

**DEPRESSION AMONG THE SC AND ST
STUDENTS AT HIGHER SECONDARY LEVEL
IN JALPAIGURI DISTRICT**

A Dissertation Submitted To The Department Of Education

Jadavpur University In Partial Fulfillment

For The Degree Of Master of Philosophy In Education

SUBMITTED BY

PARTHA DAS

EXAMINATION ROLL NO: MPED194015

REGISTRATION NO: 133405 OF 2015-2016

SUPERVISED BY

PROF. SUBARNA KUMAR DAS

DEPARTMENT OF EDUCATION

JADAVPUR UNIVERSITY

KOLKATA

2019

THIS DISSERTATION THESIS IS DEDICATED TO.....

MY RESPECTED PARENTS, MY FRIEND,
PHILOSOPHER AND GUIDE

DR. MUKTIPADA SINHA AND PROF. SUBARNA
KUMAR DAS

FOR THEIR ENDLESS LOVE, ENCOURAGEMENTS,
SUPPORT

Approved & to register in next F.Arts Meeting
S.K. 12/4/19.

TO ALL HANDS
S.K. 12/4/19

Certified that the thesis entitled, *Depression Among the SC and ST students at Higher Secondary level in Jalpaiguri District.* submitted by me towards the partial fulfilment of the degree of Master of Philosophy (Arts) in EDUCATION of Jadavpur University, is based upon my own original work and there is no plagiarism. This is also to certify that the work has not been submitted by me for the award of any other degree/diploma of the same Institution where the work is carried out, or to any other Institution. A paper out of this dissertation has also been presented by me at a seminar/conference at E. I. 21st C.I.A.C-2019 thereby fulfilling the criteria for submission, as per the M.Phil Regulation (2017) of Jadavpur University.

Panthe Das

EXAM Roll.No. - MPED 194015
Reg. No. - 133405 of 2015-16

(Name of the M.Phil Student with Roll number and Registration number)

On the basis of academic merit and satisfying all the criteria as declared above, the dissertation work of *Panthe Das* entitled *Depression Among the SC & ST students at Higher secondary level in Jalpaiguri Dist.* is now ready for submission towards the partial fulfilment of the Degree of Master of Philosophy (Arts) in Education of Jadavpur University.

Branda
30.4.19

Head
Department of Education

(DR. BISHNUPADA NANDA)
PROFESSOR & HEAD
DEPARTMENT OF EDUCATION
JADAVPUR UNIVERSITY

Subarna Das

Supervisor & Convener of RAC

DR. SUBARNA KUMAR DAS
PROFESSOR
DEPARTMENT OF LIBRARY & INFORMATION SCIENCE
JADAVPUR UNIVERSITY

Jayanti Das

Member of RAC



DEPARTMENT OF EDUCATION

CERTIFICATE FROM THE HEAD OF THE DEPARTMENT

Certified that Partha Das has completed his research work on the topic entitled, "Depression Among the SC and ST Students at Higher Secondary Level in Jalpaiguri District"; under the supervision of Dr. Subarna Kumar Das; Professor & HOD, Department of Library & Information Science, Jadavpur University. He has also fulfilled the necessary requirements of the relevant regulations relating to the Master of Philosophy programme of Jadavpur University. I would now recommend submission of his above thesis for necessary follow up actions for the said degree.

I further certified that, any part of this dissertation has not been submitted before for any other degree or diploma at any university or other educational institution or anywhere.

Place: Kolkata

Date: 22/5/19

(Dr. Bishnupada Nanda)

Professor & HOD, Department of Education

Jadavpur University

Kolkata - 700032

Prof. Bishnupada Nanda
HEAD
Department of Education
Jadavpur University

* Established on and from 24th December, 1955 vide Notification No. 10986/JU-42/55 dated 6th December, 1955 under Jadavpur University Act, 1955 (West Bengal Act XXXIII of 1955) followed by Jadavpur University Act, 1981 (West Bengal Act XXIV of 1981)

ফোন : (৯১) - ০৩৩ - ২৪৫৭-২৮৮২
ফ্যাক্স : (৯১) - ০৩৩ - ২৪১৪-৬০০৮

Website : www.jadavpur.edu
E-mail : education.JU@gmail.com
hod@education.jdvu.ac.in

Phone : (91)-033-2457-2882
Fax : (91)-033-2414-6008

CERTIFICATE

Certified that the thesis entitled "*Depression Among the SC and ST Students at Higher Secondary Level in Jalpaiguri District*" submitted by me for award of the degree of Master of Philosophy in Education in Jadavpur University is based upon my work carried out under the supervision of Subarna Kumar Das, Professor, Department of Library & Information Science, Jadavpur University.

And neither this thesis nor any part of it has been submitted before for any degree or diploma anywhere / elsewhere.

Partha Das
(Partha Das)

Dated: 23/05/19

Countersigned

Subarna Kumar Das
Prof. Subarna Kumar Das 22/5/19

(Supervisor)

DR. SUBARNA KUMAR DAS
PROFESSOR
DEPARTMENT OF LIBRARY & INFORMATION SCIENCE
JADAVPUR UNIVERSITY

Acknowledgement

For the preparation of this thesis, the researcher has received encouragement, assistance and co-operation from various persons.

In the very first place, he expresses her heartiest gratitude and respect to her guide Dr. Subarna Kumar Das, Professor, Department of Library & Information Science, Jadavpur University, for valuable guidance, concrete suggestions and helpful criticism throughout the course of this study and preparation of the report.

He wishes to express his best regards and heartiest gratitude to Dr. Muktipada Sinha, Associate Professor, Department of Education, Jadavpur University, for his concrete suggestions, helpful criticism and encouragement during this study.

He wishes to express his best regards and gratitude to Dr. Bishnupada Nanda, Professor and Head of the Department, Department of Education, Jadavpur University, for his encouragement during this study.

The researcher his best regards and gratitude Dr. Lalit Lalitav Mahakud, Assistant Professor, Department of Education, Jadavpur University, for his encouragement during this study.

He wishes to express his best regards and gratitude to Dr. Samir Chattopadhyay, Assistant Professor, Department of Education, Jadavpur University, for his valuable suggestions and encouragement during this study.

The researcher expresses his gratitude and thanks to Bijoy Krishna Panda, Liton Mallik and Mouli Saha for unconditional support and encouragement during the research work.

The researcher expresses his gratitude and thanks to his senior and all his friends who have helped him. As like Abhijit Biswas, Muzaffar Ansari, Sk. Imran Pervez, Debjani Ghatak, Abhinandan Kumar, Abhishek Khanra, Avijit Pradhan, Priyom Roy, Suraj Bhattacharyya Chayan Adak, Krishna Sarkar, Manos Bhunia and Mousumi Biswas who have helped him every moment during the study period.

The researcher expresses his best gratitude and thanks to all friends and well-wishers who help in the collection of primary data Jalpaiguri district in West Bengal.

He expresses his thankfulness to Department of Education, Jadavpur University for allowing him to conduct his study for his dissertation.

Finally, he wishes to express his heartiest gratitude and respect to his parents Haripada Das and Pratima Das whose blessing and well-wishes helped him to every moment to perform such a work.

Place: Kolkata

Partha Das

Date: 15/05/2019

LIST OF TABLES

Table 1.1	Age dependent psychopathological symptoms of depression (Mehler, Wex & Kolch, 2008, p.150)	3
Table 1.2	Age dependent somatic symptoms of depression (Mehler-Wex & Kolch, 2008, p.150).	4
Table 3.1	Distribution of the Sample according to School	38
Table 3.2	Sample Distribution according to Gender	38
Table 3.3	Sample distribution according to Locality of school	39
Table 3.4	Distribution of Sample According to Caste	40
Table 3.5	Distribution of Sample According to Sibling (s)	41
Table 3.6	Distribution of Sample according to Class	42
Table 3.7	Distribution of Sample according to Structure of family	43
Table 3.8	Distribution of Sample according to Education of Father	44
Table 3.9	Distribution of Sample according to Education of Mother	45
Table 3.10	Distribution of Sample according to Family Income	46
Table 3.11	Value of BDI-II Scoring	51
Table 3.12	Schedule of the data collection	52
Table 4.1	Percentage wise distribution of depression of higher secondary level students on the basis of Gender variable	57
Table 4.2	Percentage wise distribution of depression of higher secondary level students on the basis of Locality of School variable.	58

Table 4.3	Percentage wise distribution of depression of higher secondary level students on the basis of Caste	60
Table 4.4	Percentage wise distribution of depression of higher secondary level students on the basis of their Number of Sibling	62
Table 4.5	Percentage wise distribution of depression of higher secondary level students on the basis of their Class	64
Table 4.6	Percentage wise distribution of depression of higher secondary level students on the basis of their Structure of Family	66
Table 4.7	Percentage wise distribution of depression of higher secondary level students on the basis of their Education of Father	67
Table 4.8	Percentage wise distribution of depression of higher secondary level students on the basis of their Education of Mother	69
Table 4.9	Percentage wise distribution of depression of higher secondary level students on the basis of their Family Income	71
Table 4.10	Chi square test showing the Gender wise comparison in depression among the SC and ST students at higher secondary level	74
Table 4.11	Chi square test showing the Caste wise comparison in depression among the SC and ST students at higher secondary level	74
Table 4.12	Chi square test showing the Locality of school wise comparison in depression among the higher secondary level students	75

Table 4.13	Chi square test showing the Structure of family wise comparison in depression among the SC and ST students at higher secondary level	76
Table 4.14	chi square test showing the Number of Siblings wise comparison in depression among the SC and ST students at higher secondary level	77
Table 4.15	Chi square test showing the Class wise comparison in depression among the SC and ST students at higher secondary level	77
Table 4.16	Chi square test showing the Education of father's wise comparison in depression among the SC and ST students at higher secondary level	78
Table 4.17	Chi square test showing the Education of mother's wise comparison in depression among the SC and ST students at higher secondary level	79
Table 4.18	Chi square test showing the Family income wise comparison in depression among the SC and ST students at higher secondary level	80

LIST OF FIGURES

Figure 1.1	Age specific suicide rate	10
Figure 1.2	Number of deaths for suicide, according to Crime Bureau Report, 2013	10
Figure 3.1	Map showing the location of population area	36
Figure 3.2	Map showing the location of sample area	37
Figure 3.3	Sample Distribution According to Gender	39
Figure 3.4	Distribution of Sample According to Locality of school	40
Figure 3.5	Distribution of Sample According to Caste	41
Figure 3.6	Distribution of Sample according to Number of Sibling(s)	42
Figure 3.7	Distribution Sample according to Class	43
Figure 3.8	Distribution Sample according to Structure of family	44
Figure 3.9	Distribution Sample according to Education of Father's	45
Figure 3.10	Distribution Sample according to Education of Mother's	46
Figure 3.11	Distribution Sample according to Family Income	47
Figure 3.12	Showing the schematic diagram of the influencing variables under the study	49
Figure 4.1	Level of depression among the SC and ST students at higher Secondary level	56
Figure 4.2	Gender wise distribution of Level of Depression	58
Figure 4.3	Locality of School wise distribution of Level of Depression	59

Figure 4.4	Caste wise distribution of Level of Depression	61
Figure 4.5	Siblings wise distribution of Level of Depression	63
Figure 4.6	Class wise distribution of Level of Depression	65
Figure 4.7	Structure of Family wise distribution of Level of Depression	67
Figure 4.8	Education of Father's wise distribution of Level of Depression	68
Figure 4.9	Education of Mother's wise distribution of Level of Depression	70
Figure 4.10	Family Income wise distribution of Level of Depression	72

LIST OF APPENDIXES

Appendix 1.1: Beck Depression Inventory in Bengali & English Version

Appendix 1.2: Tabulation of Data

Appendix 1.3: List of School

LIST OF ABBREVIATIONS

- BDI : Back's Depression Inventory
- CBT : Cognitive Behavioural Therapy
- CDI : Children's Depression Inventory
- DD : Dysthymic Disorder
- DSM : Diagnostic and Statistical Manual of Mental Disorder
- ER : Emotional Regulation
- GOVT: Government
- MDD : Major Depression Disorder
- PD : Psychotic Disorder
- BD : Bipolar Disorder
- PAA : Preschool Assessment of Attachment
- SAA : School-aged Assessment of Attachment
- SAD : Seasonal affective disorder
- SPSS : Statistical Package for Social Science
- SUPRE: Suicide prevention
- UNICEF: United Nations Children's Fund
- WBBSE: West Bengal Board of Secondary Education
- WBCHSE: West Bengal Council of Secondary Education
- WHO : World Health Organization
- ICD : International Classification of Diseases

KADS : Kuther Adolescent Depression Scale

CES-D: Centre for Epidemiological Studies- Depression scale

PHQ : Patient Health Questionnaire

CONTENTS

ACKNOWLEDGEMENT	II
LIST OF TABLES & FIGURES	IV
LIST OF APPENDIXES	IX
ABBREVIATIONS	X
CHAPTER – I : THE CONTEXT OF THE STUDY	
1.1 : Introduction	1
1.2 : Identification Criteria of Depression among the school Going Students	2
1.3 : Causes of Depression	5
1.4 : Type of Depression	7
1.5 : Depression as the leading cause of suicide	8
1.6 : Suicide in India	9
1.7 : Depression among school Going Students from Deprived people	10
1.8 : Operational Definitions	11
References	13
CHAPTER – II : THE PROBLEM OF THE STUDY	
2.1 : Review of Related Literature	16
2.1.1 : Indian Studies	16
2.1.2 : Studies in Other Countries	23
2.2 : The Statement of the Problem	27

2.3	: Delimitation of the Study	27
2.4	: Objectives of the Study	28
2.5	: Hypotheses of the Study	29
	References	30

CHAPTER – III : METHODOLOGY AND PROCEDURE

3.1	: Method	34
3.1.1	: Study Design	34
3.1.2	: Study Population and Sample	36
3.1.3	: Variables	47
3.1.4	: Tools	50
3.2	: Procedure	52
3.2.1	: Collection of Data	52
3.2.2	: Data Quality	53
3.2.3	: Tabulation of Data	53
3.2.4	: Statistical Analysis	54
	References	55

CHAPTER – IV : ANALYSIS AND INTERPRETAION OF DATA

4.1	: Descriptive Statistics	56
4.2	: Inferential Statistics	73
4.2.1	: Hypotheses Testing	73
	References	81

CHAPTER – V : CONCLUSION AND DISCUSSION

5.1	: Findings of the Study	82
5.2	: Conclusion	89
5.3	: Discussion	89
5.4	: Limitations of the Study	92
5.5	: Scope for Further Studies	93
	References	94

BIBLIOGRAPHY

CHAPTER – I : THE CONTEXT OF THE STUDY

1.1 : Introduction

**1.2 : Identification Criteria of Depression Among the
School Going Students**

1.2 : Causes of Depression

1.4 : Type of Depression

1.5 : Depression as the leading cause of Suicide

1.6 : Suicide in India

**1.7 : Depression among School Going Students from
Deprived people**

1.8 : Operational Definitions

CHAPTER-I

THE CONTEXT OF THE STUDY

1.1 Introduction

Adolescents is considered to be one of the most significant periods in the lifespan of a human being. It is that stage in the human being's development when very rapidly changes take place both physiologically as well as psychologically. According to WHO, Adolescents is defined by the age group of 10-19 years. In India, the adolescent children constitute about 25% of the country's population which came to around 243 million. This figure is about 20% of the world's 1.2 billion adolescents (UNICEF). The average age of depression in India is 31.9 years compare to 18.8 years in China, and 22.7 years in the US. The female: male ratio in this regard was about 2:1 (Bhowmik et. al, 2012). According to WHO, depression ranks as the fourth leading cause of disability overall world and it is projected that by 2020, it will be the second leading cause across the world.

Adolescence is a stage of turbulence when different kinds of storms affect our minds. Therefore, it is not surprising that about 10-20 % of the world's adolescents suffer from mental disorder and most of these cases begin before the age of 14 (Walters et. al, 2005 & Sharan & Sagar, 2005). At this age, a child goes through many transitions such as change in school and is unable to cope with the change in environment which ultimately leads to mental disorder. If this is not identified at the early stage, it can lead to long run harm to the student such as poor academic record, drug abuse as well as poor family and social life. In the worst case it can also lead to suicide. Due to rapid change in the emotional state of adolescents they find it difficult to share their problems with their parents, family or teachers. Hence, a research in this area would be beneficial to identify the causes of depression and come up with measures for its prevention and effective management.

1.2 Identification Criteria of Depression Among the school Going Students

Depression is not only caused in adult individuals, but it also affects children as well as adolescents. Only its expressions are as bit different. Grown up adults can communicate the depression more directly at times but children usually are unable to tell that they are depressed. Rarely children will say that they are psychologically sick or that they are feeling down in their mood. Depression varies from person to person, but there are some common signs and symptoms. Young persons will express their depression in many ways. Here is a list of few examples:

- Increased anger and frustration, misbehaviour with others.
- Feelings of hopelessness and helplessness.
- Irritability or restlessness.
- Easily become tearful.
- Prefers loneliness and avoids other people.
- Self-neglect
- Reduce interest or pleasure in activities previously enjoyed.
- Fatigue or loss of energy
- Reduced ability to think, concentrate, or make any decisions.
- Loss of sexual desire.
- Feelings of worthlessness or guilt.
- Poor appetite or eat too much.
- Tiredness and lack of energy
- Poor concentration in studies which result in poor performance in examinations.
- No wish to live anymore-thoughts of suicide.
- Preoccupation with thoughts of death.

Table 1.1: Age dependent psychopathological symptoms of depression (Mehler, Wex & Kolch, 2008, p.150)

Age Group	Psychopathological Symptoms
Toddlers	Restlessness, screaming; Unprompted crying attacks, Irritability, Agitation; Disinterestedness, Passivity, Apathy, Lack of expression; Reduced creativity, Imagination and Stamina Clinginess, Silliness; Auto stimulating behaviour
Pre-school children	Crying, Irritability, Aggressive and explosive outbreaks, Hypomania, reduced gestural activity/passive general motor response, Introversion, Lack of interest; Joylessness, Attention seeking behaviour, Low frustration tolerance, Aggressiveness, Delayed social and Cognitive developments.
School children	Crying, Defiant behaviour, Defence, Aggressive behaviours; Self-reported sadness, listlessness and Lack of drive, Disinterestedness, Withdrawal; Problem concentrating, Failure at school worries, Initial thoughts expressing tiredness of life; Attention seeking.
Adolescents	Apathy, Despair, Refusal, Lack of drive, Disinterestedness, Withdrawal; Thoughts and action showed down, Problem in performance/achievements, Cognitive impairments; Anxiety, Disgust, Lack of self-confidence, Self-reproachfulness, Brooding, Fear of the future, Suicidality.

*source: Mehler-Wex & Kolch, 2008, p.150.

Table 1.2: Age dependent somatic symptoms of depression (Mehler-Wex & Kolch, 2008, p.150).

Age Group	Somatic Symptoms
Toddlers	Disruptions to falling asleep/sleeping through because of insufficient self-calming strategies Eating disorders and refusal to eat accompanies by weight loss, increased proneness to infections.
Pre-school children	Regressive use of language; Delays in motor development sleeping and eating disorders secondary enuresis and encopresis.
School children	Sleeping and eating disorders Somatic complaints; Regressive behaviour.
Adolescents	Sleeping and eating disorders Psychosomatic complains Low morning mood; Early waking; Inability to relax and rest.

*Source: Mehler-Wex & M. Kolch, 2008, p.150.

The methods devised by DSM and ICD are commonly used to determine and identify depression (Sinha & Ghosal, 2015).

According to DSM-IV, depressive disorder can be identified as follows:

If depressive mood persists for more than 2 weeks along with any four of the following symptoms, then we can say that the person suffers from depressive disorder:

- Substantial change in body weight
- Considerable change in sleeping pattern
- Exhaustion and energy loss
- Retardation and agitation
- Feeling of senselessness and guilt
- Indecision and lack of concentration
- Continuous feeling of suicide

According to ICD-10, following symptoms indicate depressive disorder:

- What is the extent of sadness and for how many does it continue?
- Has he/she lost interest in daily activities?
- Does he/she become tired easily?

If the answer to these 3 questions is “yes”, then we need to see for the following symptoms:

- Whether he/she has lost self-confidence
- Whether he/she feels guilty for various things
- Whether lack of attention or concentration is seen or not
- Whether there is any problem in sleeping pattern
- Whether there is substantial change in eating habit and body weight
- Whether he/she is feeling disgust towards life

1.3 Causes of Depression

Depression is a very complex disease. It happens for variety of causes. It may occur due to bio-chemical deviations in the human brain and also genetic factors. But other environmental issues also play an important role for the causes of depression. More or less of the negative life experiences that may cause depression. Here are a few causes of depression, for example (Sinha & Ghosal, 2015):

- A severe illness
- A terminal disease
- A serious accident
- A serious loss, such as a loss of a job, house or money
- A divorce, separation or breakup of a relationship
- The death of a loved one
- Chronic physical pain

- Loss of hopefulness
- Being abused (violence, rape assault etc.)
- A loved one abused (child murder, child molestation, kidnapping, murder, rape, assault etc.)
- Physical abuse
- Verbal abuse
- Sexual abuse
- Unresolved abuse from the past
- Feeling “trapped” in a situation perceived as negative
- Feeling that things will never “get better”
- Feeling hopeless and helpless
- Serious legal problem, such as criminal prosecution or incarceration.
- Feeling “taken advantage of”
- Inability to deal with a perceived “humiliating” situation.
- Alcohol abuse
- A feeling of not accepted by family, friends or society.
- A horrible disappointment
- Feeling like one has not lived up to his or her high expectations otherwise of another.
- Bullying (adults as well as children can be bullied)
- Low self-esteem
- Trouble at home and change in family dynamics
- Difficulties at school/college and failure to getting a good grade
- Previous suicide attempt
- Family history of suicide
- Social isolation and neglect from family

1.4 Types of Depression

There is different type of depressive disorder:

Major depressive disorder: It is also known as *major depression* and it considered by a grouping of symptoms that affect with an individual's ability to sleep, study, eating, work, energy and interest or pleasure in activities. Major depression can sometimes occur from one generation to the next in family, but often it may affect people with no family history of the illness. Some common causes of major depression like, loss of a loved one through death, divorce or separation, social separation or feeling deprived, major life changes- moving, job change or retirement, personal conflict in relationship, physical, sexual or emotional abuse etc.

Persistent depressive disorder: Persistent depressive disorder also known as *dysthymia* disorder. It is a continuous long-term (two years or longer) from of depression. In many cases, major depression disorder may happen before or during persistent depressive disorder, hence sometimes it is also called *double depression* disorder. So many symptoms are included:

- Loss of interest in day-to-day activities
- unhappiness, emptiness or feeling down
- Hopelessness
- Tiredness and lack of energy
- Low self-esteem, self-criticism or feeling incapable
- Trouble concentrating and trouble making any decision
- Irritability or excessive anger
- Avoidance of all social activities
- Feelings of guilt and worries over the past
- Poor appetite or eat too much
- Sleep problems etc.

Psychotic Disorder: Under this condition, depression is accompanied by some sort of delusional behaviour or hallucination. In other words, the person starts hearing or seeing things which are not present in reality.

Postpartum Disorder: This disorder is common among new mothers whereby they panic at the thought of raising a new born baby. About 10-15% women suffer from such condition.

Seasonal Affective Disorder: This is caused mainly during winter as there is very less natural sunlight and the depression goes away when winter is over and spring or summer arrives. It is cured by a mixture of light therapy, psychotherapy and antidepressant medication.

Bipolar Disorder: Bipolar disorder is known as *manic depression*. It is not severe depressive or major depressive disorder. It is also called as mood disorder. It is involving cycles of depression and mania. When in the manic cycle, it affects individuals thinking, decision, and social behaviour. During the depression phase of bipolar disorder so many symptoms are including like, feel like you can't enjoy anything, have trouble focusing or remembering things, have a hard time building decisions, eat too little or too much.

1.5 Depression as the leading cause of suicide

Depression is one of the leading cause of suicide. In many times depressed persons are not getting enough energy to fight uncomfortable situations and challenges in life. They feel a complete helplessness, that compelled them to attempt suicide. Studies showed that an individual gives up to the discussion of problems they are drowned in, as they think themselves unable and incapable to fight. Out of the feeling that they have been victimized by the situation completely they desire to get read of disquiet,

and chooses the path of suicide, having the belief that, suicide may end their sufferings all at once, completely.

