_3=14.16$ ) and endurance & persistence Index ( $F=598.31$ ;  $t_1=12.43$ ,  $t_2=6.03$  and  $t_3=18.33$ ) varied significantly in terms of their levels of depression (Non-depressed, vulnerable and at risk). The reason behind such as satiation might be that the expressed impulsivity is one of the key concept for the clinical state, especially among adolescents. The findings of the present study were supported by earlier researches on depression which reflected that individuals with larger emotional variability, negative moods and emotional states were more prone to depression. Hence impulsivity was considered as a predictor for the clinical depression especially among adolescents (Kuppens et.al, 2007 ; Peeters et.al, 2003).

## Discussion

The adolescent period was the stress and storm period of human life as individuals had gone through regeerious physical and psychological changes during this time. These changes increase the impulsivity among adolescents which made them prone to depression. Adolescent period is loaded with more intense emotions and poor regulation of emotions enhancing the possibilities of developing impulsivity. Later these impulsivity had promoted to the development of depression. Low levels of self regulation resulted in extensively high levels of externalized and internalized problem behavior adolescence making them more risk population for depression. The strands of results were supported by data based studies by (Silk et.al,2003; Eisenberg et.al.,2005; Finkenauer et al,2005; Lengua,2003) who opined that depressed adolescents tend to have low level of self-regulation than that of non-depressed youths. Number of researches have demonstrated that older children with internalizing disorder scored high on negative emotionality and low on effortful performances than that of non-depressed children. Research had shown that impulsivity in childhood and adolescence has been related to poor anger control and aggressive behaviour ( Musher-Eizeman et al.,2004). Researches had also shown that individuals with high levels of depression are characterized by longer duration of negative moods and emotional states than non-depressed individuals ( Peeters et.al, 2003).

## Conclusion

The proportionate number of students with different levels of depression ( control, vulnerable & at risk ) revealed dissimilarities. The data based facts of the present study had revealed the following facts about the relationship of socio-economic status, Impulse- control and depression.

1. The nature of socio-economic status of the adolescent student groups differed significantly in terms of of their levels of depression (non-depressed, vulnerable and at risk).
2. The profile of Impulse control attributes of the adolescent students differed significantly in terms of their levels of depression (non-depressed, vulnerable and at risk).

## References

- American Psychiatric Association: Diagnostic and statistical manual of mental disorders. Washington, DC: American Psychiatric Association; 2000.
- Basu, S., Chottopadhyay, D., A; Ash, S., Samajdar, J., Deb, Z. and Basu, S. (1995). Adaptation of Beck Depression Inventory into Bengali and its clinical validity. Bulletin, *Indian Psychiatric society*. W.Bengal, 5-9.
- Baviskar, M., Phalke, V. and Phalke, D. (2013). A study of socio-demographic factors and their association with anxiety, depression and stress in junior college students in a rural area of India. *International Journal of Scientific Research*, vol. 2(12), 375-377.
- Beck, A.T., Ward, C., Mendelson, M., Mock, J., & Erbaugh, J.(1961). An inventory for measuring depression. *Archives of General Psychiatry*, 4, 561-571.
- Ehrenberg, M.F., Cox, D.N., & Koopman, R. F. (1991). The relationship between self-efficacy and depression in adolescent. *Adolescence*, 26, 361-374.
- Ehrenberg, M.F., Cox, D.N., & Koopman, R. F. (1991). The relationship between self-efficacy and depression in adolescent. *Adolescence*, 26, 361-374.
- Finkenauer, C., Engels, R.C.M.E. and Baumeister, R.F. (2005). Parenting behaviour and adolescent behavioural and emotional problems : The role of self-control. *International Journal of Behavioural Development*, 29, 58-69.
- Kuppens, P., Van Mechelen, I., Nezlek, J.B., Dossche, D. & Timmermans, T.(2007). Individual differences in core affect variability and their relationship to personality and adjustment. *Emotion*, 7, 262-274.
- Lengua, L.J. (2003). Associations among emotionality, self-regulation, adjustment problems and positive adjustment on middle childhood. *Journal of Applied Developmental Psychology*, 26, 21-38.
- Musher-Eitzman, D.R., Boxer, P., Danner, S., Dubow, E.F., Goldstein, S.E. and Heretick, D. M.L. (2004). Social-cognitive mediators of the relation of environmental and emotion regulation factors to children's aggression. *Aggression Behaviour*, 30, 389-408.
- Patel, M.K. (2003). Adolescent family factors and depression : A study of prediction relationship. *Journal of Academy of Applied Psychology*, 29, 93-96.
- Peeters, F., Nicolson, N.A., Berkhof, J., Delespaul, P. and de Vries, M. (2003). Effects of daily events on mood states in major depressive disorder. *Journal of Abnormal Psychology*, 112, 203-211.
- Silk, J. S., Steinberg, L. and Morris, A.S. (2003). Adolescent's emotion regulation in daily life : Links to depressive symptoms and problem behaviour. *Child Development*, 74, 1869-1880.
- Srivastava A., and Naidu, R.K. (1983). Manual Impulse Control scale, Varanasi.
- WHO (2007), Depression Symptom Checklist. Available from URL: [http://www.un.org.in/untrs/NMH\\_Resources\\_WHO](http://www.un.org.in/untrs/NMH_Resources_WHO).