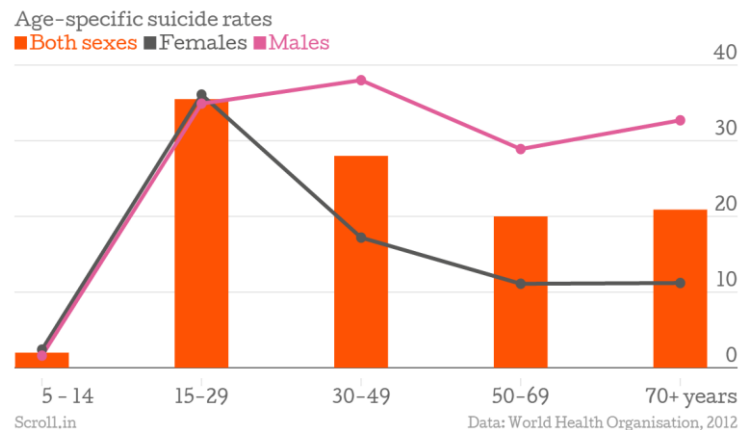
The prefix of suicide always need proper care and need to be jink with early interference for the ill and depressed individuals. This dreadful act, mostly out of depression, today is a threat to humanity, as everyone in this world has equal right to live, prosper and enjoy the pursuit of happiness.

1.6 Suicide in India

Growing population, Globalisation, competition, lack of privacy problems are some reasons that are progressively driving individuals to contemplate a step as extreme as suicide. Of the usual demography, the 20-something age group seems to be the maximum volatile of the lot (AASRA, 2019). Suicide is the leading preventable cause of mortality. Every year 8,00,000 people commit suicide all over the world (World Health Organization ,2012). Among 15-29 years olds over all the world suicide is the second leading causes of death. The prevalence of suicide is high in India. The national suicide rate is 21.1 as per 1 00 000 populations as per world health organization data 2012. Tamil Nadu (12.5% of all suicides), Maharashtra (11.9%) and West Bengal (11.0%) had the highest proportion of suicides (Suicides in India the Registrar General of India, Government of India, 2012). High literacy, better reporting system, higher economic status and higher expectations are implicated as possible causes (Ramanujam, et. al. 2017).

Suicide was the significant causes of death among young people aged 10 to 24 in the country, with 62,960 such death reported in 2013, according to the Lancet Commission on Adolescents Health and Well-being report. All over world accidents, self-harm (suicide), violence accounted for most deaths in this age group.

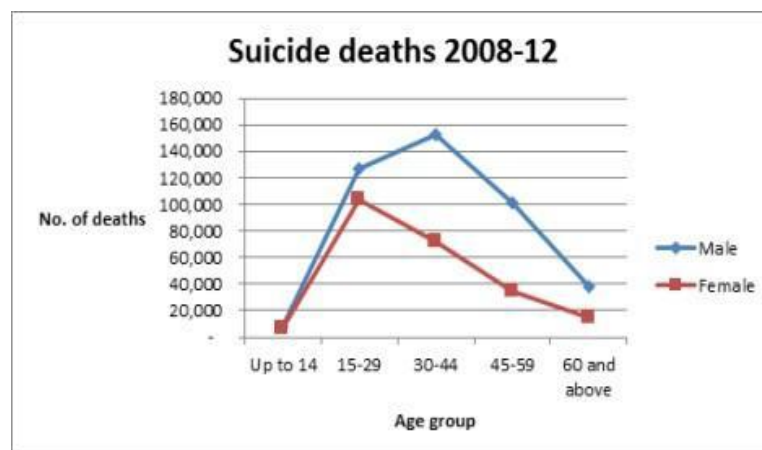
Figure 1.1 Age specific suicide rate



*Source: World Health Organization, 2012

In India the age- specific rate is as according to Crime Bureau Report, 2013:

Figure 1.2: Number of death for suicide



*Source: Crime Bureau Report, 2013

1.7 Depression Among School going Students from Deprived people

The social structure of our country has led to develop significant disparities among the different sections of the society in almost every aspects of living. People from backward classes, being deprived from the mainstream society for long time, have developed a sense of insecurity and disconnection in every spheres like education,

employment, rights and social status. Adolescents from these backward classes naturally enters the battleground of life having in mind those pre-occupied misconceptions of long deprivation by the society. Therefore, very little disappointment or failure is attributed by them as the continuation of their deprivation by the upper classes. It is seen in general, that they become very much vulnerable when exposed to catastrophes of life, and as a result either withdraw their effort or feel anxious, worried and lastly depressed. In this journey of preventing suicide through prevention of depression, the researcher found scarcity of significant studies on adolescents of the weaker section of society which is very ambiguous to generalize the actual causes and status of their depressed state of mind. The present study will be an effort for identifying the adolescents from the weaker section of society, suffering from depression, and a learned inquiry toward the underline causes of the same.

1.8 Operational Definitions

Depression: Here, depression indicates a drastic change in behavioural pattern for a prolonged time caused by feelings of sadness and or a loss of interest in activities ones enjoyed.

Scheduled Caste (SC): They are depressed sections of the Hindu societies who have suffered for long under social handicaps and thus need social protection and help for the amelioration of their social, economic and political condition.

Scheduled Tribe (ST): The “Scheduled Tribes” (as mentioned in article 342 of The Constitution of India) also known as aborigines are those backward section of the Indian population who still observe their tribal ways, their own peculiar customs and cultural rules. The tribal people have remained backward because of the fact they live

in unreachable or inaccessible forests and hilly areas and have thus been cut off from the main currents of national life.

References

- Addis, M. E. (2008). Gender and Depression in Men, American Psychological Association, *Wiley Periodicals*, 15 (3), 153-168.
- Bahls, S. C. (2002). Depression in childhood and adolescence: clinical features, *Journal de Pediatria*, 78 (5), pp. 359-266.
- Bansal, V., Goyal, S & Srivastava, K. (2009). Study of prevalence of depression in adolescents of a public school, *Indian Psychiatry Journal*, 18 (1), pp.43-46.
- Basu, G. & Biswas, S. (2017). Mental health and depression among school going adolescents: excerpts from a school based study on Nadia district, West Bengal, *Asian Journal of Medical Science*, 8 (5), pp. 64-69.
- Bhat, N.M. (2014). A study of emotional stability and depression in orphan secondary school students, *International Journal of Education and Psychological Research (IJEPR)*,3 (2), pp. 95-100.
- Bhowmik, D., Kumar, K. P. S., Srivastava, S., Srivastava, P. & Dutta, A. S. (2012). Depression- Symptoms, Causes, Medications and Therapies, *The Pharma Innovation*, 1 (3), pp. 37-51.
- Glied, S. & Pine, D. S. (2002). Consequence and Correlates, *American Medical Association*, 156, pp. 1009-1014.
- Goodwin, R. D. & Gotlib, I. H. (2004). Gender differences in depression: the role of personality factors, *Psychiatry Research*, 126, pp. 135-142.
- Goud, T.G., Ramesh K. & Kumar, K.P. (20014). Factor Associated with Depression among Adolescents, *Research and Reviews: Journal of Medical and Health Science*, 3(4), pp 73-76.
- Govt. of India (2012) Suicides in India the Registrar General of India.

- Gupta, R. & J, N. (2017). Prevention of Suicide, *Indian Journal of Social Psychiatry*, Wolters Kluwer – Medknow, 33 (2), pp. 139-141.
- Hammen, C. (2009). Adolescents depression stressful interpersonal contexts and risk for resource, *Association for Psychological Science*, 18 (4), pp.200-204.
- Krishnaveni, Y. S., Prakash B., Kulkarni, P. & Narayanamurthy, M. R. (2018). Prevalence and factors associated with depression and anxiety among students of backward community and minority girl's hostels of Mysuru city, *International Journal of Community Medicine and Public Health*, Medip Academy, 5(3), pp 1075-1081.
- M, Bhandari. (2016). Anxiety and depression among adolescents' students at higher secondary level, *A Multidisciplinary Journal of Science, Technology and Mathematics*, Research Council of Science and Technology, Biratnagar, Nepal, 14, pp.103-109.
- Mehler Wex, C. & Kolch, M. (2008). Depression in Child and Adolescents, *Dtsch Arztebl Int*, 105 (9), pp. 144-55.
- Nair, M. K. C., Poul, M. K. & John, R. (2004). Prevalence of depression among adolescents, *Indian Journal of Pediatrics*, 71 (6), pp.523-524.
- Patil, A. S. (2015). Depression among adolescents: A cross sectional study, *International Journal of Current Research and Academic Review*, 3 (2), pp. 183-186.
- Petersen, A. C., Compas, B. E., Gunn, J. B., Stemmler, M., Ey, S. & Grant, K. E. (1993). Depression in Adolescence, *American Psychological Association*, 48 (2), pp. 155-168.
- Preeti, B., Singh, K. & Kumar, R. (2017). Study of Depression, Anxiety and Stress Among School Going Adolescents, *Indian Journal of Psychiatric Social Work*, 8(1), pp. 6-9.

- Radhakrishnan, R. & Andrade, C. (2012). Suicide: An Indian perspective, *Indian Journal of Psychiatry*, Indian Psychiatric Society, 54 (4), pp. 304-319.
- Ramanujam, G., Rahuman, A. & Mahalakshmi, R. (2017). Prevalence of depression among who attempt suicide, *International Journal of Research in Medical Sciences*, 5 (9), pp. 4108-4111.
- Sharan, P. & Sagar, R. (2007). Mental Health policy for children and adolescents in developing countries, *J. Indian Assoc. Child Adoles. Ment. Health*; 3 (1), pp.1-4.
- Sharma, G. & Pandey, D. (2017). Anxiety, Depression and Stress in relation to Academic Achievement among Higher Secondary School Students, *The International Journal of Indian Psychology*, REDSHINE Publication, 4(2), pp 82-89.
- Sharma, P & Kirmani, M.N. (2013). *Exploring depression & anxiety among college going students*, *International Journal of Science and Research(IJSR)*, 4(6), pp. 528-532.
- Sinha, M. & Ghosal, C. C. (2015): *School-Portrayal of Manashik Swasta Samashya*, Pragatishil Publishers, ISBN- 978-81-89846-66-4.
- Wani, M.A., Sankar, R., Rakshantha, P., Nivatha, A.L.S., Sowparnika C.E. & Marak L.D.B. (2016). *International Journal of Education and Psychological Research (IJEPR)*, 5 (3), pp. 45-49.
- WHO, (2012). *Suicide Prevention (SUPRE)*.
- World Health Organization (2013). *Caring for children and adolescents with mental disorder*, Geneva: World Health Organization.
- www.aasra.info
- Zartaloudi, A. (2011). What is men's experience of depression, *Health Science Journal*, 5 (3), pp.182-187.

CHAPTER – II : THE PROBLEM OF THE STUDY

2.1 : Review of Related Literature

2.1.1 : Indian Studies

2.1.2 : Studies in Other Countries

2.2 : The Statement of the Problem

2.3 : Delimitation of the Study

2.4 : Objectives of the Study

2.5 : Hypotheses of the Study

References

CHAPTER- II

THE PROBLEM OF THE STUDY

2.1 Review of Related Literature

Research takes advantages of the knowledge which has been accumulated in the past as a result of continuous human endeavour. It is not feasible to be undertaken in isolation of the work that has already been done on the problem which are directly or indirectly related to a study purposed by a researcher. A careful review of the research journal, book, dissertation, thesis and other sources of information on the problem to be investigated is one of the most essential steps in the planning of any research study. A review of the related literature must precede any well planned research study. Review of the related literature; beside, allows the researcher to acquaint himself with current knowledge in the field or area in which he going to conducted his research (Koul, 2009).

For this purpose, contemporary studies on Depression among the SC and ST students at higher secondary level in Jalpaiguri district conducted in West Bengal (India) is reviewed to specify the present research problem. The reviews of related literature are below:

2.1.1 Indian Studies

Man Mohan Singh, Madhu Gupta and Sandeep Grover (August 2017) conducted a research entitled as **“Prevalence & factors associated with depression among school going adolescents in Chandigarh, north India”**. In this study based on cross-sectional method and the researcher 542 randomly selected school going adolescents (13-18 yr.), from eight school by multistage sampling technique. Depression was assessed by using Patient Health Questionnaire-9 (PHQ-9) and associated factors by pretested

semi structured interview schedule. The result show that a significant proportion of school going adolescents suffered from depression. The presence of depression was associated with a large number of modifiable risk factors.

Kunal Kishor Jha, Satyajeet Kumar Singh, Santosh Kumar Nirala, Chandramani Kumar, Prays Kumar, Neeraj Aggarwal (2018) conducted a study entitled as **“Prevalence of Depression among School going Adolescents in an Urban Area of Bihar, India”**. This study was conducted on 1412 students to find out the prevalence of depression and its associated sociodemographic factors among school going adolescents in an urban area of Patna, Bihar. Here the researcher self-administered questionnaire of Beck Depression Inventory II was used to measure the prevalence of depression. The result shows that the prevalence of depression was found to be 49.2%, wherein the prevalence of severe depression was 7.7%. the overall prevalence of depression was significantly ($P < 0.001$) higher among girls (55.1%) than boys (45.8%). The prevalence of depression was found to be higher among students belonging to minorities (Buddhism, Jainism, etc.) (63.3%, $P > 0.001$). Elder students were found to be more depressed than younger students and depression was found to be statistically significantly associated with gender and religion ($P > 0.005$). Guilty feeling (69.48%) was one of the supreme prominent clinical issues associated with depression followed by pessimism (58.14%), sorrow (56.52%) and previous failure (55.81%).

Lodha Rama, Seema Patel, Surbhi Maata, Priyanka Negi, Pal D K and Lodha Krishna Murari (2016) conducted a research entitled as **“Prevalence of Depression among Higher Secondary School Adolescents in Bhopal Madhya Pradesh”**. A total of 136 students were included in this study and data was collected by standard tool BDI and some general questionnaire. The researcher found that 60 (44.1%) of study participants were found to have score corresponding to mild degree of depression and 33 (24.3%) were suffering from moderate depression whereas 3% were suffering from severe depression.

P Jayanthi, M Thirunavukarasu and Rajamanickam Rajkumar (2015) conducted a study in Tamil Nadu on **“Academic Stress and Depression among adolescents: A crass-sectional study”**. In this study 1120 students were included and data was collected by standard tool Beck Depression Inventory(BDI). The results indicated that adolescents who had academic stress were at 2.4 times (95% CI=0.9-2.4) ($p<0.001$) higher risk of depression than adolescents without academic stress. Adolescents with severe academic pressure need to be identified early as interventions to decrease academic stress is likely to effect the occurrence and severity of depression.

Vandana Sharma. et al. (2014) conducted a research entitled as **“Prevalence of Depression among Adolescents: A comparative Analysis”**. This study 300 adolescents were selected from Government model secondary schools of Chandigarh by using stratified random sampling technique and Beck Depression Inventory-II (Beck, Steer & Brown, 1996) was used to measured depression. The results indicated 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.

Nirpal Kaur Shukla, Mukesh Shukla, Siraj Ahmad, Ram Shukla and Zainab Khan. et. al. (2017) conducted a study on **“A cross-sectional study on depression among school going adolescents’ girls in Barabanki district, Uttar Pradesh, India”**. In this study, out of 336 adolescent girls screened, 18.7% were found positive in depressive characteristics. Lower socio- economic status was found as one of the independent predictor of depression. Girls belonging to lower socio-economic groups were more susceptible for depression. The researcher 6- item Kutcher Adolescent Depression Scale (KADS) using to measure the depression.

Urmila K.V., Usha K., Mohammed M.T.P, Kavitha Pavithran et. al. (2017) conducted a study on **“Prevalence and risk factors associated with depression among higher secondary school students residing in a boarding school of north Kerala, India”**. This study based on cross-sectional observation and conducted among 130 students

residing in boarding school of North Kerala. In this study the researcher found that the prevalence of clinically significant depression was seen in 57.7% and the prevalence was more in those attending the tuition class ($p = 0.0068$). Depression was more in girls and still higher in girls who attended the tuition classes ($p = 0.035$). There was a significant correlation between the prevalence of depression and stream of subjects selected ($p = 0.001$).

Nimal Verma, Meeta Jain, Pritam Roy (2014) conducted a study on “**Assessment of magnitude and grades of depression among Adolescents in Raipur City, India.**” In this study, school going adolescent of class 12th in Raipur city, India over a sample of 321 students found that 40.49% students were found to be mildly depressed and 19% had major depression. Depression was found more in females 59.49% as compare to male 56.24%. The percentage of depressed students was highest among students of I.C.S.E. board (48.33). Depression measured by using Centre for epidemiological studies- depression scale (CES-D). Among many factors observed for association with depression, statistically significant factors identified were working mothers, students staying away from home, poor relationship with family and self or parental dissatisfaction with academic achievement. Peer pressure also had significant association. Having a hobby acted as a protection against depression.

T Gangadhara Goud, Ramesh K, K Pravan Kumar (2014) conducted a study entitled as “**Factor Associated with Depression among Adolescents**”. In Bellary district in Karnataka, over 1275 students revealed that the prevalence of depression found that 827 (64.9%) students were depressed and remaining 448 (35.1%) students were without any depressive symptoms. It was found that out of 552 students up to the age of 19 years, 337 (61.1) of them were depressed and 215 (38.9%) of them were normal, among 723 students aged above 19 years, 490 (67.8%) of them showed depressive symptoms and 233 (32.2%) of them showed no depressive symptoms. Among 731 males found that 463 (63.3%) of them were depressed and 268 (36.7%) of them without

any depressive symptoms and among 544 females 364 (66.9%) of them were depressed and remaining 180 (33.1%) of them were normal.

Bisla Preeti, Kuldeep Singh, Raj Kumar (2017) conducted a study entitled as **“Study of Depression, Anxiety and Stress Among School Going Adolescents”**. In this study the researcher conducted on 200 adolescent students. DASS (Hindi Version) was used for data collection. The results indicated that on these adolescents at high risk of developing depression and anxiety disorder and depression was significantly more among the female students than the male students. Adolescents were stress need to be identified early and interventions to decrease academic stress needs to be provided that which are probable to effect the incidence and severity of depression and anxiety.

Krishnaveni Y. S., Prakash B., Praveen Kulkarni, Narayanamurthty M. R. (2018) conducted a study entitled as **“Prevalence and factors associated with depression and anxiety among students of backward community and minority girl’s hostels of Mysuru city”**. In this study the researcher conducted on 353 students and to find out factors influencing mental health in hostel students, and its effects in their daily life which will help hostel supervisors, parents and teachers to deal with students and help to reach maximum progress in their academics. In this research the data were collected using validated questionnaire (PHQ 9 for depression and GAD7 for anxiety). The result show that 245 (69.4%) students were depression and anxiety was found in 222 (62.8%) students. Depression and anxiety were more predominant in adolescent students and are associated with socioeconomic situation of students and reproductive health.

Gouri Sharma and Dr. Deepak Pandey (2017) conducted a study entitled as **“Anxiety, Depression and Stress in relation to Academic Achievement among Higher Secondary School Students”**. In this study the researcher conducted on 120 (60 boys & 60 girls) to find out the prevalence of relationship among anxiety, stress, depression and academic achievements. Here the researcher ADSS (anxiety, depression and stress scale) was used to measure the anxiety, depression and stress among the students. The

result shows that significant negative association between depression and anxiety for criterion variable academic achievement and other hand stress and academic achievement found to be significant positive association with each other.

Mohammad Amin Wani, Dr. R. Sankar, Rakshanatha. P, Nivatha A.L.S, Sowparnika C.E, Marak L. D. B (2016) conducted a study entitled as **“Stress Anxiety and Depression among science and arts students”**. In this study 260 students were selected were 130 boys and 130 girls. Level of stress, anxiety and depression was measured by Depression Anxiety Stress Scale (DASS) constructed by Lovibond & Lovibond (1995). The result indicated that girl students are likely to to stress, anxiety and depression than boys as they have high percentage in all three areas than boys. Similarly, science students have high level of stress, anxiety and depression than arts students. The results also revealed both gender and faculty have significant effect on stress, anxiety and depression as all found ‘F’ ratio’s was to be found significance.

Preeti Sharma and Mustafa Nadeem Kirmani (2013) conducted a research entitled as **“Exploring Depression & Anxiety among College going Students”**. In this study the sample consisted of 218 undergraduate and post graduate students pursuing professional and non-professional courses from one of the State university of Bangalore City (boys- 123 and girls- 95). Here the researcher used Beck Depression Inventory and Beck Anxiety Inventory to measure depression and anxiety. The result show that girls more depression and anxiety in comparison to boys and also professional students showed more symptoms of depression and anxiety than non-professional students.

Nasir Mohammad Bhat (2014) conducted a research entitled as **“A study of Emotional Stability and Depression in Orphan Secondary School Students”**. In this present study consists of 210 secondary school students (131 Orphan) and (79 non-Orphan) taken from different school and orphanages. Here the researcher purposive sampling techniques was used for the research purpose. The researcher mental health scale used that developed by Alpana Sen Gupta and Arun Kumar Singh (1983) and

for depression Beck Depression Inventory were used to measured depression. The result show that significant difference in the emotional stability and depression level between the two groups. Orphans were found that the lower side of emotional stability and higher level of depression as compared to their counterpart non- orphans secondary school students.

Shelke Umesh S, Kunkulol Rahul R, Phalke Vaishali D, Narwane Sandeep P, Patel Prashant C (2014) conducted a research entitled as **“Study of Depression among Adolescent students of Rural Maharashtra and its Association with Socio-demographic Factor: A cross-sectional study”**. This study based on cross- sectional survey research and consists 300 students (30 of either sex from 8th to 12th class) and data was collected 6 item KADS (Kutcher Adolescents Depression scale). The result that 6.66% of students were positive for depression and no statistical difference was found in number of students with depression with respect to gender, class of students and socioeconomic status.

M. K. C. Nair, Mini K. Paul, Ramany John (2004) conducted a research entitled as **“Prevalence of Depression among adolescents”**. In this study the researcher selected adolescents age group of 13 to 19 belonging to school / college students and school dropouts. Here the researcher Beck Depression Inventory (BDI) was used for measured the depression. The result indicated that 11.2% of school dropout students had severe depression and extreme grades of depression as against 3% school going student and nil among college going adolescents.

Shailendra Kumar Mishra, Mona Srivastava, Narendra K Tiwary, Abhinit Kumar (2018) conducted a study entitled as **“Prevalence of depression and anxiety among children in rural and suburban areas of Eastern Uttar Pradesh: A cross sectional study”**. In this study the researcher conducted on 200 adolescent students and to assess and compare the prevalence of depression and anxiety among children residing in rural and suburban area of Eastern Uttar Pradesh. Here the researcher Children’s Depression Inventory and Revised Children’s Manifest Anxiety scale were used for

measured depression and anxiety. The result show that depression was found to be 14.5% while that of anxiety disorder were found to be 15% and there was no significant difference in the prevalence of depression or anxiety in rural and suburban areas.

Neetu Beniwal, Gajender K. Verma, Chander K. Chahar, K. K. Verma (2016) conducted a research entitled as **“To study the prevalence of depression and effect of home environment on depression among school going children”**. In this study 1200 children were selected to find out the prevalence of depression in school going children and effect on home environment on depression of Bikaner, Rajasthan. School children included in the study were selection tool CES-DS to pick up the likely cases of depression and final analysis of M.D.D. was made according to DSM-IV-TR norms. In this study, the result show that prevalence of depression was found 2.33% in 6-12-year-old children. Depressed children were showed very high level of social separation, deprivation of privileges, rejection and punishment in their home environment.

Vivek Bansal, Sunil Goyal and Kalpana Srivastava (2009) conducted a research entitled as **“Study of prevalence of depression in adolescents of a public school”**. In this study 125 students were selected to find out the prevalence of depression among adolescents’ students of a public school. In this study the researcher measured depression by GHQ-12 and BDI. The result show that 15.2% of children were distress (GHQ-12 score e “14; 18.4% depressed (BDI score e “12); 5.6% adolescents were positive score both the instruments.

2.1.2 Studies in Other Countries

M. Bhandari et. al. (2016) This study 100 sample was selected among male female students (50/50) from arniko higher secondary school which is located in Biratnagar Municipality of Morang District, Nepal. Beck depression Inventory (BDI) and Beck Anxiety Inventory (BAI) tools were used researcher for the data collection. This study

found that significant correlation between total depression and total anxiety score ($p = 0.000$). The study also indicated that the depression and anxiety were significantly associated with structure of family ($p = 0.005$ & $p = 0.015$). Also the depression and academic performance of students was significantly associated ($p = 0.030$) and the major accident in the family ($p = 0.009$). Similarly, the parental fight and anxiety was significantly associated ($p = 0.007$), conflict with father ($p = 0.009$) and death of family member ($p = 0.016$).

Maharj et al. (2008) conducted a research entitled as **“Depression among Adolescents, aged 13-19 Years, attending Secondary schools in Trinidad Prevalence and Associated Factors”**. In this study, 1290 students participated, in this study the response rate of 79.6%; 43% students aged 13-15 years; 53.6% students were Indo-Trinidadians; 82.5% students were attending co-educational schools and 70.6% lived with both parents. The prevalence of depression was found 25.3% \pm 2.37%. Chi-square analysis found that statistically significant associations between depression and the categories of students age, gender, living arrangements and type of school and here the researcher depression was measured by used Beck Depression Inventory (BDI).

Dr. Noora Al-Kaabi, Dr. Nagah Abdel Aziz Selim, Dr. Rajvir Singh, Dr. Himad Almudahka and Dr. Mansoura Salem (2017) conducted a research entitled as **“Prevalence and Determinants of depression among Qatari adolescents in Secondary Schools”**. In this study conducted 823 Qatari adolescent students were selected of which 797 students agreed to participated giving a response rate of 96.8%. In this study, the researcher using a self-Arabic version of Beck Depression Inventory – II (BDI=II) to measure the depression. This study indicated that almost one third of Qatari adolescent students in secondary schools have 34.5% depression, female adolescent students was more depression than male students. Bad relationship with friends, parents and teachers were the most significant predictors of depression (OR= 14.0, 95%CI = 1.55-124), (OR = 9.4, 95%CI= 1.04-85.4), (OR= 5.0, 95%CI= 1.41-16.26) consecutively.

M Ramli et al. (2008) conducted a study entitled as **“Depression among Secondary School students: A comparison between Urban and rural Populations in Malaysian Community”**. In this study selected among 2048 school going children in the state of Selangor, Malaysia in 2008 and were the level of depression measured by a self – rated scale- the Children Depression Inventory. In this study, the researcher found that the prevalence of possible depression in these students was 10.3% and there was no difference in the prevalence of significant depressive symptoms between rural and urban school children. The factor associated with depression were being female, Chinese, parents with their low education level, stealing, and alcohol abuse ($p < 0.001$). Depression were contributed significantly to suicidal tendencies ($p < 0.001$).

J Kaur et al. (2014) conducted a research entitled as **“Prevalence of Correlates of Depression Among Adolescents in Malaysia”**. In this study 28738 school going adolescent were selected to participated in the survey in Malaysia and data was collected Malaysia Global School- based health survey (GSHS) 2012 and the researcher were analysed with additional data from the validated DASS2 (Depression, Anxiety and Stress) questionnaire. The result show that the overall prevalence of depressive symptoms was 17.7%, with higher amounts among adolescents of Indian (30.0%) and Chinese (20.2) decent compared with other ethnicities and among adolescents whose parents married and living together (16.7%), had a significant lower percentage of depressive symptoms related with other types of parental marital status.

Mehmet ESKiN, Kamil ERTEKiN, Hacer HARLAK, Cigdem DEREBOY (2008) conducted a research entitled as **“Prevalence and factors Related to Depression in High School Students”**. In this study, a total of 805 (n=367 girls, n=438 boys) first year students from three high schools in the city of Aydin filled in a self-made questionnaire that contained questions about socio-demographics, academic achievement and religious belief. Result show that the depression is very high mong school going students. Low self-esteem, low perceived social support from peers or

friends and family, and inefficient problem solving skill appears to be risk factors for adolescent depression.

Gitanjali Saluja, Ronaldo Iachan, Peter C. Scheidt, Mary D. Overpeck, Wenyu Sun (2004) conducted a research entitled as **“Prevalence of and Risk Factor Depressive Symptoms Among Young Adolescents”**. In this study, among 9863 school going children in the United States and data was collected school based survey self-administered questionnaires in grades 6, 8, and 10 (average age 11, 13 and 15). The result indicated that 18% adolescents reported symptoms of depression. A maximum proportion of female (25%) showed depressive symptoms than males adolescent (10%). Among American Indian youth 29% showed depressive symptoms, as compared with 22% Hispanic, whereas 18 % of white, 17 % of Asian American, and 15% of African American adolescences.

Daniel P. Chapman, Charles L. Whitfield, Vincent J. Felitti, Shanta R. Dube, Valerie J. Edwards, Robert F. Anda (2003) conducted a research entitled as **“Adverse childhood experiences and the risk of depressive disorders in adulthood”**. In this study, the researcher 9460 adult selected to find out the association between the number of such experiences (ACE score) and the risk of depressive disorders. The result show that lifetime prevalence of depressive disorders was 23%. Childhood emotional misuse increased risk for depressive disorders, and adjusted odds ratios (ORs) of 2.7 {95% confidence interval (CI), 2.3-3.2} in female and 2.5 (95% CI, 1.9-3.2) in male. In this study, the researcher found that a strong, does- response relationship between the ACE score and the possibility of lifetime and current depressive disorders ($p > 0.0001$). The number of ACEs has a measured relationship to both lifetime and depressive illnesses.

2.2 Statement of the Problem

Mental illness in the form of depression among adolescents is emerging as a threat to societies across the world. The contemporary studies on depression among the SC and ST students at higher secondary level in India as well as in West Bengal indicated that there are certain geographic locations of the state which have been left unattended under this concern. Although, improvement of the situation of depression and sense of deprivation among the backward class peoples is one of the top social agenda in India for the last several years, nominal improvements were made, that has been identified by the previous researchers. Therefore, in light of the overwhelming concern for mental health and wellbeing among the adolescents across the country, a significant knowledge gap is noticed.

After reviewing the available literatures on depression of adolescents from the backward classes of society, the following research questions emerged in researcher's mind:

- I. What is the rate of prevalence of depression among the SC and ST students at higher secondary level in Jalpaiguri District?
- II. Do demographic factors have serious effect on the prevalence of depression among the SC and ST students at higher secondary level in Jalpaiguri District?

In view of the identified research questions and the conclusion of previous literatures, the present problem has been narrowed down as “**Depression Among the SC and ST Students at Higher Secondary Level in Jalpaiguri District**”.

2.3 Delimitation of the Study

The present study was delimited to the following

1. The sample of this study consisted of the students belongs to age group of 14 to 18 years.

2. In this study, only 426 SC and ST school going students have been studied.
3. The sample group of students were studying between classes IX to XI.
4. The study was delimited to measurement of only depression as a dependent variable.
5. The data were collected were from 9 Bengali medium schools.
6. The sample of the study were collected from the schools of Jalpaiguri district covering both urban and rural locations.
7. The type of school was delimited to only government school.

2.4 Objectives of the Study

In view of the basic research questions and delimitation of the study, the following objectives were identified:

1. To know the existing status of depression among the SC and ST students at higher secondary level in Jalpaiguri district.
2. To find out the effect of different socio-academic variables i.e. Gender, Caste, class, family structure, number of siblings, father's education, mother's education, family income and location of the school on depression of the SC and ST students.
3. To make SC and ST students aware of the phenomena of 'depression' and prepare a guideline for their parents and teachers in order to identify and manage the same.

2.5 Hypotheses of the Study

In view of the basic research questions and objective of the study, the following Null-hypotheses were formulated.

H₀₁: There is no significant difference in depression among the SC and ST students with respect to their gender.

H₀₂: There is no significant difference in depression among the SC and ST students with respect to their category of Caste.

H₀₃: There is no significant difference in depression among the SC and ST students with respect to their locality of school.

H₀₄: There is no significant difference in depression among the SC and ST students with the respect to their Structure of family.

H₀₅: There is no significant difference in depression among the SC and ST students with respect to their Number of Siblings.

H₀₆: There is no significant difference in depression among the SC and ST students with the respect to their class.

H₀₇: There is no significant difference in depression among the SC and ST students with the respect to their education of father.

H₀₈: There is no significant difference in depression among the SC and ST students with respect to their education of mother.

H₀₉: There is no significant difference in depression among the SC and ST students with respect to their family income.

References

- Al-Kaabi, N., Selim, N.A.A., Singh, R., Almudahka, H. & Salem, M. (2017). Prevalence and Determinants of depression among Qatari adolescents in Secondary Schools, *Family Medicine and Medical Science Research*, Med Science Research, 6(3), pp.1-8.
- Alotaibi, T. (2015). Combating anxiety and depression among school children and adolescents through student counselling in Saudi Arabia, *Procedia Social and Behavioural Sciences*, Elsevier, 205, pp.18-29.
- Bansal, V., Goyal, S & Srivastava, K. (2009). Study of prevalence of depression in adolescents of a public school, *Indian Psychiatry Journal*, 18 (1), pp.43-46.
- Beniwal, N., Verma, G.K., Chahar, C.K. & Verma, K.K. (2016) To study the prevalence of depression and effect of home environment on depression among school going children. *International Journal of Contemporary Pediatrics*, Medip Academy Publication, 3(3), pp.988-992.
- Bhat, N.M. (2014). A study of emotional stability and depression in orphan secondary school students, *International Journal of Education and Psychological Research (IJEPR)*,3 (2), pp. 95-100.
- Creswell, J.W. (2018). Educational Research (4th edition), Pearson India Education Services Pvt. Ltd.
- Eskin, M., Ertekin, K., Harlak, H. & Dereboy, C. (2008). Prevalence and factors Related to Depression in High School Students, *Turkish Journal of Psychiatry*, 19 (4), pp.1-8.
- Gay, L. R., Mills, G. E. & Airasian, P. W. (2012). Educational Research Competencies for Analysis and Application (10th Edition), Pearson Education, Delhi.

- Goud, T.G., Ramesh K. & Kumar, K.P. (20014). Factor Associated with Depression among Adolescents, *Research and Reviews: Journal of Medical and Health Science*, 3(4), pp 73-76.
- Jayanthi, P., Thirunavukarasu, M. & Rajkumar, R. (2015). Academic Stress and Depression among adolescents: A crass-sectional study. *Indian Pediatrics*, Indian Academy of Pediatrics Publication, 52(3), pp.217-219.
- Jha, K. K., Singh, S. K., K., Nirala, S.K., Kumar, C., Kumar, P. & Aggarwal, N. (2017). Prevalence of Depression among School going Adolescents in an Urban Area of Bihar, India. *Indian Journal of Psychological Medicine*, Wolters Kluwer Madknow Publication, 39(3), pp.287-292.
- Kaur, J., Naidu, B. M., Manickam, M. A., Ibrahim, N. & Rosman, A. (2014). Prevalence and Correlates of Depression among Adolescents in Malaysia, *Asia- Pacific Journal of Public Health*, 26 (5), pp.53-62.
- Koul, L. (2009). *Methodology of Educational Research (4th Edition)*, Vikas Publishing House Pvt. Ltd
- Krishnaveni, Y. S., Prakash B., Kulkarni, P. & Narayanamurthy, M. R. (2018). Prevalence and factors associated with depression and anxiety among students of backward community and minority girl's hostels of Mysuru city, *International Journal of Community Medicine and Public Health*, Medip Academy, 5(3), pp 1075-1081.
- M, Bhandari. (2016). Anxiety and depression among adolescents' students at higher secondary level, *A Multidisciplinary Journal of Science, Technology and Mathematics*, Research Council of Science and Technology, Biratnagar, Nepal, 14, pp.103-109.

- Maharaj, R. G. (2008). Depression among adolescents, aged 13-19 years, Attending Secondary School in Trinidad prevalence and Associated Factors, *West Indian Med Journal*, 57 (4), pp.352-359.
- Mangal, S.K. (2004). Statistics in Psychology and Education, 2nd Edition: *PHI Learning Private Limited*, ISBN-978-81-203-2088-8.
- Preeti, B., Singh, K. & Kumar, R. (2017). Study of Depression, Anxiety and Stress Among School Going Adolescents, *Indian Journal of Psychiatric Social Work*, 8(1), pp. 6-9.
- Rama, L., Patel, S., Maata, S., Negi, P., Pal, D.K. & Murari, L.K. (2016). Prevalence of Depression among Higher Secondary School Adolescents in Bhopal Madhya Pradesh. *National Journal of Community Medicine*, MedSci Publication, 7(11), pp.856-858.
- Ramili, M., Adlina, S., Suthahar, A., Edarish, A. B., Ariff, F. M., Narimah, A. H. H., Nuraliza, A. S., Fauzi. & Karuthan, C. (2008). Depression among secondary school students: A comparison between Urban and Rural Population in a Malaysian Community, *Hong Kong college of Psychiatrists*, 18 (2), pp.55-61.
- Sharma, G. & Pandey, D. (2017). Anxiety, Depression and Stress in relation to Academic Achievement among Higher Secondary School Students, *The International Journal of Indian Psychology*, REDSHINE Publication, 4(2), pp 82-89.
- Sharma, P & Kirmani, M.N. (2013). *Exploring depression & anxiety among college going students*, *International Journal of Science and Research(IJSR)*, 4(6), pp. 528-532.
- Sharma, V. (2014). Prevalence of Depression among Adolescents: A comparative Analysis. *Paripex- Indian Journal of research*, 3(6), pp.53-55.
- Shukla, N.K., Shukla, M., Ahmad, S., Shukla, R. & Khan, Z. (2017). A cross-sectional study on depression among school going adolescents' girls in Barabanki

district, Uttar Pradesh, India, *International Journal of Contemporary Pediatrics*, Medip Academy Publication, 4(1), pp 178-181.

Singh, M.M., Gupta, M. & Grover, S. (2017). Prevalence & factors associated with depression among school going adolescents in Chandigarh, north India. *Indian Journal of Medical research*, Wolters Kluwer Madknow Publication, 146(2), pp.205-215.

Singh, Y. K. (2006). *Fundamental of Research Methodology and Statistics*, New Age International (P) Limited, ISBN: 978-81-224-2418-8.

Urmila, K.V., Usha. K., Mohammed M.T.P & Pavithran, K. (2017). Prevalence and risk factors associated with depression among higher secondary school students residing in a boarding school of north Kerala, India, *International Journal of Contemporary Pediatrics*, Medip Academy Publication, 4(3), pp 735-740.

Verma, N., Jain, M. & Roy, P. (2014). Assessment of magnitude and grades of depression among Adolescents in Raipur City, India, *International Research Journal of Medical Sciences*, International Science Community association,2(5), pp 10-13.

Wani, M.A., Sankar, R., Rakshntha, P., Nivatha, A.L.S., Sowparnika C.E. & Marak L.D.B. (2016). *International Journal of Education and Psychological Research (IJEPR)*,5 (3), pp. 45-49.

CHAPTER – III : METHODOLOGY AND PROCEDURE

3.1 : Method

3.1.1 : Study Design

3.1.2 : Study Population and Sample

3.1.3 : Variables

3.1.4 : Tools

3.2 : Procedure

3.2.1 : Collection of Data

3.2.2 : Data Quality

3.2.3 : Tabulation of Data

3.2.4 : Statistical Analysis

References

CHAPTER-III

METHOD AND PROCEDURE

The system of collecting data for research project is a vital segment of research methodology. It is a way to systematically solve the research problem. It also describes the development of necessary tool for data collection. This chapter is based on theme of method study, design, sample, variables, tools, procedure, collection of data, and tabulation of the data. The present chapter of the design and procedure under the following sub-heads.

3.1 Method

The present study was conducted in Jalpaiguri district of West Bengal to find out the depression among the SC and ST students and impact of various demographic variable. For this purpose, an intensive survey was conducted in higher secondary schools located in Jalpaiguri district. Nine schools were selected randomly (4 schools in urban areas and 5 in rural areas) from Jalpaiguri district of West Bengal. The purpose of the study was to find out the rate of prevalence of depression among the SC and ST students at higher secondary level.

3.1.1 Study Design

The present study was conducted on cross sectional survey research framework. Survey research design is a procedure in quantitative research in which investigation administers a survey to a sample or to entire population of people in order to describe attitude, opinions, behaviours or characteristics of the population (John, 2005). In this procedure the researcher collected quantitative and qualitative data using a questionnaire and then statistically analysed the data to describe trends of the population or to test the research hypotheses. The results of the statistical tests thus obtained were compared with previous findings of researches which are similar in nature to draw meaningful inferences and predictions. In this study, the survey

research design was used because it was felt that it is an appropriate technique for collecting information in the form of qualitative data about depression on the basis of different categories of independent variable for the study from a large population involving respondents belonging to different backgrounds.

Within the broad framework the present study design makes an effort to search answer to the two basic research question in light of the following questions -

1. What are the rates of prevalence of depression among the SC and ST students at higher secondary level in Jalpaiguri district?
2. What are the differences of depression between boys and girls?
3. What are the rates of prevalence depression between scheduled castes and scheduled tribes students?
4. What are the differences of depression between rural & urban school going children?
5. What are the difference of depression among school going children between nuclear and joint family?
6. What are the rates of prevalence depression among the different number of siblings of school going children?
7. What is the rate of prevalence depression among the different class of SC and ST school going children?
8. What are the difference of depression level among the school going students with respect to their father's education?
9. What is the difference of the rate of prevalence depression level among the SC and ST school going students with respect to their mother's education?
10. What is the difference rate of prevalence depression level among the school going students with respect to their family income?

3.1.2 Population and Sample

Population:

Students studying in class IX to XI in Bengali medium schools affiliated under the West Bengal Council of Higher Secondary Education (WBCHE) were the target population for the study. The students were roughly from the age group of 14 to 18 years old. The map showing location of the population area is given in figure 3.1.

Figure 3.1: Map showing the location of population area.



Sample

A good number of the sample representing the population are required to collect information from the target population and accordingly chosen from Jalpaiguri districts. The study was conducted on a total participant of 426 students (N=426) studying in class IX to class XI in Bengali medium schools conducted by the West Bengal Council of Higher Secondary Education (WBCHSE). The figure 3.2 showing the map at the sample drawn to the study and the table showing distribution of sample is given in table 3.1

Figure 3.2: Map showing the location of sample area.

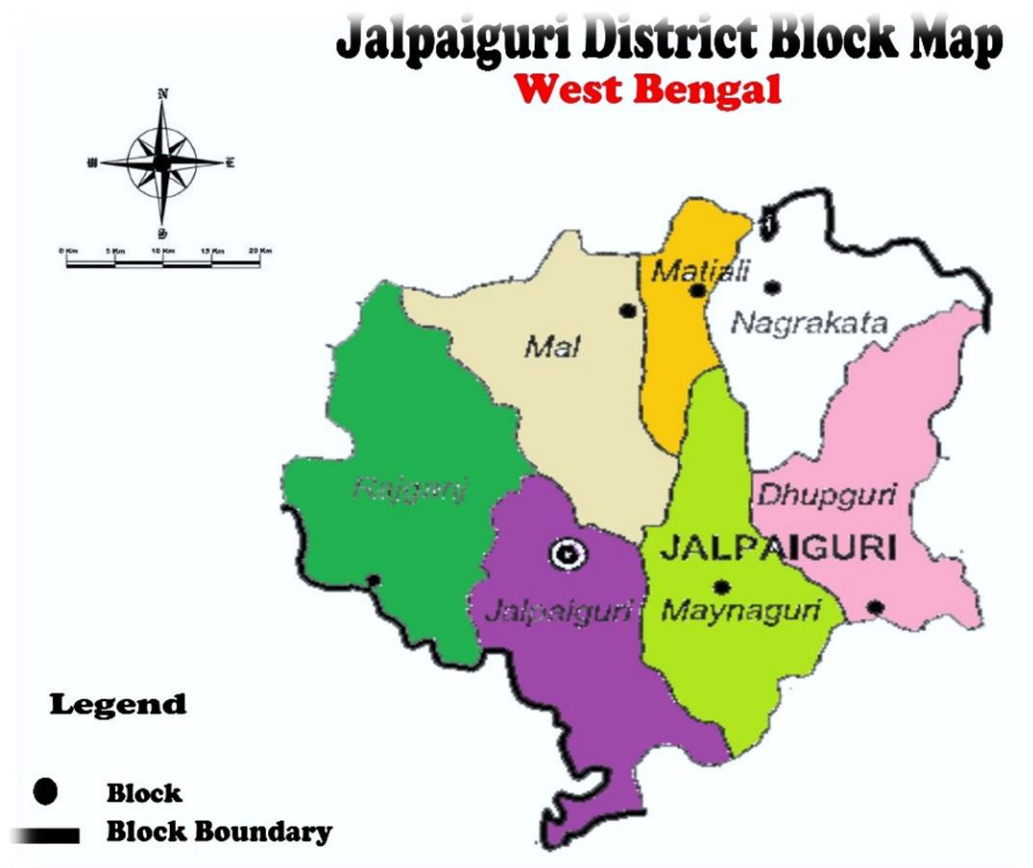


Table 3.1: Distribution of the Sample according to School

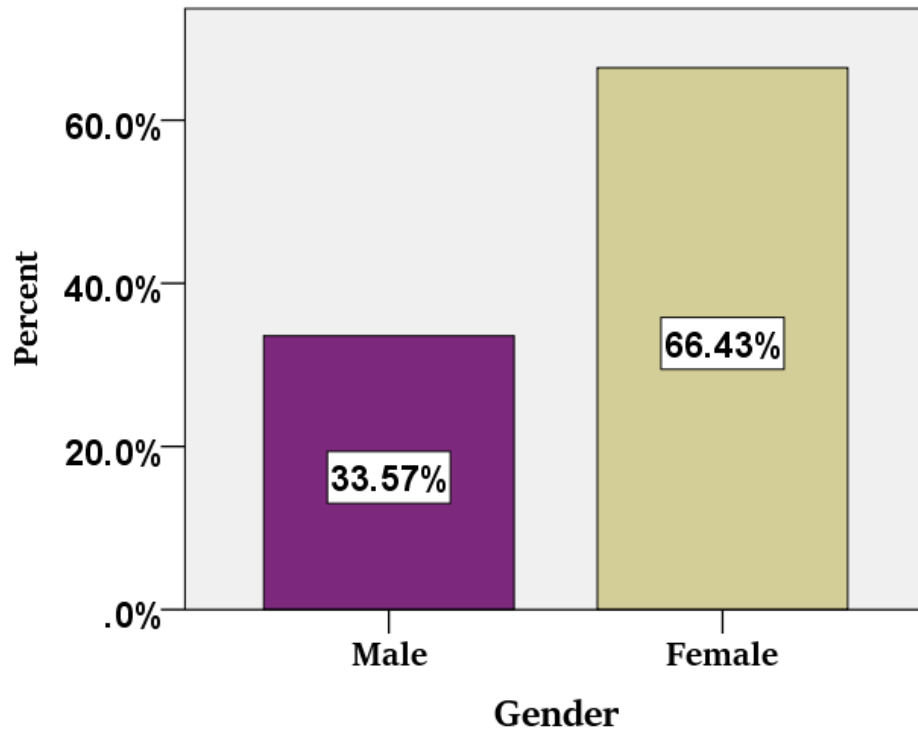
SL NO	NAME OF THE SCHOOL	LOCATION OF THE SCHOOL	NO OF STUDENTS
1	Jalpaiguri Higher Secondary School	Urban	33
2	Kadamtala Girls' High School	Urban	30
3	Central Girls' High School	Urban	27
4	Sonali Girls' High School	Urban	53
5	Barapatia Pachiram Nahata High School (HS)	Rural	91
6	Mohitnagar Colony Tara Prasad Girls' High School (HS)	Rural	67
7	Mohitnagar Colony Tara Prasad High School (XII)	Rural	22
8	Berubari Tapashili Free High School (H.S)	Rural	81
9	Kaliaganj Uttameswar High School	Rural	22

Out of the total 426 students included in the study, 143 were male and 283 were female students. The gender wise distribution is shown in table 3.2 and figure 3.3 below:

Table 3.2: Sample Distribution according to Gender

Gender	Number of students	Percentage (%)
Male	143	33.57%
Female	283	66.43%

Figure 3.3: Sample Distribution according to Gender

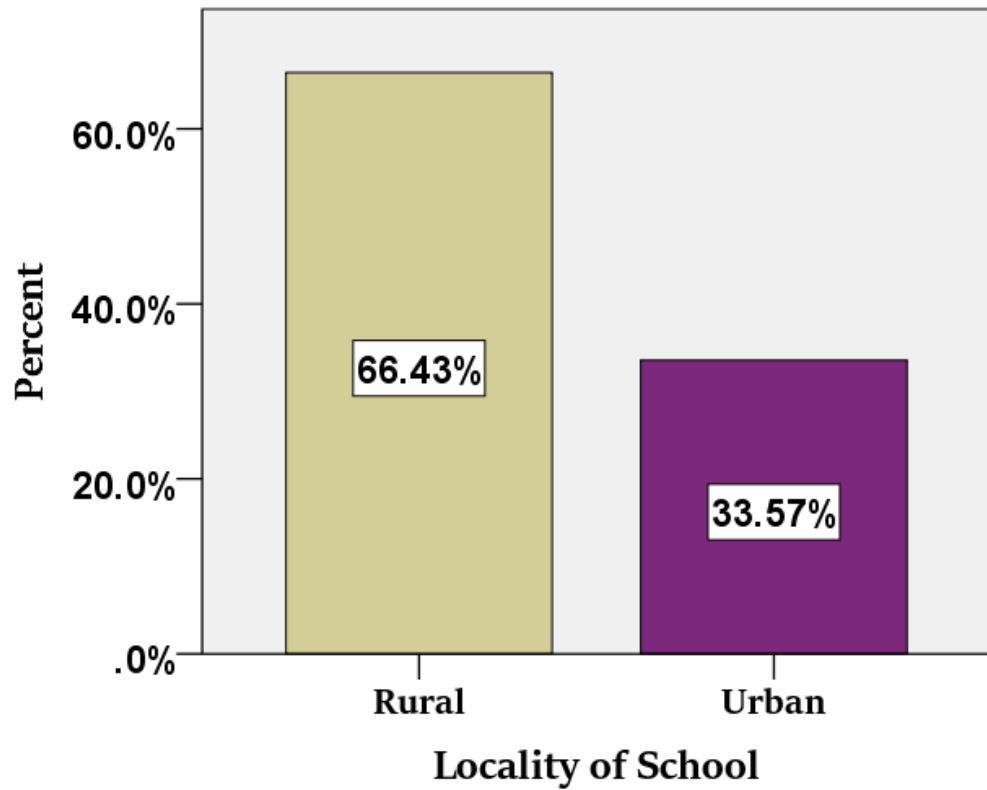


Out of total of 426 students included in the study, 283 students were attending schools located in the rural area and 143 students in urban area. The Locality of school wise sample distribution is shown in table 3.3 and Figure 3.4 below:

Table 3.3 Sample distribution according to Locality of school

Locality of School	Number of students	Percentage (%)
Rural	283	66.43%
Urban	143	33.57%

Figure 3.4: Distribution of Sample According Locality of school

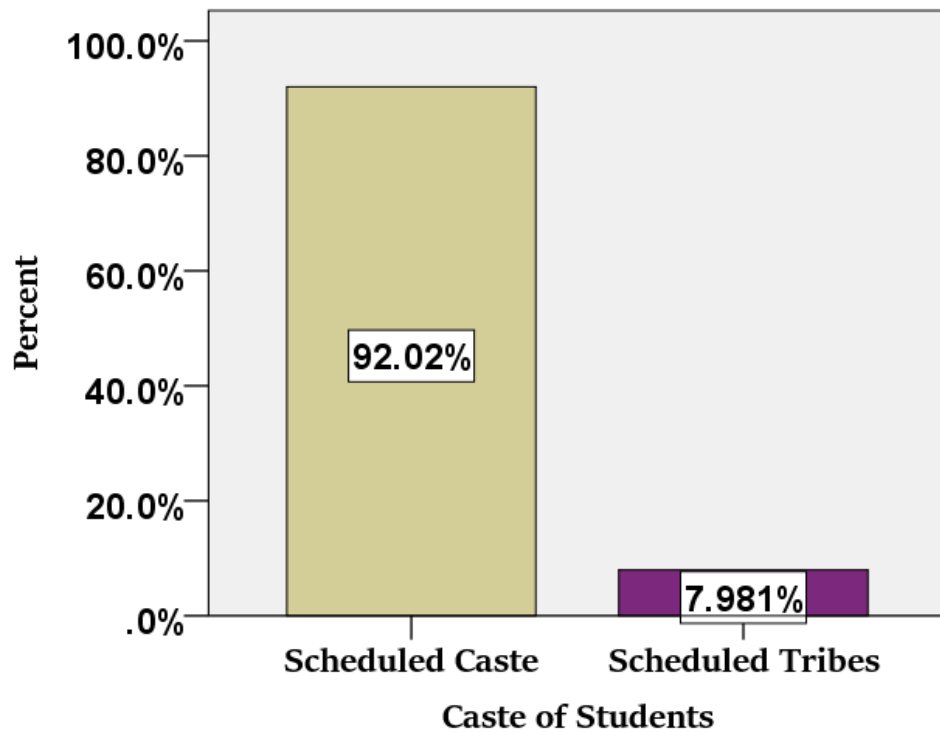


Out of the total sample, 392 students were from Scheduled caste category and 34 students were from Scheduled Tribes category. The caste wise sample distribution is shown in Table 3.4 and Figure 3.5 below:

Table 3.4: Distribution of Sample According to Caste

Caste	Number of students	Percentage (%)
Scheduled Caste	392	92.02%
Scheduled Tribes	34	7.98%

Figure 3.5 Distribution of Sample According to Caste

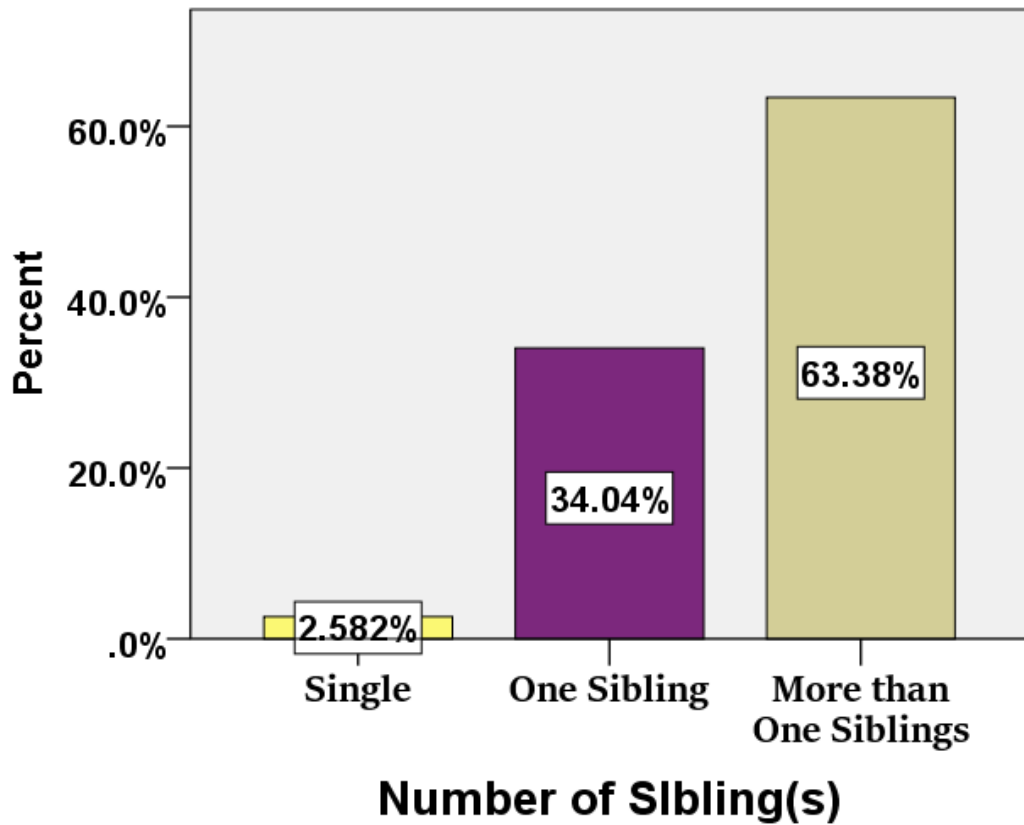


Out of the total sample, 11 children (2.58%) were single child of their parents without any sibling(s), 145 children (34.04%) had one sibling and 270 children (63.38%) had more than one sibling. The sibling wise sample distribution is shown table 3.5 and figure 3.6 below:

Table 3.5: Distribution of Sample According to Sibling (s)

Sibling (s)	Number of Students	Percentage (%)
Single	11	2.58%
One Sibling	145	34.04%
More than One	270	63.38%

Figure 3.6 Distribution of Sample according to Number of Sibling(s)

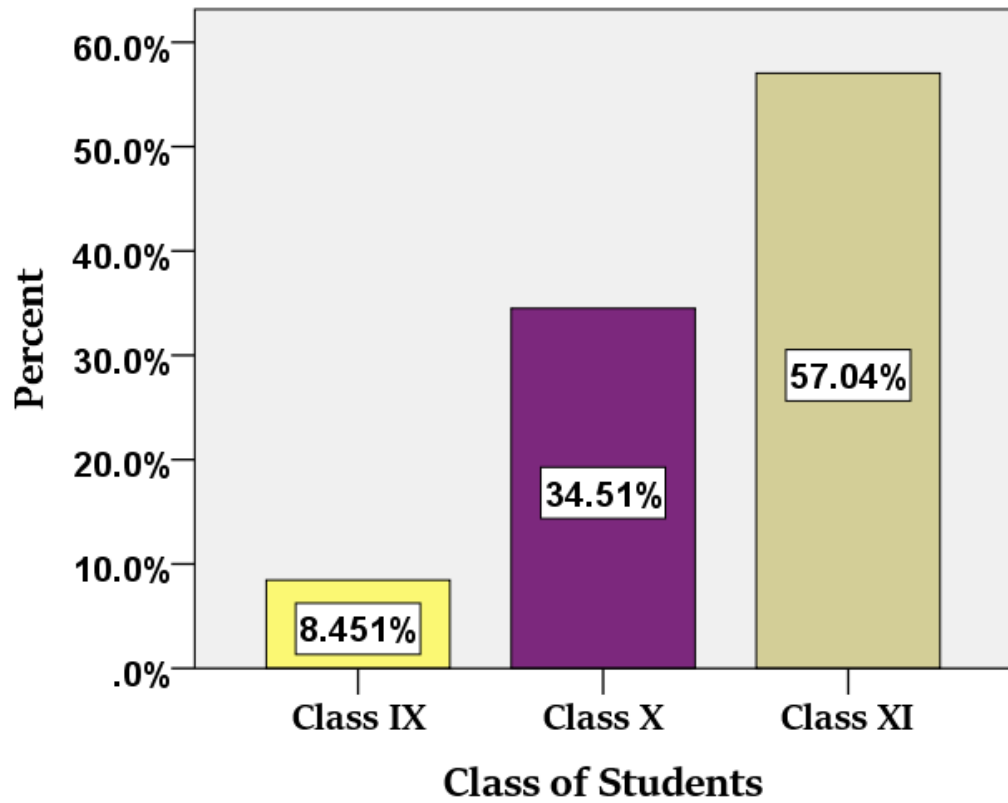


Out of the total students, 36 students (8.45%) students were from class IX, 147 students (34.51%) were from class X and maximum 243 students (57.04%) were from XI standard. The class wise sample distribution is shown table 3.6 and figure 3.7 below:

Table 3.6: Distribution of Sample according to Class

Class	Number of Students	Percentage (%)
Class IX	36	8.45%
Class X	147	44.51%
Class XI	243	57.04%

Figure 3.7 Distribution Sample according to Class

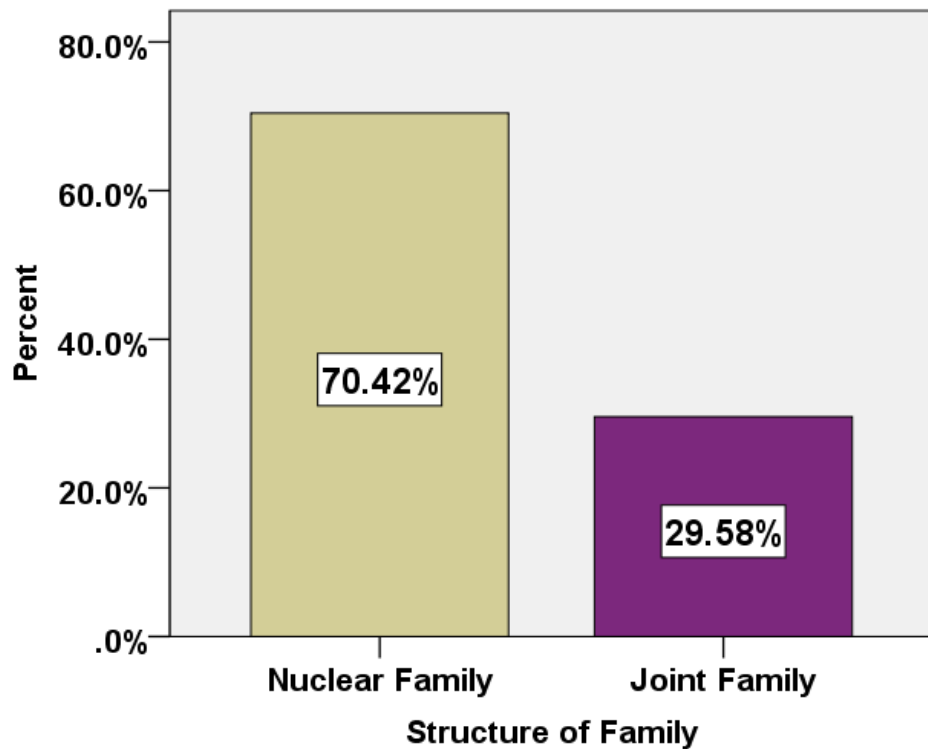


Out of total of 426 students included in the study, 300 students were from nuclear family and 126 students from joint family. The Structure of Family wise sample distribution is shown in table 3.7 and Figure 3.8 below:

Table 3.7: Distribution of Sample according to Structure of family

Structure of Family	Number of students	Percentage (%)
Nuclear Family	300	70.42%
Joint Family	126	29.58%

Figure 3.8 Distribution Sample according to Structure of family

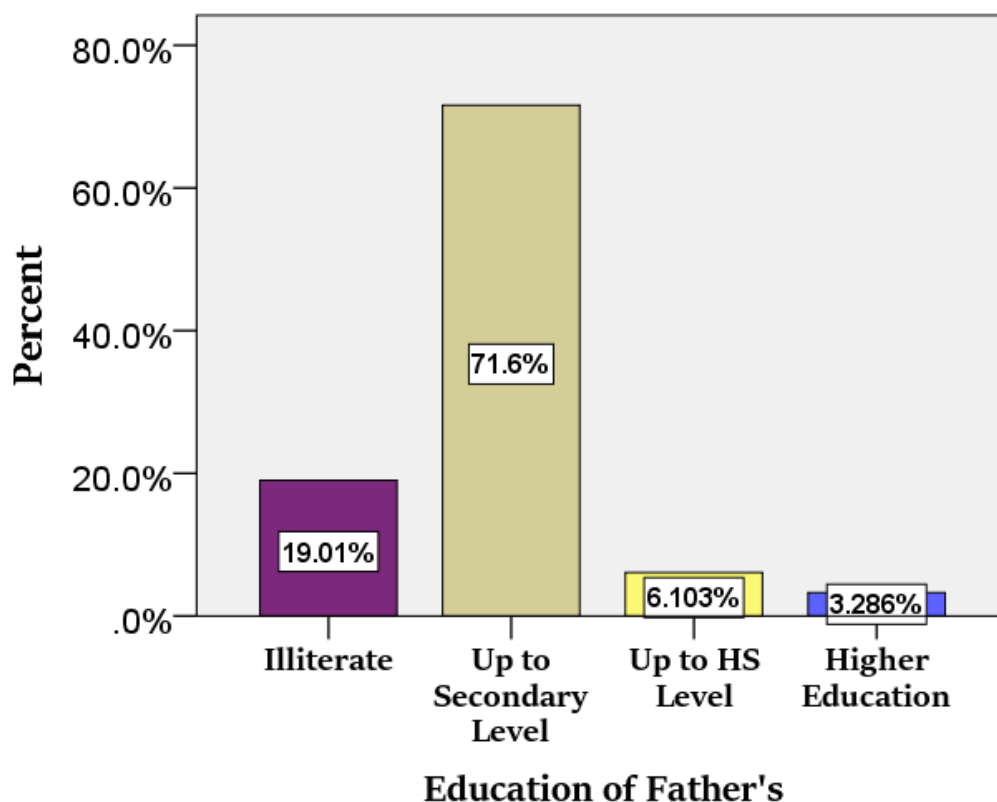


Out of the total sample, 81 students whose father were Illiterate, maximum number 305 students (71.6%) whose father were educated up to secondary level and were educated up to HS level 26 and only 14 students whose father were higher educated. The caste wise sample distribution is shown in Table 3.8 and Figure 3.9 below:

Table 3.8: Distribution of Sample according to Education of Father's

Education of father	No of students	Percentages (%)
Illiterate	81	19.01%
Up to secondary level	305	71.6%
Up to HS level	26	6.1%
Higher education	14	3.3%
Total	426	100.0%

Figure 3.9 Distribution Sample according to Education of Father

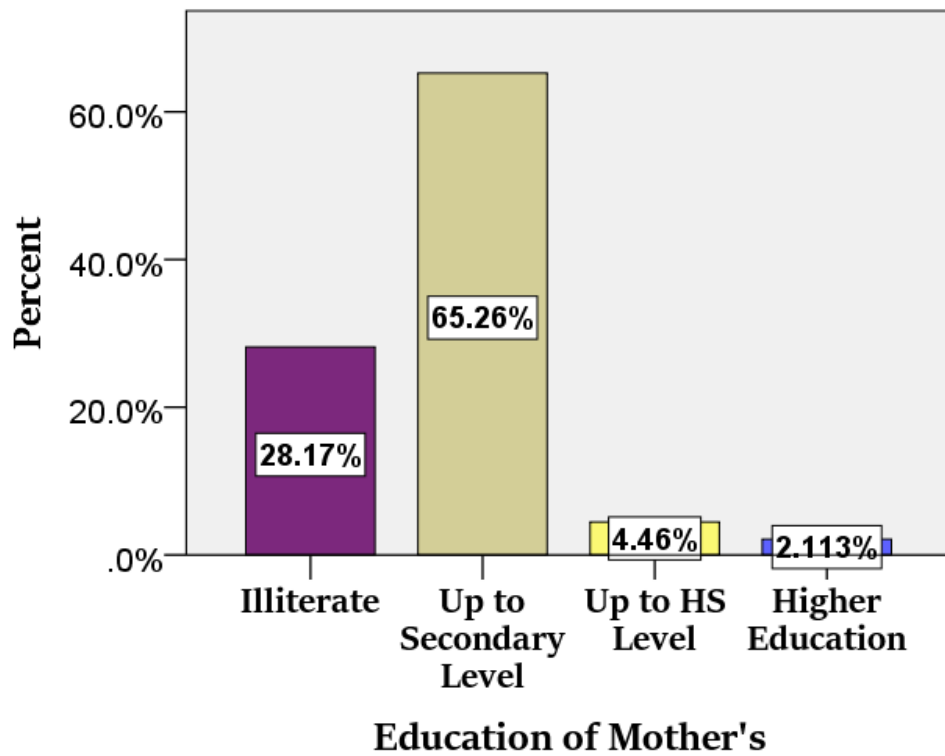


Out of the total sample, 120 students whose mother were Illiterate, maximum number 278 students whose mother were educated up to secondary level and up to HS level 19 and only 9 students whose mother were higher educated respectively. The caste wise sample distribution is shown in Table 3.9 and Figure 3.10 below:

Table 3.9: Distribution of Sample according to Education of Mother's

Education of Mother	No of students	Percentages (%)
Illiterate	120	28.17%
Up to secondary level	278	65.26%
Up to HS level	19	4.46%
Higher education	9	2.11%
Total	426	100.0%

Figure 3.10: Distribution Sample according to Education of Mother's

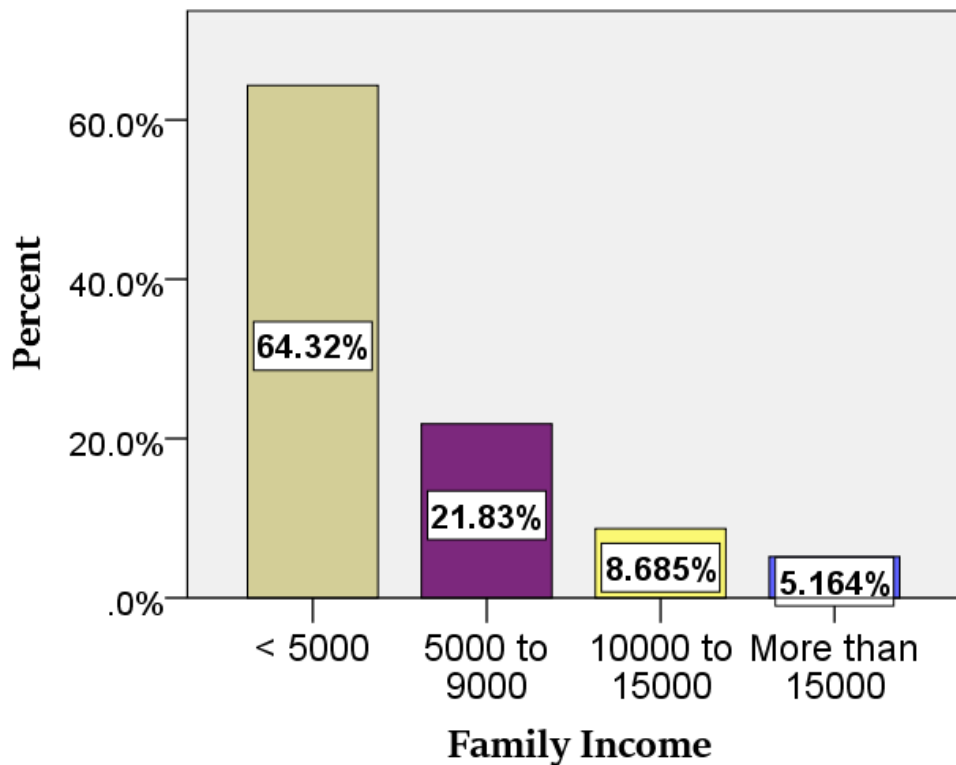


Out of the total sample, 274 students were identified in their family income below five thousand, 93 students were indicating whose family monthly income five thousand to ten thousand, another 37 students were identified their monthly family income ten thousand to fifteen thousand and only 22 students were identified whose family income more than fifteen thousand. The caste wise sample distribution is shown in Table 3.10 and Figure 3.11 below:

Table 3.10: Distribution of Sample according to Family Income

Family Income	No of students	Percentages (%)
Below 5000	274	64.32%
5000 to 9000	93	21.83%
10000 to 15000	37	8.69%
More than 15000	22	5.16%
Total	426	100.0%

Figure 3.11: Distribution Sample according to Family Income



3.1.3 Variable

A variable is a measurable characteristics or a logical set of attributes of the subject (participants) of research that can vary. In the present study the following variables were identified and used:

1. Independent variables:

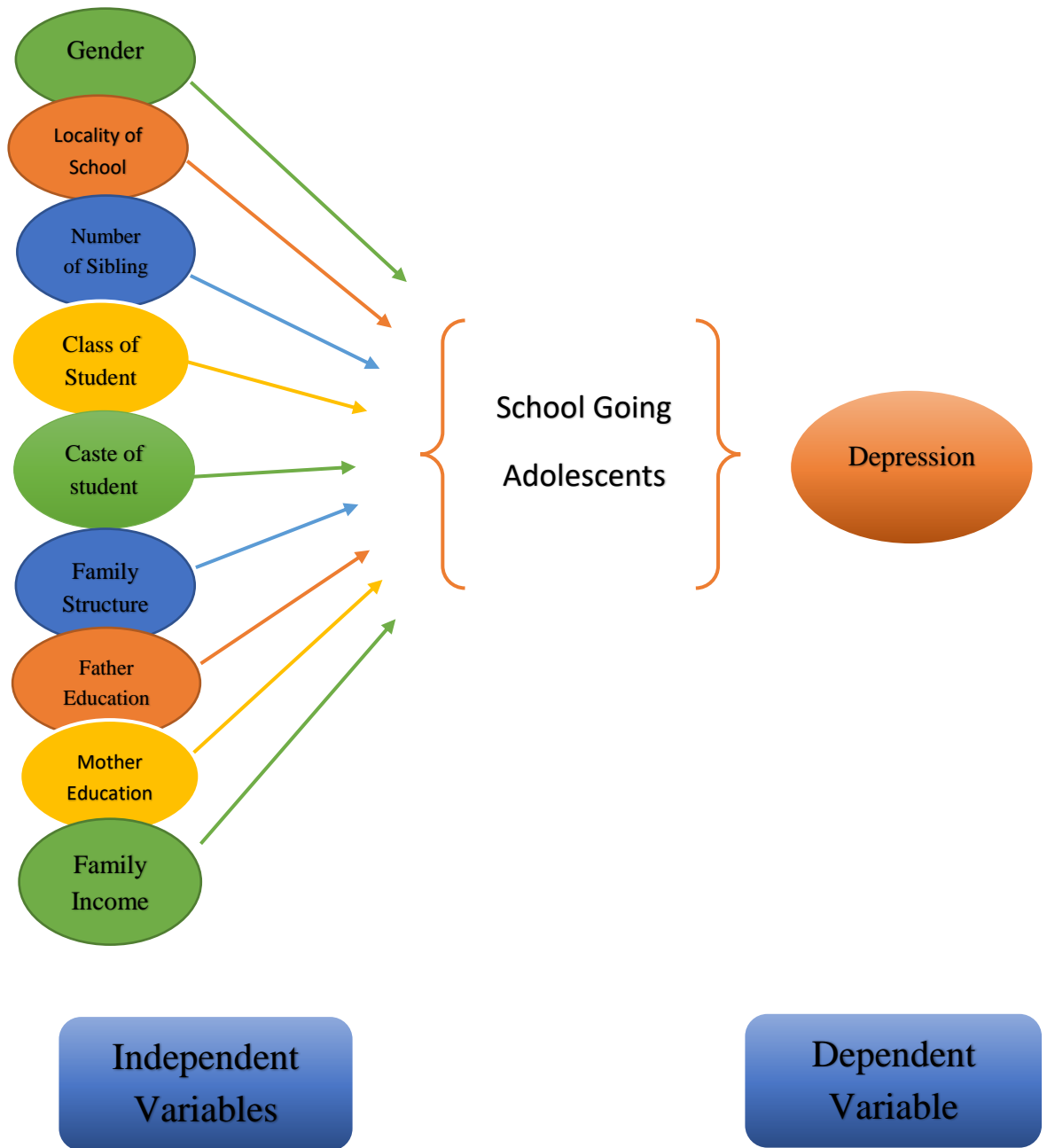
Independent variables are believed to be the influencing variables that effect the dependent variable. In the present study, following the related studies, the independent variables have been identified. Those are given below:

- a) **Gender** - Gender was one of the main classificatory independent variables of the study, the two dimensions that is male and female were considered of a gender variable.

- b) **Locality of School** - Students belonging to specific locality might have some impact on the dependent variable. Rural and urban dimensions were identified as dimensions of the locality variable.
- c) **Number of Sibling** – In this study the researcher included number of siblings as an independent variable which has some influence on dependent variable. So, in the present study were no sibling, one sibling and more than one sibling identified three dimensions of number of sibling variables.
- d) **Class of Student** – In this study the researcher included class is an independent variable which has some influence on dependent variable. So, the present study was class IX, class X and class XI students identified three dimensions of class variable.
- e) **Caste of student** – Caste is another independent variable that impact on dependent variables. In this present study scheduled caste and scheduled tribes were included as an independent variable.
- f) **Family structure** – Structure of Family was one of the main classificatory independent variables of the study, two dimensions that is nuclear family and joint family were considered as Family structure variable.
- g) **Education of Father** – Educational qualification of father was an important independent variable that influence the dependent variable. So, the present study was Illiterate, up to secondary level, up to HS level and Higher education identified four dimensions of education of father variables.
- h) **Education of Mother** - Educational qualification of mother was an important independent variable that influence the dependent variable. So, the present study was Illiterate, up to secondary level, up to HS level and Higher education identified four dimensions of education of father variables.
- i) **Family Income** – Monthly family income is an important independent variable that effect on dependent variable. So, the present study was identified below five thousand, five thousand to ten thousand, ten thousand to fifteen thousand

and more than fifteen thousand four categories of monthly family income variable.

Figure 3.12 Showing the Schematic diagram of the influencing variables under the study.



2. Dependent variable: In the present study, impact of depression among backward class school going adolescents' children as outcome was the dependent variable. The

study aimed to measuring the influence of the independent variable on the status of dependent variable.

The researcher assumed that there might be some others intervening variables which could influence the dependent variable. Hence, to control the intervening variables the random sampling techniques has been used for sample selection. This statistical design may naturalize the effect of intervening variables with equal probability.

3.1.4 Tool

It is important for a study to gather data to test the hypothesis or answer the research questions. Tools are distinctively used to collect information and data to describe and quantify the data according to the study design. In the present study, the researcher used Beck Depression Inventory (BDI-II) adopted in Bengali version by the help of his own guide, originally developed by Aaron T. Beck (1996). The original tool consists of 21 items, presented in multiple-choice format, which measure presence and degree of depression in adolescent and adult consistent with the “Diagnostic and Statistical Manual of Mental Disorders Fourth Edition” (DSM-IV; 1994). The 21 items cover sadness, pessimism, past failure, loss of pleasure, guilty feelings, punishment feelings, self-dislike, self-criticalness, loss of energy, changes in sleeping pattern, irritability, changes in appetite, concentration difficulty, tiredness or fatigue and loss of interest in sex.

To adopt this tool in Bengali version the researcher minutely studied each items of the test. Then researcher translated all the items along with the instruction in Bengali language. While translating the items in Bengali language, the researcher taken care of maintaining the meaning and theme or content of the test as same as that of the original test. For doing this, he also took assistance and advice of some experts in the field including her own guide. The Bengali version of this tool includes the same items with same content and same meaning as it is the original Beck Depression Inventory (BDI-II, see appendix I & II).

Information sheet: along with the becks inventory questionnaire, an information sheet was provided to each of the students participating in the study to collect information about their family structure i.e. joint or nuclear locality of schools rural or urban.

BDI-II Scoring: Each of the 21 items corresponding to a symptom of depression is summed to give a single score for the BDI-II. There is a four-point scale for each item ranging from 0-3. On two items (16 and 18) there are seven options to indicate either an increase or decrease of appetite and sleep. Cut score guidelines for the BDI-II are given with the recommendation that thresholds be adjusted based on the characteristics of the sample, and the purpose for use of the BDI-II. Total score of 0-13 is considered minimal range, 14-19 is mild, 20-28 is moderate and 29-63 is severe. Table 3.11 shows the value of the score:

Table 3.11: Value of BDI-II Scoring

Depression Level	Score
Considered minimal range	0-13
Mild	14-19
Moderate	20- 28
Severe	29-63

Note: Value (Meaning) of ratings considered

Considered minimal range – **Normal**

Mild – **Minor problem**

Moderate – **Borderline:** may have problem in future, if not taken care.

Severe – **Abnormal;** definite problem, requires interventions.

3.2 Procedure

This phase includes the description of different steps followed in the collecting all qualitative and quantitative data from the primary sample under this study and process of analysis it. Data was collected from higher secondary level students, during 3rd January to 31st January 2019.

3.2.1 Data collection

Data for the present research study were collected to measurement of depression among backward school going adolescents' students. Initially 9 schools were randomly selected from Jalpaiguri district. There were used to provide instruction in Bengali and located in both rural and urban areas. The researcher personally contacted the head of the schools and explain the purpose of the study and sought permission to conduct the study. A total number of 9 schools, 4 urban and 5 rural schools finally agreed to participate in the study. With the consent of the school authority a schedule was prepared for data collection. The schedule is shown in the below:

Table 3.12: Schedule of the data collection

SL NO	NAME OF THE SCHOOL	ADDRESS	DATE
1	Jalpaiguri Higher Secondary School	Bill Para Road, Jalpaiguri, West Bengal,735101	03.01.19
2	Kadamtala Girls' High School	Jalpaiguri, West Bengal 735101	05.01.19
3	Central Girls' High School	Ukilpara, Jalpaiguri, West Bengal 735101	07.01.19
4	Sonali Girls' High School	Jalpaiguri, West Bengal 735101	10.01.19
5	Barapatia Pachiram Nahata High School (HS)	Rangdhamali, Jalpaiguri, West Bengal 735101	15.01.19
6	Mohitnagar Colony Tara Prasad Girls' High School (HS)	Mohitnagar, Jalpaiguri, West Bengal 735102	18.01.19

7	Mohitnagar Colony Tara Prasad High School (XII)	Mohitnagar, Jalpaiguri, West Bengal 735102	21.01.19
8	Berubari Tapashili Free High School (H.S)	Gopirbandar, Jalpaiguri, West Bengal 735132	28.01.19
9	Kaliaganj Uttameswar High School	Patkata, Jalpaiguri, West Bengal 735121	31.01.19

On the scheduled data, during the class, the questionnaire was distributed to all the students present in class. They were asked to read the questionnaire and were explain how to attempt it. The researcher was available in the class room to answer and clarify to the queries of the students. It took an average of 30 minutes per class. Then the students were asked to fill up the information sheet regarding their family type, locality of school they have. It was ensured that the students respond on the questions freely and spontaneously, and type privacy of the responses made by them was maintained.

3.2.2 Data Quality

The researcher and supervisor were watchful to ensure the quality of data and several steps were taken to maintain. The comparison of enumerated and post enumerated data was found to be good at most of the indicators match in about more than 99% of cases which ensure the quality of the data.

3.2.3 Tabulation of Data

Each of 21 responses of individual questionnaire was marked with scoring values. A summary was prepared as the bottom of individual seat. This data so found were edited and tallied to obtain numerical data. The whole set show acquired was systematically and squinty tabulation for further analysis and draw inference. (See appendix- III)

3.2.4 Statistical Analysis

Raw data of 426 students gathered were individually tabulated in Microsoft excel. Thereafter it was analysed using SPSS 20 and descriptive statistics (frequency counts) were calculated for each level of depression. Chi-square test of independence was computed to find out any significant relationship in between each classificatory variable and levels of depression.

References

- Best, J.W., & Kahn, J.V. (2008). *Research in Education*, Delhi: *Pearson*.
- Cohen, L., Manion, L. & Morrison, K. (2007). *Research Method in Education* (6th Edition), Routledge Taylor & Francis Group, ISBN: 0-203-02905-4.
- Creswell, J.W. (2018). *Educational Research* (4th edition), Pearson India Education Services Pvt. Ltd.
- Garrett, H.E. (1979). *Statistics in Psychology and Education*, 6th Edition: *International Book Bureau*, Hyderabad, pp. 42-48.
- Gay, L. R., Mills, G. E. & Airasian, P. W. (2012). *Educational Research Competencies for Analysis and Application* (10th Edition), Pearson Education, Delhi.
- Kothari, C. R. (2004). *Research Methodology Methods & Techniques*, 2nd Edition, *New Age International (P) Limited publishers*, ISBN: 978-81-224-2488-1.
- Koul, L. (2009). *Methodology of Educational Research* (4th Edition), *Vikas Publishing House Pvt. Ltd*
- Mangal, S.K. (2004). *Statistics in Psychology and Education*, 2nd Edition: *PHI Learning Private Limited*, ISBN-978-81-203-2088-8.
- Singh, Y. K. (2006). *Fundamental of Research Methodology and Statistics*, *New Age International (P) Limited*, ISBN: 978-81-224-2418-8.

CHAPTER – IV : ANALYSIS AND INTERPRETAION OF DATA

4.1 : Descriptive Statistics

4.2 : Inferential Statistics

4.3 : Hypotheses Testing

References

CHAPTER - IV

ANALYSIS AND INTERPRETATION OF DATA

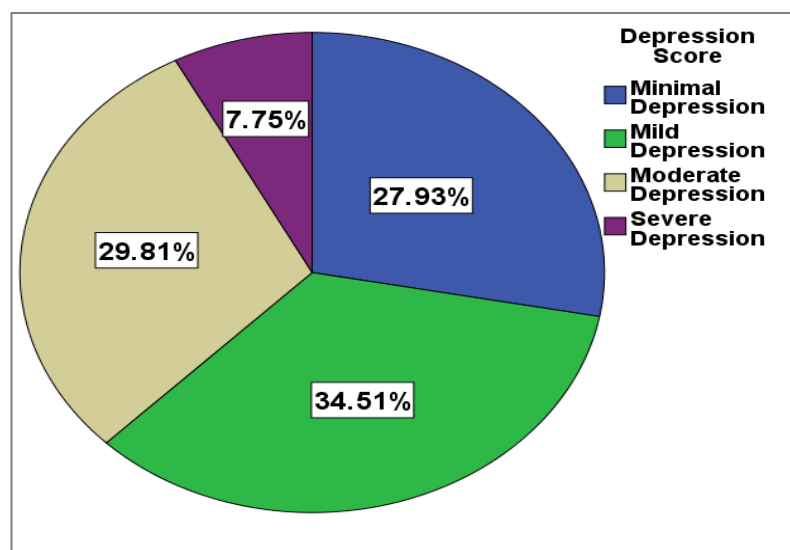
The researcher present chapter has been divided into two parts. The first part presents the statistics with analysis and interpretation by means of descriptive statistics with graphical representation and percentage analysis. The second part deals with non-parametric inferential statistics, viz. chi – square test (χ^2) predicting the level of Depression Among the SC and ST Students at Higher Secondary Level under different variables. Hence, without this portion the research works was always incomplete.

4.1 Analysis of the depression level among the SC and ST students on the basis of different variables using Descriptive statistics.

The score of the students of the level of depression was categorized in four types. First one is (0-13) that means having minimal level of depression, second one is (14-19) that means mild level of depression, third one is (20-28) that means having moderate level of depression and fourth one is (29-63) having severe level of depression.

Assessment of Depression Among the SC and ST Students at Higher Secondary Level.

Figure 4.1: Level of depression among the SC and ST students at higher secondary level



4.1.1 Measurement of the Level of Depression Among the SC and ST Students at Higher Secondary Level on the basis of Gender.

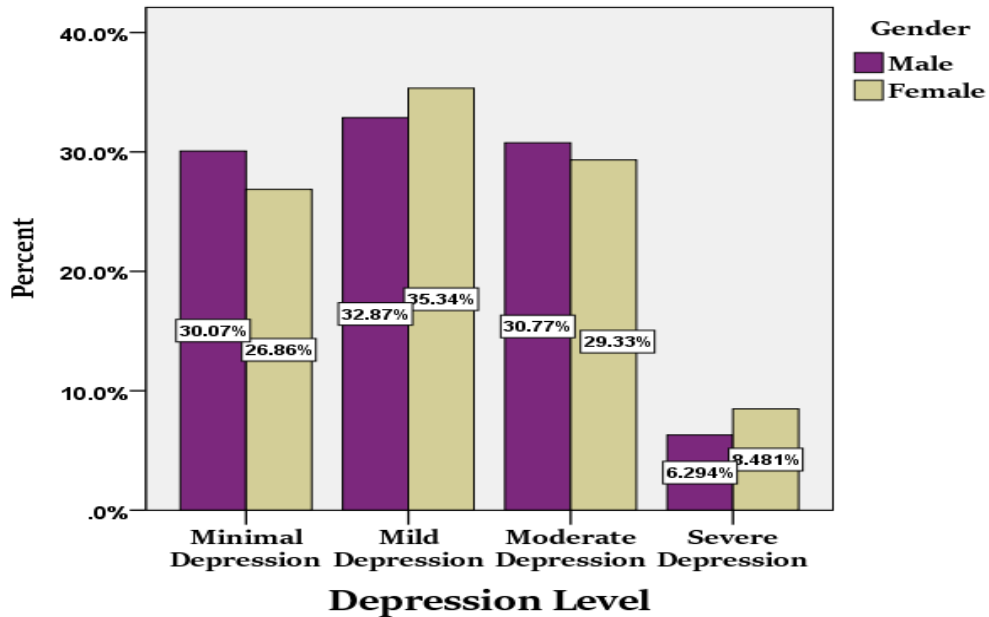
The study showed that the rate of prevalence of depression among SC and ST higher secondary level students on the basis of their Gender which is given following table 4.1.

4.1 Percentage wise distribution of depression of higher secondary level students on the basis of Gender variable

			GENDER		TOTAL
			Male	Female	
DEPRESSION SCORE	Minimal Depression	Count	43	76	119
		% within Gender	30.1%	26.9%	27.9%
	Mild Depression	Count	47	100	147
		% within Gender	32.9%	35.3%	34.5%
	Moderate Depression	Count	44	83	127
		% within Gender	30.8%	29.3%	29.8%
	Severe Depression	Count	9	24	33
		% within Gender	6.3%	8.5%	7.7%
TOTAL		Total Number	143	283	426
		% within Gender	100%	100%	100%
		% of total	33.57%	66.43%	100.0%

From the above table it was found that 27.9% of all the students said to have minimal depression. When we look at male and female students separately, the proportion of males (30.1%) was better than females (26.9%). Mild depression was found among 34.5% of all the students including 32.9% of all male students and 35.3% of all female students. In case of moderate depression, females were slightly in better position (29.3% of all female students) than males (30.8% of all male students). 6.3% of all males and 8.5% of all females comprising 7.7 % of all the students under this study were found with severe depression. The illustration is given in figure 4.2.

Figure 4.2 Gender wise distribution of Level of Depression



4.1.2 Measurement of the Level of Depression among the SC and ST at higher secondary level students on the basis of Locality of School.

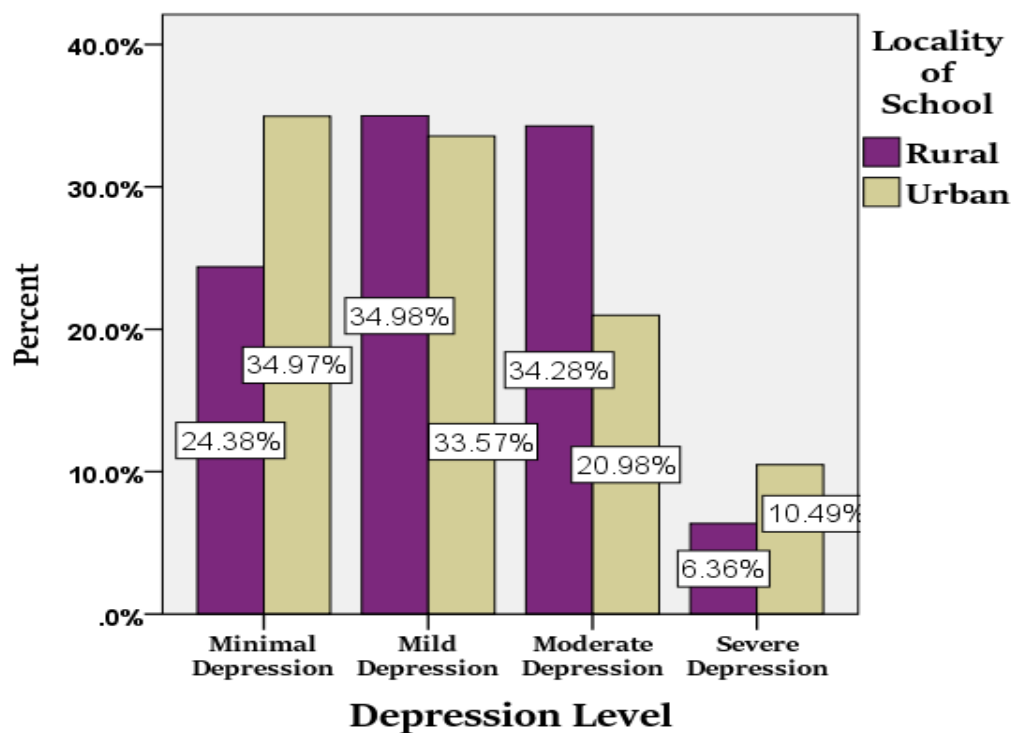
The study showed that the rate of prevalence of depression among the SC and ST higher secondary level students on the basis of Locality of School which is given following table 4.2.

Table 4.2 Percentage wise distribution of depression of higher secondary level students on the basis of Locality of School variable.

			LOCALITY OF SCHOOL		TOTAL
			Rural	Urban	
DEPRESSION SCORE	Minimal Depression	Count	69	50	119
		% within Location of School	24.4%	35.0%	27.9%
	Mild Depression	Count	99	48	147
		% within Location of School	35.0%	33.6%	34.5%
	Moderate Depression	Count	97	30	127
		% within Location of School	34.3%	21.0%	29.8%
	Severe Depression	Count	18	15	33
		% within Location of School	6.4%	10.5%	7.7%
TOTAL		Total Number	283	143	426
		% within Location of School	100.0%	100.0%	100.0%
		% of total	66.43%	33.57%	100%

According to Table 4.2, it can be inferred that minimal depression was found among 24.4% of students belonging to rural areas, and 35% of urban areas. Mild depression was seen among 35% rural students and 33.6% urban students. In the case of moderate depression too, the percentage of students belonging to rural areas (34.3%) was higher than those belonging to urban areas (21%). However, for severe depression, rural schools performed much better with only 6.4 % compared to urban areas where the figure was much higher at 10.5%. The illustration is given in figure 4.3.

Figure 4.3 Locality of School wise distribution of Level of Depression



4.1.3 Measurement of the Level of Depression among the SC and ST higher secondary level students on the basis of Caste.

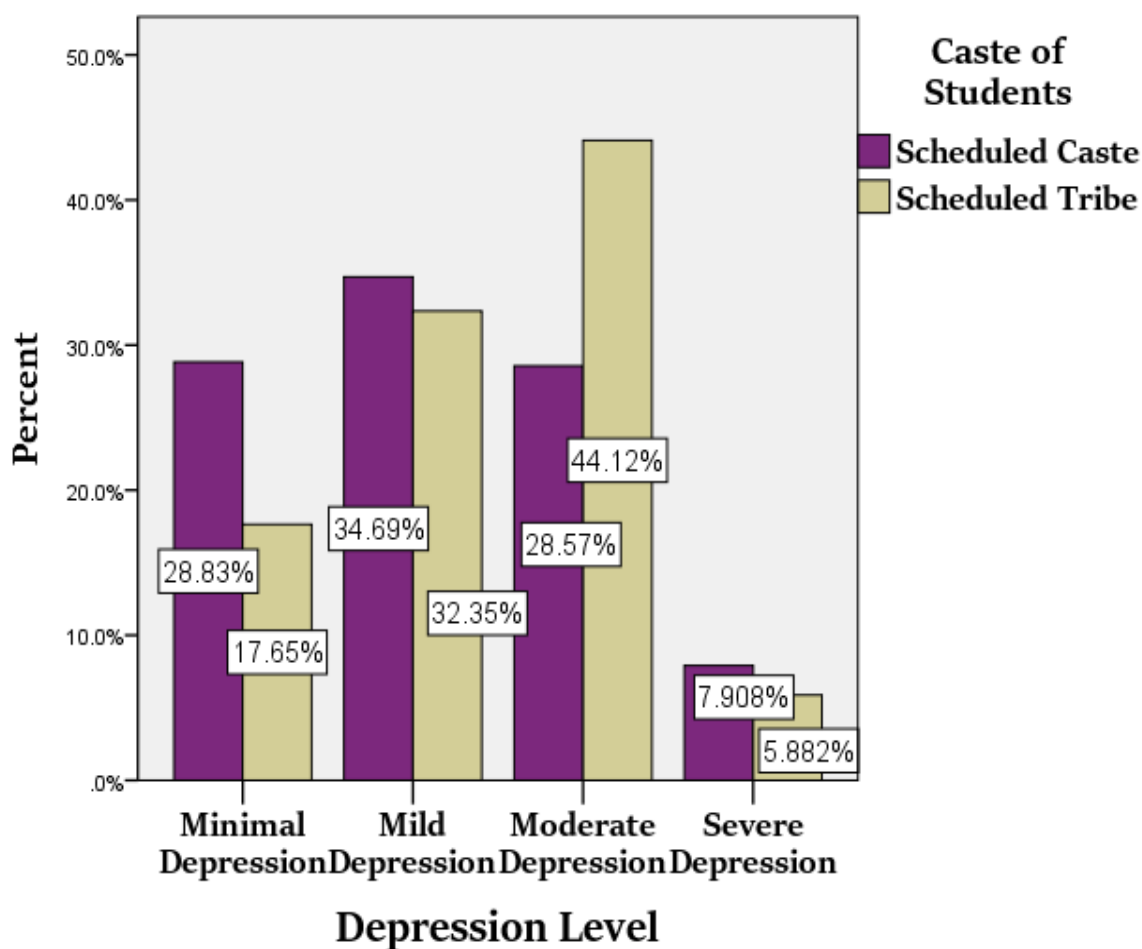
The study showed that the rate of prevalence of depression among the SC and ST higher secondary level students on the basis of their caste which is given table 4.3.

Table 4.3 Percentage wise distribution of depression of higher secondary level students on the basis of Caste.

			CASTE OF STUDENTS		TOTAL
			SC	ST	
DEPRESSION SCORE	Minimal Depression	Count	113	6	119
		% within Caste of Students	28.8%	17.6%	27.9%
	Mild Depression	Count	136	11	147
		% within Caste of Students	34.7%	32.4%	34.5%
	Moderate Depression	Count	112	15	127
		% within Caste of Students	28.6%	44.1%	29.8%
	Severe Depression	Count	31	2	33
		% within Caste of Students	7.9%	5.9%	7.7%
TOTAL		Total Number	392	34	426
		% within caste of students	100%	100%	100%
		% of total	92.02%	7.98%	100.0%

Coming to the variable of caste, 28.8% among the SC students showed signs of minimal depression and the corresponding figure for ST students was 17.6%. The figures were very similar for mild depression (SC – 34.7%, ST – 32.4%). However, ST students showed more symptoms of moderate depression (44.1%) as compared to SC students (28.6%). When it comes to severe depression however, the trend is reversed with SC students faring much worse with 7.9% and ST students comparatively better with 5.9%. The illustration is provided in figure 4.4.

Figure 4.4 Caste wise distribution of Level of Depression



4.1.4 Measurement of the Level of Depression among the SC and ST higher secondary level students on the basis of their Number of Siblings.

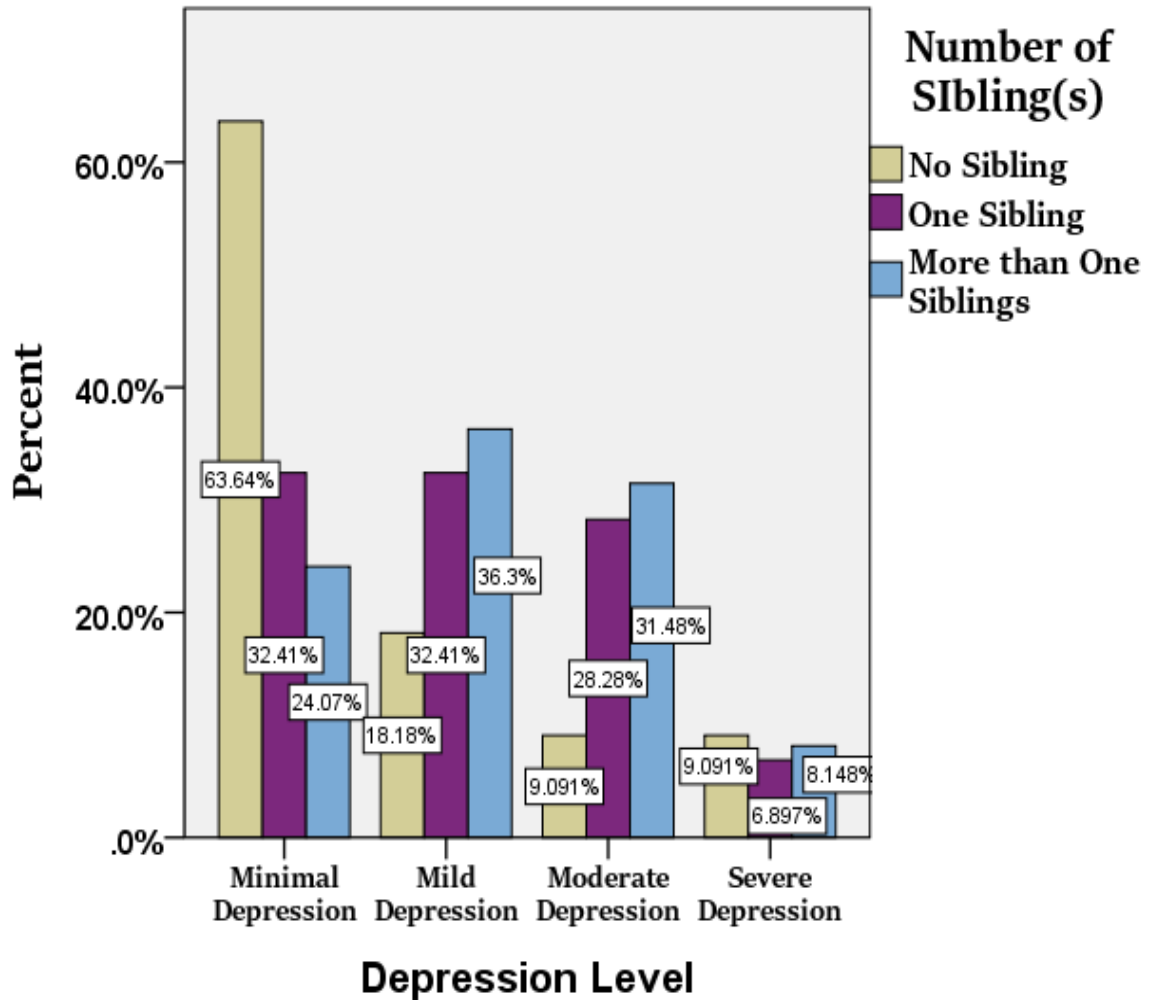
The study showed that the rate of prevalence of depression among the higher secondary level students on the basis of their number of siblings, which is given table 4.4.

Table 4.4 Percentage wise distribution of depression of higher secondary level students on the basis of their Number of Siblings.

			NUMBER OF SIBLING (S)			TOTAL
			No Sibling	One Sibling	More than One Siblings	
DEPRESSION SCORE	Minimal Depression	Count	7	47	65	119
		% within	63.6%	32.4%	24.1%	27.9%
	Mild Depression	Count	2	47	98	147
		% within	18.2%	32.4%	36.3%	34.5%
	Moderate Depression	Count	1	41	85	127
		% within	9.1%	28.3%	31.5%	29.8%
	Severe Depression	Count	1	10	22	33
		% within	9.1%	6.9%	8.1%	7.7%
TOTAL		Total Number	11	145	270	426
		%Within	100%	100%	100%	100%
		% of total	2.58%	34.04%	63.38%	100.0%

Under this study, maximum students had more than one siblings whereas only 11 students belonged to no sibling category. The figures for no sibling category are somewhat inconclusive due to the very small sample size. However, the proportion of students having moderate and severe depression was slightly higher among those students who had more than one sibling (31.5% and 8.1% respectively) compared to those who had only one sibling (28.3% and 6.9% respectively). The illustration of the distribution is depicted in figure 4.5.

Figure 4.5 Siblings wise distribution of Level of Depression



4.1.5 Measurement of the Level of Depression among the SC and ST higher secondary level students on the basis of their Class.

The study showed that the rate of prevalence of depression among SC and ST school going students on the basis of their Class which is given in table 4.5.

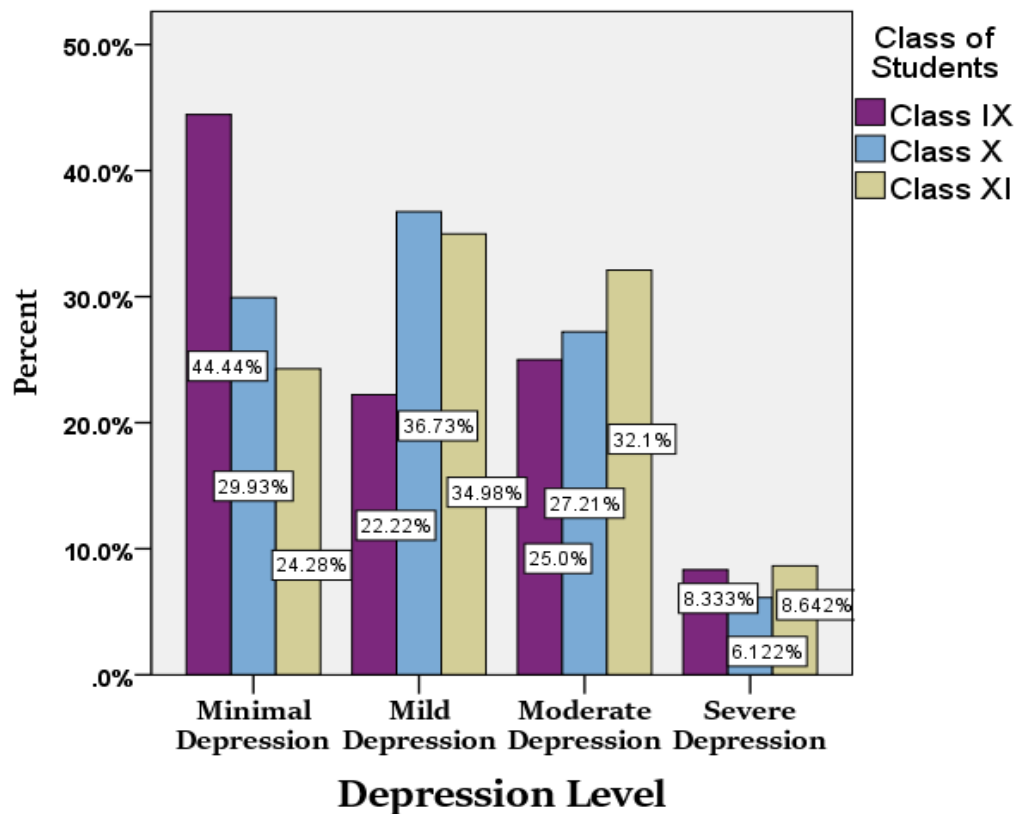
Table 4.5 Percentage wise distribution of depression of higher secondary level students on the basis of their Class.

			CLASS OF STUDENTS			TOTAL
			Class IX	Class X	Class XI	
DEPRESSION SCORE	Minimal Depression	Count	16	44	59	119
		% within Class of Students	44.4%	29.9%	24.3%	27.9%
	Mild Depression	Count	8	54	85	147
		% within Class of Students	22.2%	36.7%	35.0%	34.5%
	Moderate Depression	Count	9	40	78	127
		% within Class of Students	25.0%	27.2%	32.1%	29.8%
	Severe Depression	Count	3	9	21	33
		% within Class of Students	8.3%	6.1%	8.6%	7.7%
TOTAL		Total Number	36	147	243	426
		%Within class of students	100%	100%	100%	100%
		% of total	8.45%	34.51%	57.04%	100.0%

From the above table it has been observed that out of the total 36 students (8.45%) students were from class IX, within this group, 16 students (44.4%) were rated minimal level of depression and 8 students (22.2%) were having mild level of depression, with another 9 students (25.0%) were having moderate level of depression and only 3 students (8.3%) were rated severe level of depression among class IX students. This was followed by the 147 students (34.51%) were from class X and within the group, 44 students (29.9%) were rated minimal level of depression among the adolescents and 54 students (34.7%) were rated mild level of depression, another 40 students (27.2%) were having moderate level of depression and only the 9 students (9.1%) were rated severe level of depression among SC and ST school going students. Better proportion i.e. 243 students (57.04%) were from class XI and within this group, 59 students (24.3%) were rated minimal level of depression and 85 students (35.0%) said to have mild level of depression among school going students, another with 78 students (32.1%) were rated moderate level of depression and only 21 students (8.6%)

were rated severe level of depression among all class XI SC and ST students. The illustration of the distribution is given figure in 4.6

Figure 4.6 Class wise distribution of Level of Depression



4.1.6 Measurement of the Level of Depression among the SC and ST higher secondary level students on the basis of their Structure of Family.

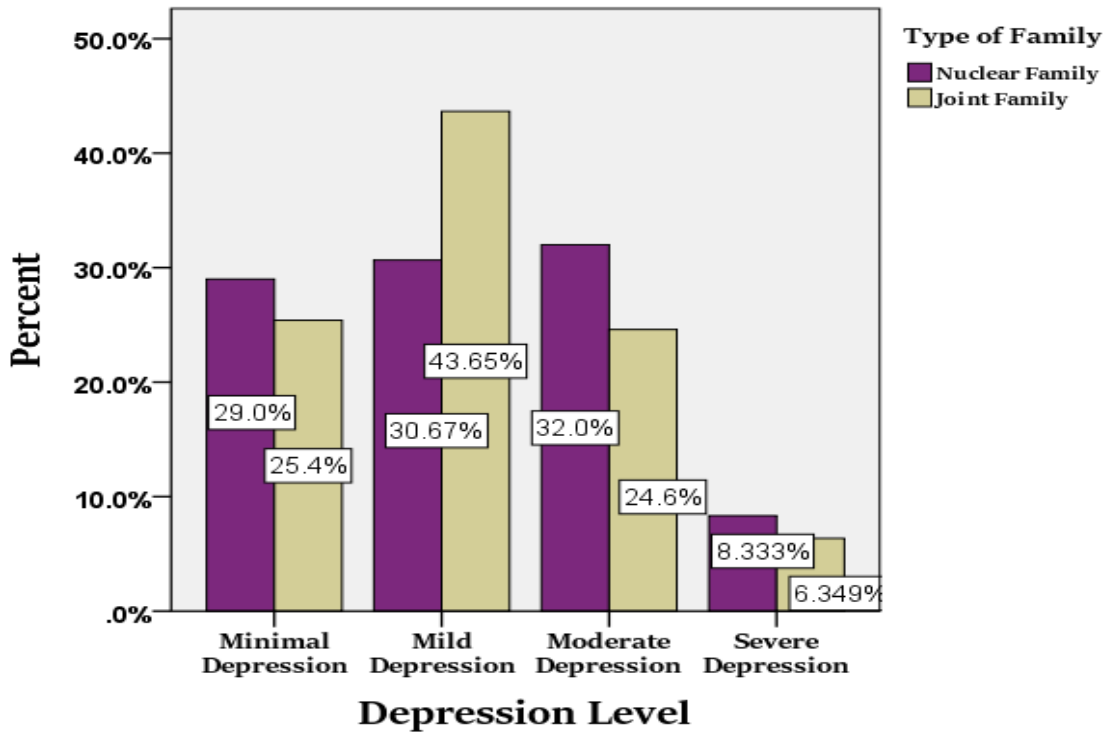
The study showed that the rate of prevalence of depression among SC and ST school going students on the basis of their Structure of Family which is given in table 4.6.

Table 4.6 Percentage wise distribution of depression of higher secondary level students on the basis of their Structure of Family.

			STRUCTURE OF FAMILY		TOTAL
			Nuclear Family	Joint Family	
DEPRESSION SCORE	Minimal Depression	Count	87	32	119
		% Within structure of family	29.0%	25.4%	27.9%
	Mild Depression	Count	92	55	147
		% Within structure of family	30.7%	43.7%	34.5%
	Moderate Depression	Count	96	31	127
		% Within structure of family	32.0%	24.6%	29.8%
	Severe Depression	Count	25	8	33
		% Within structure of family	8.3%	6.3%	7.7%
TOTAL		Total Number	300	126	426
		%Within structure of family	100%	100%	100%
		% of total	70.42%	29.58%	100.0%

On the basis of Structure of family, students from nuclear family fare better than students from joint family when it comes to minimal depression. But then, students from joint family fare better in case of mild depression and severe depression. Out of 300 students belonging to nuclear families, 25, i.e. 8.3% showed signs of severe depression. On the other hand, out of 426 students belonging to joint family, 33, i.e. 7.7% showed signs of severe depression. The illustration for the above data is provided in figure 4.7.

Figure 4.7 Structure of Family wise distribution of Level of Depression



4.1.7 Measurement of the Level of Depression among the SC and ST higher secondary level students on the basis of their Education of Father's.

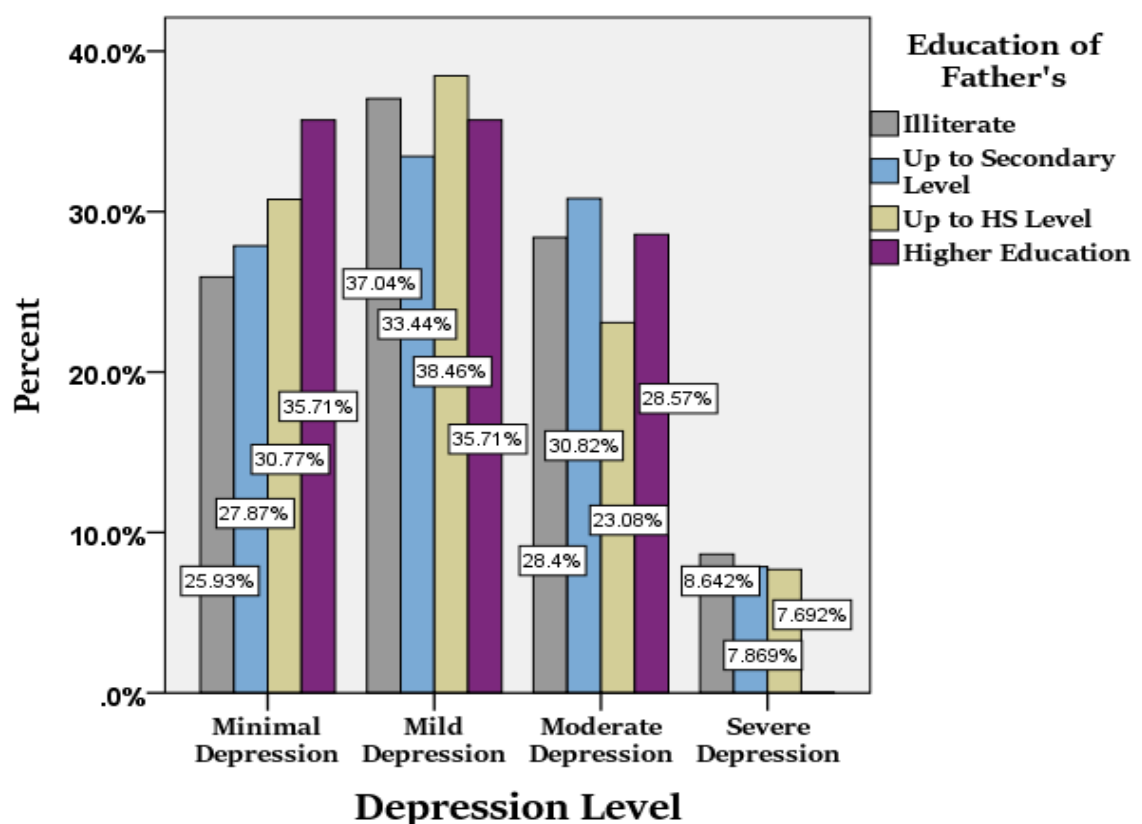
The study showed that the rate of prevalence of depression among SC and ST school going students on the basis of their Education of Father's which is given in table 4.7.

Table 4.7 Percentage wise distribution of depression of higher secondary level students on the basis of their Education of Father's.

			EDUCATION OF FATHER'S				TOTAL
			Illiterate	Up to SC	Up to HS	Higher Education	
DEPRESSION SCORE	Minimal Depression	Count	21	85	8	5	119
		% within	25.9%	27.9%	30.8%	35.7%	27.9%
	Mild Depression	Count	30	102	10	5	147
		% within	37.0%	33.4%	38.5%	35.7%	34.5%
	Moderate Depression	Count	23	94	6	4	127
		% within	28.4%	30.8%	23.1%	28.6%	29.8%
	Severe Depression	Count	7	24	2	0	33
		% within	8.6%	7.9%	7.7%	0.0%	7.7%
TOTAL		Total	81	305	26	14	426
		%within	100%	100%	100%	100%	100%
		% of total	19.01%	71.60%	6.10%	3.29%	100.0%

From the above table it has been observed that 35.7% of all students whose father had completed higher education, surprisingly found with minimal depression that is more in proportion than the rest three categories of father education. 38.5% of all students whose father had completed higher secondary level, were found with mild level of depression that is more in proportion than the rest three categories of father education. 23.1% of all students whose father had completed up to secondary level of education, were found with moderate level of depression that is lowest proportion than the rest three categories of father education. 8.6% all of students whose father is illiterate were found with severe level of depression that is more in proportion than the rest three categories of father education. The illustration of the distribution is given figure in 4.8.

Figure 4.8 Education of Father's wise distribution of Level of Depression



4.1.8 Measurement of the Level of Depression among the SC and ST higher secondary level students on the basis of their Education of Mother's.

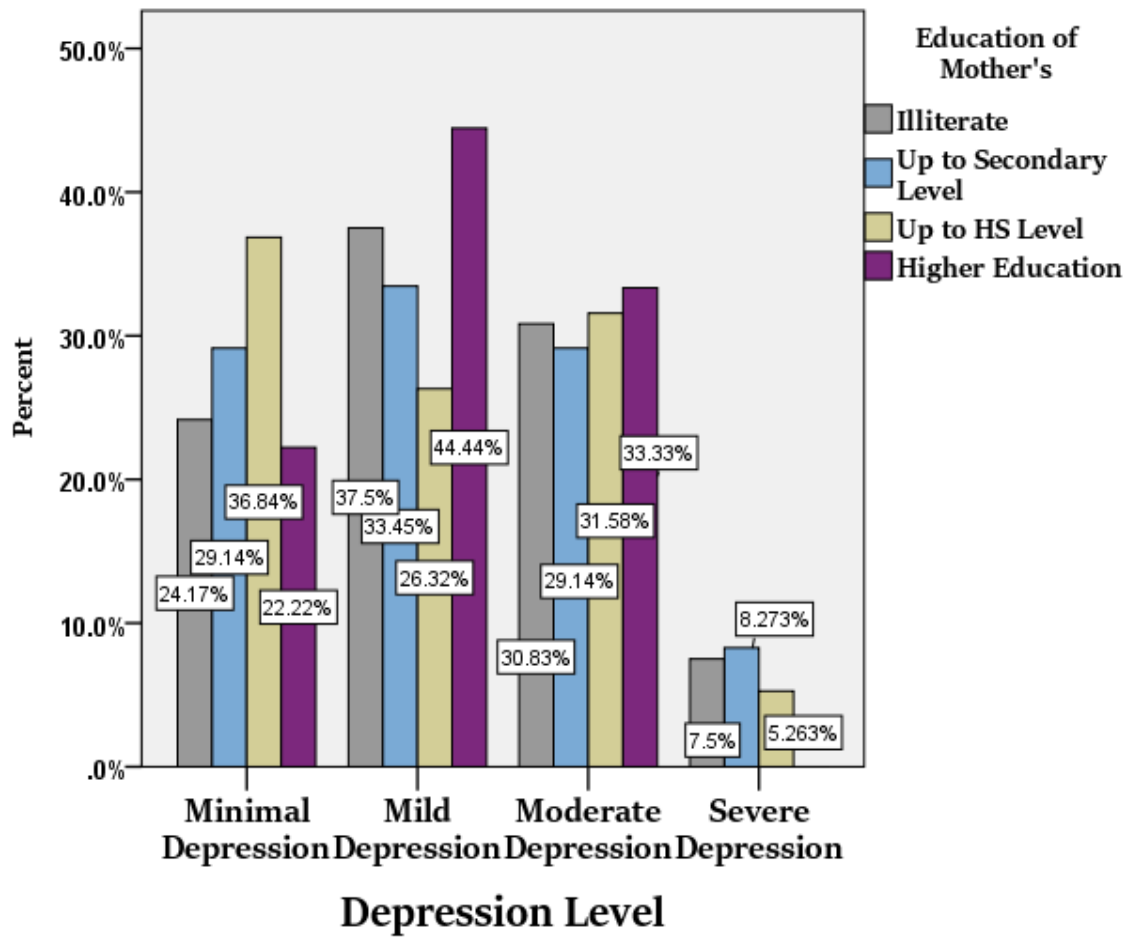
The study showed that the rate of prevalence of depression among SC and ST school going students on the basis of their Education of mother's which is given in table 4.8.

Table 4.8 Percentage wise distribution of depression of higher secondary level students on the basis of their Education of Mother's.

			EDUCATION OF MOTHER'S				TOTAL
			Illiterate	Up to Secondary Level	Up to HS Level	Higher Education	
DEPRESSION SCORE	Minimal Depression	Count	29	81	7	2	119
		% within	24.2%	29.1%	36.8%	22.2%	27.9%
	Mild Depression	Count	45	93	5	4	147
		% within	37.5%	33.5%	26.3%	44.4%	34.5%
	Moderate Depression	Count	37	81	6	3	127
		% within	30.8%	29.1%	31.6%	33.3%	29.8%
	Severe Depression	Count	9	23	1	0	33
		% within	7.5%	8.3%	5.3%	0.0%	7.7%
TOTAL		Total	120	278	19	9	426
		% within	100.0%	100.0%	100.0%	100.0%	100.0%
		% of total	28.17%	65.26%	4.46%	2.11%	100.0%

Similarly, on analyzing the data on the basis of mother's education, we received very similar data as we got in case of father's education. Once again, maximum students belonged to the category with their mother's education up to secondary level. Among them, 29.1% showed signs of minimal depression, 33.5% belonged to mild depression, 29.1% to moderate depression and finally 8.3% to severe depression. Among those whose mothers were illiterate, 7.5% suffered from severe depression. Once again, it was found that the number of students whose mothers were educated up to higher secondary level and those who had completed higher education was very less (19 and 9 respectively). Quite noticeably, none of the students whose mothers have completed higher education showed signs of severe depression and similarly, only 1 student whose mother was educated up to higher secondary level showed signs of severe depression. The corresponding data is illustrated in figure 4.9.

Figure 4.9 Education of Mother's wise distribution of Level of Depression



4.1.9 Measurement of the Level of Depression among the SC and ST higher secondary level students on the basis of their Family Income.

The study showed that the rate of prevalence of depression among Sc and ST school going Students on the basis of their monthly family income which is given in table 4.9.

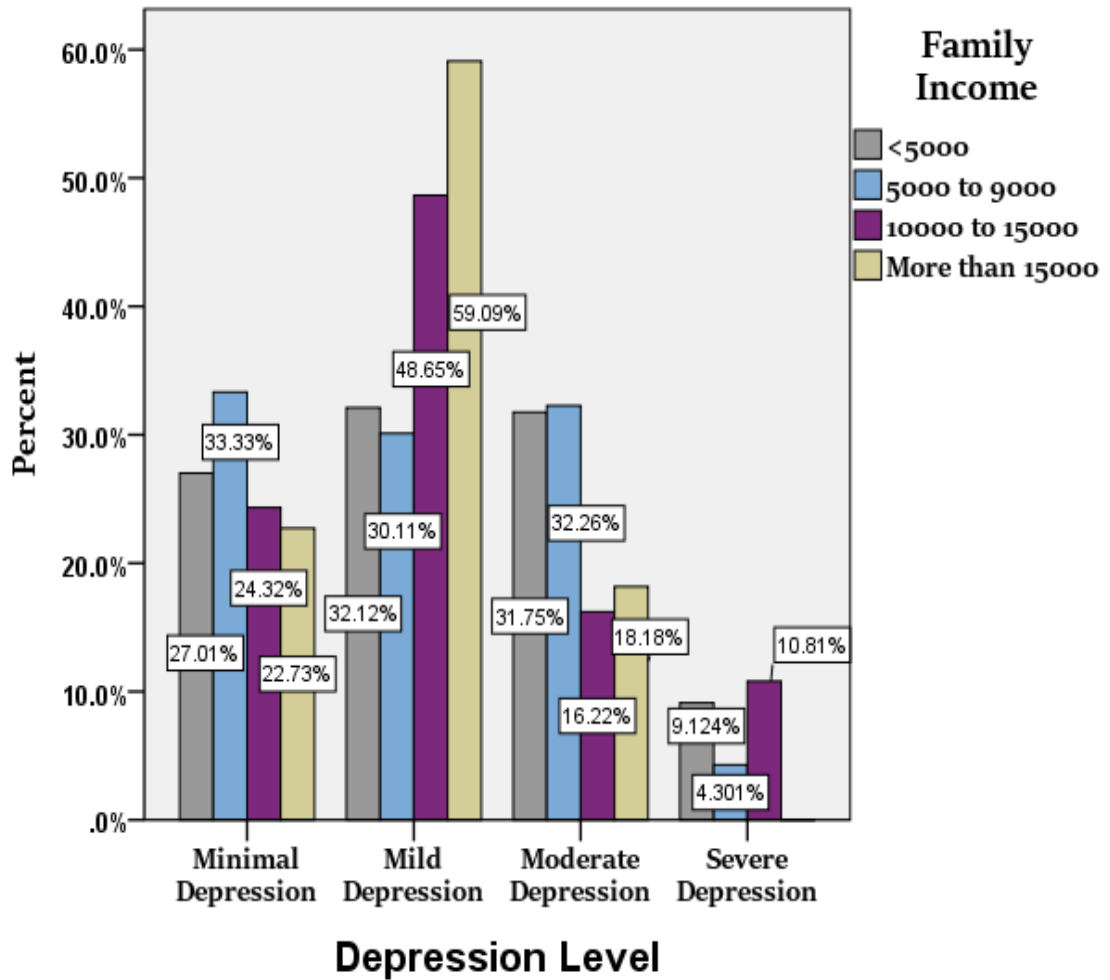
Table 4.9 Percentage wise distribution of depression of higher secondary level students on the basis of their Family Income.

			FAMILY INCOME				TOTAL
			Below 5000	5000 - 9000	10000 - 15000	> 15000	
DEPRESSION SCORE	Minimal Depression	Count	74	31	9	5	119
		% within	27.0%	33.3%	24.3%	22.7%	27.9%
	Mild Depression	Count	88	28	18	13	147
		% within	32.1%	30.1%	48.6%	59.1%	34.5%
	Moderate Depression	Count	87	30	6	4	127
		% within	31.8%	32.3%	16.2%	18.2%	29.8%
	Severe Depression	Count	25	4	4	0	33
		% within	9.1%	4.3%	10.8%	0.0%	7.7%
TOTAL		Count	274	93	37	22	426
		% within	100.0%	100.0%	100.0%	100.0%	100.0%
		% of total	64.32%	21.83%	8.67%	5.16%	100.0%

Finally, on the basis of family income, it has been observed that the out of the total 274 students i.e. 64.32% belong to their monthly family income below 5000. Within this group, 74 students (27.0%) were rated minimal level of depression 88 students (32.1%) fall under the mild level of depression, another 87 students (31.8%) were found with moderate level of depression and only 25 students (9.1%) showed severe level of depression. Again 93 students i.e. 21.83% belong to their family monthly income between 5000 and 9000. This group showed 31 students (33.3%) with minimal level of depression, 28 students (30.1%) fall under the mild level of depression, moderate level of depression was found in 30 students (32.3%) and only 4 students (4.3%) were rated under severe level of depression. This was followed by the 37 students i.e. 8.69% indicated their family monthly income 10000 to 15000. Within this group, 9 students (24.3%) were rated minimal level of depression, 18 students (48.6%) and 6 students (16.2%) showed signs of mild and moderate level of depression respectively. Only 4 students (10.8) indicated severe level of depression. Lastly, 22 students i.e. 5.16% had their monthly family income more than 15000. Within this group, 5 students (22.7%) were having minimal level of depression, 13 students (59.1%) were having mild level of depression and only 4 students (18.2%) were rated with severe level of depression.

None of the students in this family income group suffered from severe depression. The illustration of the distribution is given in figure 4.10.

Figure 4.10 Family income wise distribution of Level of Depression



4.2 Inferential Statistics

This part of the chapter deals with inferential statistics using chi square test of variable. In the current study, the nature of population from which samples have been drawn is not known to be normal. The variables are in normal from which is classified in category are represented by frequency counts. So, it is decided to test the collected data by distribution free non-parametric test. As the chi square test is used with discrete data in the form of frequencies, it is decided to used chi square test as a test of independent and to estimate the like hood that some factor than chance accounts for the observed relationship (Koul, 2009).

In the present analysis as the overall score are considered for inferential statistics, a correlation for size of sample is made (Garrett, 1999).

$$\chi^2 = \sum \frac{(O-E)^2}{E}$$

Where:

χ^2 = Chi Square obtained

\sum = the sum of

O = observed score

E = expected score

4.2.1 Hypothesis testing

H₀1: There is no significant difference in depression among the SC and ST students with respect to their gender.

Table 4.10: χ^2 test showing the gender wise comparison in depression among the SC and ST students at higher secondary level.

VARIABLE	Category	N	df	χ^2 Value	p-value	Remarks
GENDER	Male	143	3	1.172	.760	*NS (p>0.05)
	female	283				

*NS- Not Significant

The result indicates that findings on testing H₀₁ that is given below:

The analysis in above table revealed that the value of $\chi^2 = 1.172$ and $p = .760$. The critical values of χ^2 at 0.05 and 0.01 level of significance with 3 df = 7.815 and 11.345 respectively. It has been observed that the calculated value of χ^2 is far lower than the critical values of χ^2 at both the levels. So, the null hypothesis can be accepted as $p > 0.05$. Hence, it can be safely concluded that the found difference in level of depression among the backward class adolescents in higher secondary school level on the basis of their gender is not significant and it can be attributed to any chance factors.

H₀₂: There is no significant difference in depression among the SC and ST students with respect to their category of Caste variable.

Table 4.11: χ^2 test showing the Caste wise comparison in depression among the SC and ST students at higher secondary level.

VARIABLE	Category	N	df	χ^2 Value	p-value	Remarks
CASTE	SC	392	3	4.152	.246	*NS (p>0.05)
	ST	34				

*NS = Not Significant

The result indicates that findings on testing H₀₂ that is given below:

The analysis in above table revealed that the value of $\chi^2 = 4.152a$ and $p = .246$. The critical values of χ^2 at 0.05 and 0.01 level of significance with 3 $df = 7.815$ and 11.345 respectively. It has been observed that the calculated value of χ^2 is far lower than the critical values of χ^2 at both the levels. So, the null hypothesis can be accepted as $p > 0.05$. Hence, it can be safely concluded that the found difference in level of depression among the backward class adolescents in higher secondary school level on the basis of their class is not significant and it can be attributed to any chance factors.

H₀₃: There is no significant difference in depression among the SC and ST students with respect to their Locality of school variable.

Table 4.12: χ^2 test showing the Locality of school wise comparison in depression among the SC and ST students at higher secondary level.

VARIABLE	Category	N	df	χ^2 Value	p-value	Remarks
LOCALITY OF SCHOOL	Rural	283	3	11.589	.009	*S ($p < 0.01$)
	Urban	143				
'Phi' Value – 0.164						

***S= Significant**

The result indicates that findings on testing H₀₃ that is given below:

The analysis the above table revealed that the value of $\chi^2 = 11.589$ and $p = .009$. the critical value of χ^2 at 0.01 level of significance with 3 $df = 11.345$. It has been observed that the calculated value of χ^2 is higher than the critical value of χ^2 at the 0.01 level. So, the null hypothesis is rejected as $p < 0.01$. Hence, it can be safely concluded that the found difference level of depression among the backward class adolescents in higher secondary school level on the basis of their locality of school is significant and it cannot be attributed to any chance factors. Also, the calculated 'phi' value (0.164) indicates that the strength of relationship between locality of school and level of depression is

very low. That means one cannot very confidently predict the level of depression based on the locality of school for a particular adolescent.

H₀4: There is no significant difference in depression among the SC and ST students with the respect to their Structure of family.

Table 4.13: χ^2 test showing the Structure of family wise comparison in depression among the SC and ST students at higher secondary level.

VARIABLE	Category	N	<i>df</i>	χ^2 Value	p-value	Remarks
STRUCTURE OF FAMILY	Nuclear	300	3	6.827	.078	*NS ($p > 0.05$)
	Joint	126				

*NS = Not Significant

The result indicates that findings on testing H₀4 that is given below:

The analysis the above table revealed that the value of $\chi^2 = 6.827$ and $p = .078$. The critical values of χ^2 at 0.05 and 0.01 level of significance with 3 *df* = 7.815 and 11.345 respectively. It has been observed that the calculated value of χ^2 is lower than the critical values of χ^2 at both the levels. So, the null hypothesis can be accepted as $p > 0.05$. Hence, it can be safely concluded that the found difference in level of depression among the backward class adolescents in higher secondary school level on the basis of their type of family is not significant and it can be attributed to any chance factors.

H₀₅: There is no significant difference in depression among the SC and ST students with respect to their Number of Siblings.

Table 4.14: χ^2 test showing the Number of Siblings wise comparison in depression among the SC and ST students at higher secondary level.

VARIABLE	Category	N	df	χ^2 Value	p-value	Remarks
NUMBER OF SIBLINGS	Single	11	6	10.954	.090	*NS (p>0.05)
	One Sibling	145				
	More than One	270				

*NS = Not Significant

The result indicates that findings on testing H₀₅ that is given below:

The analysis the above table revealed that the value of $\chi^2 = 10.954a$ and $p = .090$. The critical values of χ^2 at 0.05 and 0.01 level of significance with 6 $df = 12.592$ and 16.812 respectively. It has been observed that the calculated value of χ^2 is lower than the critical values of χ^2 at both the levels. So, the null hypothesis can be accepted as $p > 0.05$. Hence, it can be safely concluded that the found difference in level of depression among the backward class adolescents in higher secondary school level on the basis of their no. of sibling is not significant and it can be attributed to any chance factors.

H₀₆: There is no significant difference in depression among the SC and ST students with the respect to their Class.

Table 4.15: χ^2 test showing the Class wise comparison in depression among the SC and ST students at higher secondary level.

VARIABLE	Category	N	df	χ^2 Value	p-value	Remarks
CLASS OF STUDENTS	Class IX	34	6	8.494	.204	*NS (p>0.05)
	Class X	147				
	Class XI	243				

*NS = Not Significant

The result indicates that findings on testing H₀₆ that is given below:

The analysis the above table revealed that the value of $\chi^2 = 8.494a$ and $p = .204$. The critical values of χ^2 at 0.05 and 0.01 level of significance with 6 $df = 12.592$ and 16.812 respectively. It has been observed that the calculated value of χ^2 is far lower than the critical values of χ^2 at both the levels. So, the null hypothesis can be accepted as $p > 0.05$. Hence, it can be safely concluded that the found difference in level of depression among the backward class adolescents in higher secondary school level on the basis of their class is not significant and it can be attributed to any chance factors.

H₀₇: There is no significant difference in depression among the SC and ST students with the respect to their Education of father's.

Table 4.16: χ^2 test showing the Education of father's wise comparison in depression among the SC and ST students at higher secondary level.

VARIABLE	Category	N	<i>df</i>	χ^2 Value	p-value	Remarks
FATHER EDUCATION	Illiterate	81	9	2.605	.978	*NS ($p > 0.05$)
	Up to Secondary	305				
	Up to HS	26				
	Higher Education	14				

*NS = Not Significant

The result indicates that findings on testing H₀₇ that is given below:

The analysis the above table revealed that the value of $\chi^2 = 2.605a$ and $p = .978$. The critical values of χ^2 at 0.05 and 0.01 level of significance with 9 $df = 16.919$ and 21.666 respectively. It has been observed that the calculated value of χ^2 is so far lower than the critical values of χ^2 at both the levels. So, the null hypothesis can be accepted as $p > 0.05$. Hence, it can be safely concluded that the found difference in level of depression among the backward class adolescents in higher secondary school level on

the basis of their father of education is not significant and it can be attributed to any chance factors.

H₀₈: There is no significant difference in depression among the SC and ST students with respect to their Education of mother's.

Table 4.17: χ^2 test showing the Education of mother's wise comparison in depression among the SC and ST students at higher secondary level.

VARIABLE	Category	N	df	χ^2 Value	p-value	Remarks
MOTHER EDUCATION	Illiterate	120	9	3.526	.940	*NS (p>0.05)
	Up to Secondary	278				
	Up to HS	19				
	Higher Education	9				

*NS = Not Significant

The result indicates that findings on testing H₀₈ that is given below:

The analysis the above table revealed that the value of $\chi^2 = 3.526$ and $p = .940$. The critical values of χ^2 at 0.05 and 0.01 level of significance with 9 df = 16.919 and 21.666 respectively. It has been observed that the calculated value of χ^2 is so far lower than the critical values of χ^2 at both the levels. So, the null hypothesis can be accepted as $p > 0.05$. Hence, it can be safely concluded that the found difference in level of depression among the backward class adolescents in higher secondary school level on the basis of their mother of education is not significant and it can be attributed to any chance factors.

H₀9: There is no significant difference in depression among the SC and ST students with respect to their Family income.

Table 4.18: χ^2 test showing the Family income wise comparison in depression among the SC and ST students at higher secondary level.

VARIABLE	Category	N	df	χ^2 Value	p-value	Remarks
FAMILY INCOME	<5000	274	9	16.488	.057	*NS (p>0.05)
	5000-9000	93				
	10000-15000	37				
	>15000	22				

*NS = Not Significant

The result indicates that findings on testing H₀9 that is given below:

The analysis the above table revealed that the value of $\chi^2 = 16.488a$ and $p = .057$. The critical values of χ^2 at 0.05 and 0.01 level of significance with 9 $df = 16.919$ and 21.666 respectively. It has been observed that the calculated value of χ^2 is lower than the critical values of χ^2 at both the levels. So, the null hypothesis can be accepted as $p > 0.05$. Hence, it can be safely concluded that the found difference in level of depression among the backward class adolescents in higher secondary school level on the basis of their monthly family income is not significant and it can be attributed to any chance factors.

References

- Best, J.W., & Kahn, J.V. (2008). *Research in Education*, Delhi: Pearson.
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research Method in Education* (6th Edition), Routledge Taylor & Francis Group, ISBN: 0-203-02905-4.
- Creswell, J.W. (2018). *Educational Research* (4th edition), Pearson India Education Services Pvt. Ltd.
- Garrett, H.E. (1979). *Statistics in Psychology and Education*, 6th Edition: International Book Bureau, Hyderabad, 42-48.
- Gay, L. R., Mills, G. E., & Airasian, P. W. (2012). *Educational Research Competencies for Analysis and Application* (10th Edition), Pearson Education, Delhi.
- Kothari, C. R. (2004). *Research Methodology Methods & Techniques*, 2nd Edition, New Age International (P) Limited publishers, ISBN: 978-81-224-2488-1.
- Koul, L. (2009). *Methodology of Educational Research* (4th Edition), Vikas Publishing House Pvt. Ltd
- Mongal, S.K. (2004). *Statistics in Psychology and Education*, 2nd Edition: Phi Learning Private Limited, ISBN-978-81-203-2088-8.
- Singh, Y. K. (2006). *Fundamental of Research Methodology and Statistics*, New Age International (P) Limited, ISBN: 978-81-224-2418-8.

CHAPTER - V : CONCLUSION AND DISCUSSION

5.1 : Findings of the Study

5.2 : Conclusion

5.3 : Discussion

5.4 : Limitations of the Study

5.5 : Scope for Further Studies

References

CHAPTER-V

CONCLUSION AND DISCUSSION

The present study aimed to finding out the rate of prevalence of depression among the SC and ST students studying at higher secondary level in Jalpaiguri district. In this study, the population framework was consisted of adolescent students from Jalpaiguri district of West Bengal. Different socio-academic variables were considered i.e. gender, Caste, class, family structure, number of siblings, father education, mother education, family income and location of the school. The present chapter discussed about the major findings of the study, comparing the present finding with findings from others studies as well as depicted the implication of this study along with further scope of researches.

5.1 Findings of the study

The major findings emerged through the present study would be important contribution for improvement of our understanding about depression among the SC and ST students at higher secondary level in Jalpaiguri district. The major findings of this study was in respect to analysis in interpretations of data are given below:

❖ **The rate of overall Depression among the SC and ST school going students at higher secondary level**

Out of total 426 SC and ST adolescent student, overall the rate of depression was found

- 7.7% students having severe depression.
- 29.8% students having moderate depression.
- 34.5% students having mild depression.
- 27.9% students having minimal depression.

That means it can be concluded that cumulatively the rate prevalence of depression among the secondary level of students i.e. 37.5% ranged from moderate to severe depression level.

❖ The rate of depression among the SC and ST school going students at higher secondary level on the basis of Gender variable.

The rate of overall depression among the SC and ST school going students with respect of Gender are

- 6.3% male school going students having severe level of depression and 8.3% female school going students were severe level of depression.
- 30.8% males' and 29.3% females' school going students were having moderate level of depression.
- 32.9% males and 35.3% also females' school going students was found have to mild level of depression.
- 30.1% males and 26.9% females under this study were found to have minimal level of depression.

Male and female students regarding their level of depression were inferential statistically the difference was found to be not significant ($P > 0.05$).

❖ The rate of depression among the SC and ST school going students at higher secondary level on the basis of their Locality of School variable.

The rate of overall depression among the SC and ST school going students with respect to Locality of School are

- 6.4% rural areas adolescent students have severe level of depression and 10.5% urban areas adolescent's students were severe level of depression.

- 34.3% rural areas and 21.0% urban areas adolescents under this study were having to found moderate level of depression
- 35.0% rural areas and 33.6% also urban areas adolescents were having mild level of depression.
- 24.4% rural areas and 35.5% urban areas adolescents' students have minimal level of depression.

Rural and Urban areas students regarding their level of depression were inferential statistically the difference was found to be significant ($p < 0.01$).

❖ Rate of depression among the SC and ST school going students at higher secondary level on the basis of their Caste variable.

The rate of overall depression among the SC and ST school going students with respect to Caste are

- 7.9% scheduled caste adolescent students have severe level of depression and 5.9% scheduled tribes' adolescent's students were severe level of depression.
- 28.6% scheduled caste and 44.1% scheduled tribes' adolescent were having moderate level of depression.
- 34.7% scheduled caste and 32.4% scheduled tribes' adolescent were found have to mild level of depression.
- 28.8% scheduled caste and 17.6% scheduled tribes' student under this study were found to have minimal level of depression.

Scheduled caste and Scheduled tribe students regarding their level of depression were inferential statistically the difference was found to be not significant ($P > 0.05$).

❖ Rate of depression among the SC and ST school going students at higher secondary level on the basis of their Class variable.

The rate of overall depression among the school going students with respect to their Class are

- 8.3% IX class students and 6.1% X class students have severe level depression and 8.6% class XI students were found to have severe level of depression.
- 25.0% were IX class students, 27.2% class X students and 32.1% class XI students under this study were having to found moderate level of depression.
- 22.2% class IX students and 36.7% class X students were found mild depression. 35.0% were XI students showed mild level of depression.
- 44.4% class IX standard students, 29.9% and 24.3% were class X and XI standard students under this study were found to have minimal level of depression.

Different class of students regarding their level of depression were inferential statistically the difference was found to be not significant ($P > 0.05$).

❖ Rate of depression among the SC and ST school going students at higher secondary level on the basis of their Number of Siblings.

The rate of overall depression among SC and ST school going students with respect to Number of Siblings are

- 9.1% single child adolescent students have severe level of depression, 6.9% and 8.1% one sibling and more than one sibling category adolescent's students were severe level of depression.
- 9.1% single child students, one sibling category 28.3% and 31.5% more than one sibling category adolescents under this study were having to found moderate level of depression

- 18.2% single child adolescents were found have to mild level of depression and 32.4% one sibling and 36.3% more than one sibling respectively was found mild level of depression.
- 63.6% single child adolescents from backward classes students have minimal level of depression, 32.4% one sibling category and 24.1% more than one sibling category students were found to have minimal level of depression respectively.

Different number of siblings regarding their level of depression were inferential statistically the difference was found to be not significant ($P > 0.05$).

❖ Rate of depression among the SC and ST school going students at higher secondary level on the basis of their family structure.

The rate of overall depression among the school going students with respect of family structure are

- 8.3% nuclear family adolescent students having severe level of depression and 6.3% joint family adolescent's students were severe level of depression.
- 32.0% nuclear family and 24.6% joint family adolescent were having moderate level of depression.
- 30.7% nuclear family and 43.7% also joint family adolescent were found have to mild level of depression.
- 29.0% nuclear family and 25.4% Joint family under this study were found to have minimal level of depression.

Nuclear family and joint family students regarding their level of depression were inferential statistically the difference was found to be not significant ($P > 0.05$).

❖ Rate of depression among the SC and ST school going students at higher secondary level on the basis of education of fathers.

The rate of overall depression among the school going students with respect of education of father are

- The children whose fathers were higher educated found to have 35.7% with minimal depression, 35.7% with mild depression, 28.6% with moderate and none of students' severe depression.
- The children whose fathers were educated up to higher secondary found to have 30.8% with minimal depression, 38.5% with mild depression, 23.1% with moderate and 7.7% with severe depression.
- The children whose fathers were educated up to secondary level found to have 27.9% with minimal depression, 33.4% with mild depression, 20.8% with moderate and 7.9% with severe depression.
- The children of illiterate fathers found to have 25.9% with minimal depression, 37.0% with mild depression, 28.4% with moderate and 8.6% with severe depression.

Students father of education regarding their level of depression were inferential statistically the difference was found to be not significant ($P > 0.05$).

❖ The rate of depression among the SC and ST school going students at higher secondary level on the basis of education of mothers.

The rate of overall depression among the school going students with respect of education of mother are

- The children of illiterate mothers found to have 24.2% with minimal depression, 37.5% with mild depression, 30.8% with moderate and 7.5% with severe depression.
- The children whose mothers were educated up to secondary level found to have 29.1% with minimal depression, 33.5% with mild depression, 29.1% with moderate and 8.3% with severe depression.

- The children whose mothers were educated up to higher secondary found to have 36.8% with minimal depression, 26.3% with mild depression, 31.6% with moderate and 5.3% with severe depression.
- The children whose mothers were higher educated found to have 22.2% with minimal depression, 44.4% with mild depression, 33.3% with moderate and none of students' severe depression.

Students mother of education regarding their level of depression were inferential statistically the difference was found to be not significant ($P > 0.05$).

❖ The rate of depression among the SC and ST school going students at higher secondary level on the basis of their family income.

The rate of overall depression among the school going students with respect of family income are

- The children of whose family monthly income below five thousand found to have 27.0% with minimal depression, 32.1% with mild depression, 31.8% with moderate and 9.1% with severe depression.
- The children whose family monthly income five thousand to nine thousand found to have 33.3% with minimal depression, 30.1% with mild depression, 32.3% with moderate and 4.3% with severe depression.
- The children whose monthly family income ten thousand to fifteen thousand found to have 24.3% with minimal depression, 48.6% with mild depression, 16.2% with moderate and 10.8% with severe depression.
- The children whose family monthly income more than fifteen thousand found to have 22.7% with minimal depression, 59.1% with mild depression, 18.2% with moderate and none of students' severe depression.

Students family income regarding their level of depression were inferential statistically the difference was found to be not significant ($P > 0.05$).

5.2 Conclusion

From the above findings of the study the following conclusions are drawn:

- I. **Research Questions:** What is the rate of prevalence of depression among the SC and ST students studying at higher secondary level?

Out of total 426 SC and ST adolescents, 7.7% having severe depression, 29.8% students having moderate depression, 34.5% students having mild depression and lastly, 27.9% students having minimal depression.

- II. **Research Questions:** Do demographic factors have serious effect on the prevalence of depression among the SC and ST students studying at higher secondary level?

Yes, only locality of school has significant effect ($p < 0.01$) on the prevalence of depression among the SC and ST adolescents studying at higher secondary level. The other variables under this study i.e. gender, class, caste, number of sibling(s), structure of family, education of father, education of mother and family income was found to have no statistically significant effect ($P > 0.05$) on depression.

5.3 Discussion

According to World Health Organization(WHO), "Children and adolescents with good mental health are able to achieve and maintain optimal psychological and social functioning and well-being. They have a sense of identity and self-worth and ability to be productive and to learn, and a capacity to tackle developmental challenges and use cultural resources to maximize growth. Moreover, the good mental health of children and adolescents is crucial for their active social and economic participation",

(WHO, 2001). Depression is a disorder where the moods persevere and intervene with the child or adolescent's functional capabilities. Depression affects school going adolescents' day-to-day activities, readings, social association, school performance and overall well-being, as well as pushing them at risk for the suicide.

About 8,00,000 people commit suicide all over the world every year suicide prevention (SUPRE) World Health Organization (2012) of these 135,000 (17%) are residents of India. In 2012, Tamil Nadu (12.5% of all suicides), Maharashtra (11.9%) and West Bengal (11%) had the highest percentage of suicides (Suicide in India the Registrar General of India, Government of India 2012). Suicide is one of the main reasons of death among young people their age is 10-24 in the country, with 62,960 such death report in 2013, as per findings of the Lancet Commission of Adolescents Health and Well-being report. Globally, too, accidents, self-harm (suicide), violence and tuberculosis accounted for the most deaths in the age group. The major causes of suicide, according to numerous findings, points toward the depressive disorders and ill mental health of the individuals.

The present study revealed that the rate of prevalence of depression among SC and ST students found to be 37.5% ranged from moderate to severe depression level. It indicated a great but not statistically significant impact of family structure on the depression level among the school going children, where nuclear family structure is causing more depression than the joint family structure. The adolescents studying at urban schools were suffering more from severe depression than that of rural schools and the difference was statistically significant. When we look at ST students, they showed more symptoms of moderate depression (44.1%) as compared to SC students (28.6%) but statistically found to be not significant.

In this study, it was found among overall students that, 7.7% suffering from severe level of depression, 29.8% have moderate level of depression and 34.5% have mild level of depression which was similar to the findings of Jha, et. al. (2017).

In the study conducted by Rama, L., Patel, S., Maata, S., Negi, P., Pal, D.K. & Murari, L.K. (2016), found that 58.8% female and 41.2% male were found with

depressive disorder, and the difference was also statistically significant ($p < 0.05$) which was contrary to the present findings where difference between male and female found to be not significant ($p > 0.05$).

In the present study, urban areas students were suffering from higher level of depression than students from rural areas, and the difference was found to be statistically significant ($P < 0.05$).

In the study of Ramli, M. et. al (2008) the difference between levels of gender and family income was found to be statistically significant ($P < 0.01$) which the present study strongly contradicts.

As the SC and ST students belong to the marginalized section of the society, acquainted support for reducing depression or recover from it is lacking from family members or immediate society. Therefore, the primary duty for the teachers is to identify the particular students suffering from depression. Then, they should try to get to the root of the problem by being amicable to the students and understanding the real cause of their depressive behaviour. Based on the seriousness of the problem, the teachers should contact the parents of the student and discuss about the necessary measures in order to reduce the level of depression. If necessary, the teachers and parents should also consider consulting a psychiatrist (Sinha & Ghosal, 2015).

The teachers should make the student understand that mentally disturbing issues usually lessen if discussed with well-wishers. Therefore, the teachers should try to win the trust of the students because being indifferent can worsen the problem (Sinha & Ghosal, 2015).

Moreover, the teachers should keep a check whether any sort of suicidal thoughts or suicidal behaviour are found among the affected students. If that is the case, then they should immediately contact their parents and advise them to consult a psychiatrist as soon as possible.

Another point to be kept in mind is whether the students is falling in the trap of any sort of drug abuse or alcoholism. It is the responsibility of the teacher to explain

to the affected student that alcoholism is extremely bad for depression in the long run (Sinha & Ghosal, 2015).

Parents should ensure that the affected student does not hamper his daily routine. Thus, they should eat a balanced diet, sleep properly, exercise daily and also take part in some relaxing activities to keep their mind fresh. Expert counselling and different forms of psychotherapy has been found to be effective in recovering from various level of depression among which the most efficient one is Cognitive Behaviour Therapy (CBT). The concept of CBT is that one's behaviour can be altered if their way of thinking is transformed. Negative thinking is expelled and the affected student is made to believe that he/she can once again lead an absolutely normal life. Since this method may require several sittings with the students, the teachers should have proficient training in this therapy method (Sinha & Ghosal, 2015).

Lastly, another very important to be kept in mind by both teachers as well as parents is that, under no circumstances shall they prescribe any medicine on their own. Any sort of medicine can only be prescribed by a trained doctor (Sinha & Ghosal, 2015).

The Educational policy framers, stakeholders and teacher educators may adopt some characteristic measures or plans in the light of the present study. A better alternative to earnestly prevent depression should be promoting mental health and well-being among school going adolescents. School mental health promotion programme are to be needed for this. Schools have to provide a supportive environment in order to identify the mental health problems and also provide some primary counselling with references services. The present researcher thinks in his mind it very important in the present-day context.

5.4 Limitations of the Study

Present study has some limitation, which are given below:

- 1) Despite of assuring the confidentiality of data, the participants showed reluctance in sharing personal details and therefore the responses might have affected by response bias.
- 2) This study could have been conducted to a greater sample size that might have given more insights on level of depression among SC and ST students at higher secondary level of Jalpaiguri district.
- 3) Variables like family structure, presence of sibling, parental education might have other type of influence on adolescents' mental state that the present study overlooked.

5.5 Scope of further studies

The present study on depression among school going backward class adolescents in Jalpaiguri district, West Bengal is not an end in itself; rather it is an on-going journey to reveal the scenario of depression among the adolescents' school going children. Therefore, a numerous further studies may be conducted by the future researchers considering various dimension of different variable and further sophisticated tool may be developed to measure the rate of prevalence of depression with the sophisticated multivariate statistical analysis. The present researcher thinks it is very important in the present day context to explore this issue further.

References

- Bansal, V., Goyal, S. & Srivastava, K. (2009). Study of prevalence of depression in adolescents of a public school, *Indian Psychiatry Journal*, 18 (1), pp.43-46.
- Govt. of India (2012) Suicides in India the Registrar General of India.
- Jha, K. K., Singh, S. K., K., Nirala, S.K., Kumar, C., Kumar, P. & Aggarwal, N. (2017). Prevalence of Depression among School going Adolescents in an Urban Area of Bihar, India. *Indian Journal of Psychological Medicine*, Wolters Kluwer Madknow Publication, 39(3), pp.287-292.
- Rama, L., Patel, S., Maata, S., Negi, P., Pal, D.K. & Murari, L.K. (2016). Prevalence of Depression among Higher Secondary School Adolescents in Bhopal Madhya Pradesh. *National Journal of Community Medicine*, Med Publication, 7(11), pp.856-858.
- Ramili, M., Adlina, S., Suthahar, A., Edarish, A. B., Ariff, F. M., Narimah, A. H. H., Nuraliza, A. S., Fauzi. & Karuthan, C. (2008). Depression among secondary school students: A comparison between Urban and Rural Population in a Malaysian Community, *Hong Kong college of Psychiatrists*, 18 (2), pp.55-61.
- Sharan, P. & Sagar, R. (2007). Mental Health policy for children and adolescents in developing countries, *J. Indian Assoc. Child Adoles. Ment. Health*; 3 (1), pp.1-4.
- Sinha, M. & Ghosal, C. C. (2015): School-Paruyader Manashik Swasta Samashya, *Pragatishil Publishers*, ISBN- 978-81-89846-66-4.
- WHO, (2012). Suicide Prevention (SUPRE).
- World Health Organization (2013). Caring for children and adolescents with mental disorder, Geneva: World Health Organization.

Bibliography

Bibliography

- Abreu, P. R. & Santos, C. E. (2008). Behavioural Models of Depression: A Critique of Emphasis on Positive Reinforcement, *International Journal of Behavioral Consultation and Therapy*, 4 (2), 130-145.
- Addis, M. E. (2008). Gender and Depression in Men, American Psychological Association, *Wiley Periodicals*, 15 (3), 153-168.
- Al-Kaabi, N., Selim, N.A.A., Singh, R., Almudahka, H. & Salem, M. (2017). Prevalence and Determinants of depression among Qatari adolescents in Secondary Schools, *Family Medicine and Medical Science Research*, Med Science Research, 6(3), pp.1-8.
- Alotaibi, T. (2015). Combating anxiety and depression among school children and adolescents through student counselling in Saudi Arabia, *Procedia Social and Behavioural Sciences*, *Elsevier*, 205, pp.18-29.
- Bahls, S. C. (2002). Depression in childhood and adolescence: clinical features, *Jornal de Pediatria*, 78 (5), pp. 359-266.
- Bansal, V., Goyal, S & Srivastava, K. (2009). Study of prevalence of depression in adolescents of a public school, *Indian Psychiatry Journal*, 18 (1), pp.43-46.
- Basu, G. & Biswas, S. (2017). Mental health and depression among school going adolescents: excerpts from a school based study on Nadia district, West Bengal, *Asian Journal of Medical Science*, 8 (5), pp. 64-69.
- Beniwal, N., Verma, G.K., Chahar, C.K. & Verma, K.K. (2016) To study the prevalence of depression and effect of home environment on depression among school going children. *International Journal of Contemporary Pediatrics*, Medip Academy Publication, 3(3), pp.988-992.
- Best, J.W., & Khan, J.V. (2008). *Research in Education*, Delhi: *Pearson*.

- Bhat, N.M. (2014). A study of emotional stability and depression in orphan secondary school students, *International Journal of Education and Psychological Research (IJEPR)*,3 (2), pp. 95-100.
- Bhowmik, D., Kumar, K. P. S., Srivastava, S., Srivastava, P. & Dutta, A. S. (2012). Depression- Symptoms, Causes, Medications and Therapies, *The Pharma Innovation*, 1 (3), pp. 37-51.
- Cohen, L., Manion, L. & Morrison, K. (2007). *Research Method in Education* (6th Edition), Routledge Taylor & Francis Group, ISBN: 0-203-02905-4.
- Creswell, J.W. (2018). *Educational Research* (4th edition), Pearson India Education Services Pvt. Ltd.
- Eskin, M., Ertekin, K., Harlak, H. & Dereboy, C. (2008). Prevalence and factors Related to Depression in High School Students, *Turkish Journal of Psychiatry*, 19 (4), pp.1-8.
- Garrett, H.E. (1979): *Statistics in Psychology and Education*, 6th Edition: *International Book Bureau*, Hyderabad, pp. 42-48.
- Gay, L. R., Mills, G. E. & Airasian, P. W. (2012). *Educational Research Competencies for Analysis and Application* (10th Edition), Pearson Education, Delhi.
- Glied, S. & Pine, D. S. (2002). Consequence and Correlates, *American Medical Association*, 156, pp. 1009-1014.
- Goodwin, R. D. & Gotlib, I. H. (2004). Gender differences in depression: the role of personality factors, *Psychiatry Research*, 126, pp. 135-142.
- Goud, T.G., Ramesh K. & Kumar, K.P. (20014). Factor Associated with Depression among Adolescents, *Research and Reviews: Journal of Medical and Health Science*, 3(4), pp 73-76.
- Govt. of India (2012) *Suicides in India* the Registrar General of India.

- Gupta, R. & J, N. (2017). Prevention of Suicide, *Indian Journal of Social Psychiatry, Wolters Kluwer – Medknow*, 33 (2), pp. 139-141.
- Hammen, C. (2009). Adolescents depression stressful interpersonal contexts and risk for resource, *Association for Psychological Science*, 18 (4), pp.200-204.
- Iyer, K. & Khan, Z. A. (2012). Depression – A Review, *Research Journal of Recent Sciences*,
- Jayanthi, P., Thirunavukarasu, M. & Rajkumar, R. (2015). Academic Stress and Depression among adolescents: A crass-sectional study. *Indian Pediatrics, Indian Academy of Pediatrics Publication*, 52(3), pp.217-219.
- K., Nirala, S.K., Kumar, C., Kumar, P. & Aggarwal, N. (2017). Prevalence of Depression among School going Adolescents in an Urban Area of Bihar, India. *Indian Journal of Psychological Medicine, Wolters Kluwer Madknow Publication*, 39(3), pp.287-292.
- Kaur, J., Naidu, B. M., Manickam, M. A., Ibrahim, N. & Rosman, A. (2014). Prevalence and Correlates of Depression among Adolescents in Malaysia, *Asia- Pacific Journal of Public Health*, 26 (5), pp.53-62.
- Kothari, C. R. (2004). *Research Methodology Methods & Techniques*, 2nd Edition, *New Age International (P) Limited publishers*, ISBN: 978-81-224-2488-1.
- Koul, L. (2009). *Methodology of Educational Research (4th Edition)*, *Vikas Publishing House Pvt. Ltd.*
- Krishnaveni, Y. S., Prakash B., Kulkarni, P. & Narayanamurthy, M. R. (2018). Prevalence and factors associated with depression and anxiety among students of backward community and minority girl's hostels of Mysuru city, *International Journal of Community Medicine and Public Health, Medip Academy*, 5(3), pp 1075-1081.
- M, Bhandari. (2016). Anxiety and depression among adolescents' students at higher secondary level, *A Multidisciplinary Journal of Science, Technology and*

- Mathematics*, Research Council of Science and Technology, Biratnagar, Nepal, 14, pp.103-109.
- Maharaj, R. G. (2008). Depression among adolescents, aged 13-19 years, Attending Secondary School in Trinidad prevalence and Associated Factors, *West Indian Med Journal*, 57 (4), pp.352-359.
- Mehler Wex, C. & Kolch, M. (2008). Depression in Child and Adolescents, *Dtsch Arztebl Int*, 105 (9), pp. 144-55.
- Milin, R., Walker, S. & Chow, J. (2003). Major Depressive Disorder in Adolescents: A Brief Review of the Recent Treatment Literature, *Can J Psychiatry*, 48 (9), 600-606.
- Mongal, S.K. (2004): Statistics in Psychology and Education, 2nd Edition: *Phi Learning Private Limited*, ISBN-978-81-203-2088-8.
- Nair, M. K. C., Poul, M. K. & John, R. (2004). Prevalence of depression among adolescents, *Indian Journal of Pediatrics*, 71 (6), pp.523-524.
- Patil, A. S. (2015). Depression among adolescents: A cross sectional study, *International Journal of Current Research and Academic Review*, 3 (2), pp. 183-186.
- Petersen, A. C., Compas, B. E., Gunn, J. B., Stemmler, M., Ey, S. & Grant, K. E. (1993). Depression in Adolescence, *American Psychological Association*, 48 (2), pp. 155-168.
- Preeti, B., Singh, K. & Kumar, R. (2017). Study of Depression, Anxiety and Stress Among School Going Adolescents, *Indian Journal of Psychiatric Social Work*, 8(1), pp. 6-9.
- Radhakrishnan, R. & Andrade, C. (2012). Suicide: An Indian perspective, *Indian Journal of Psychiatry*, Indian Psychiatric Society, 54 (4), pp. 304-319.

- Rama, L., Patel, S., Maata, S., Negi, P., Pal, D.K. & Murari, L.K. (2016). Prevalence of Depression among Higher Secondary School Adolescents in Bhopal Madhya Pradesh. *National Journal of Community Medicine*, MedSci Publication, 7(11), pp.856-858.
- Ramanujam, G., Rahuman, A. & Mahalakshmi, R. (2017). Prevalence of depression among who attempt suicide, *International Journal of Research in Medical Sciences*, 5 (9), pp. 4108-4111.
- Ramili, M., Adlina, S., Suthahar, A., Edarish, A. B., Ariff, F. M., Narimah, A. H. H., Nuraliza, A. S., Fauzi. & Karuthan, C. (2008). Depression among secondary school students: A comparison between Urban and Rural Population in a Malaysian Community, *Hong Kong college of Psychiatrists*, 18 (2), pp.55-61.
- Sharma, G. & Pandey, D. (2017). Anxiety, Depression and Stress in relation to Academic Achievement among Higher Secondary School Students, *The International Journal of Indian Psychology*, REDSHINE Publication, 4(2), pp 82-89.
- Sharma, P & Kirmani, M.N. (2013). *Exploring depression & anxiety among college going students*, *International Journal of Science and Research(IJSR)*, 4(6), pp. 528-532.
- Sharma, V. (2014). Prevalence of Depression among Adolescents: A comparative Analysis. *Paripex- Indian Journal of research*, 3(6), pp.53-55.
- Shukla, N.K., Shukla, M., Ahmad, S., Shukla, R. & Khan, Z. (2017). A cross-sectional study on depression among school going adolescents' girls in Barabanki district, Uttar Pradesh, India, *International Journal of Contemporary Pediatrics*, Medip Academy Publication, 4(1), pp 178-181.
- Singh, M.M., Gupta, M. & Grover, S. (2017). Prevalence & factors associated with depression among school going adolescents in Chandigarh, north India. *Indian*

Journal of Medical research, Wolters Kluwer Madknow Publication, 146(2), pp.205-215.

Singh, Y. K. (2006). *Fundamental of Research Methodology and Statistics*, New Age International (P) Limited, ISBN: 978-81-224-2418-8.

Sinha, M. & Ghosal, C. C. (2015): *School-Portuyader Manashik Swasta Samashya*, Pragatishil Publishers, ISBN- 978-81-89846-66-4.

Siva, M. Y., Gautam, S. & Goutham, R. B. (2016). An Overview on Depression, *Research and Reviews: Journal of Pharmacology and Toxicology Studies (RRJPTS)*, 4 (3), 119-124.

Urmila, K.V., Usha. K., Mohammed M.T.P & Pavithran, K. (2017). Prevalence and risk factors associated with depression among higher secondary school students residing in a boarding school of north Kerala, India, *International Journal of Contemporary Pediatrics*, Medip Academy Publication, 4(3), pp 735-740.

Verma, N., Jain, M. & Roy, P. (2014). Assessment of magnitude and grades of depression among Adolescents in Raipur City, India, *International Research Journal of Medical Sciences*, International Science Community association,2(5), pp 10-13.

Wani, M.A., Sankar, R., Rakshnth, P., Nivatha, A.L.S., Sowparnika C.E. & Marak L.D.B. (2016). *International Journal of Education and Psychological Research (IJEPR)*,5 (3), pp. 45-49.

www.aasra.info

WHO, (2012). *Suicide Prevention (SUPRE)*.

World Health Organization (2013). *Caring for children and adolescents with mental disorder*, Geneva: World Health Organization.

Zartaloudi, A. (2011). What is men's experience of depression, *Health Science Journal*, 5 (3), pp.182-187.

Appendix

Appendix 1:

বেক-এর বিষণ্ণতা পরিমাপনী (Beck Depression Inventory)

প্রস্তুতকর্তা – ডঃ অ্যারন বেক (Dr. Aron Beck)

সাইকিয়াট্রি বিভাগ (Psychiatric Department)

পেনসিলভেনিয়া বিশ্ববিদ্যালয় (Pennsylvania University)

বাংলা সংস্কৃতে গৃহীত – ডঃ মুক্তিপদ সিনহা (Dr. Muktipada Sinha, Associate Professor) এবং পৌলমী মুখার্জী (Poulomi Mukherjee, M.phil Scholar)

শিক্ষাবিজ্ঞান বিভাগ, যাদাবপুর বিশ্ববিদ্যালয়, Jadavpur University, Department of education.

অনুগ্রহ করে নিম্নলিখিত ক্ষেত্র গুলি পূরণ করো (Please fill in the blanks)

নাম (Name).....

বয়স (Age)..... লিঙ্গ (sex)..... (ছেলে/ মেয়ে)(Boy/Girl)

শ্রেণি (Class).....

বিদ্যালয় এলাকা (School Locality): গ্রাম/ শহর (Urban / Rural)

বিদ্যালয় নাম (Name of the School)

.....

বিদ্যালয় ধরন (Type of School)..... (সরকারি/ বেসরকারি)(govt. /pvt)

ভাই বোনের সংখ্যাঃ ভাই..... বোন.....

No of siblings: Brother..... Sister.....

পরিবারঃ যৌথ / একক Family: Nuclear/ Joint

অভিভাবকের শিক্ষাগত যোগ্যতাঃ পিতামাতা.....

Educational Qualification of Guardian.....

অভিভাবকের মাসিক আয়..... (Monthly Income of Guardian)

নির্দেশনা (INSTRUCTION)

এই প্রশ্নমালা ২১ টি দলের বিবৃতি নিয়ে গঠিত। অনগ্রহ করে প্রতিটি দলের বিবৃতি/ বক্তব্যগুলি যত্ন সহকারে পড়ুন এবং প্রতিটি দল থেকে নেওয়া যেকোন একটি বক্তব্যের পাশে থাকা খালি ঘরটিতে (✓) চিহ্ন দিন, যা আপনি আজ আর গত দুই সপ্তাহ ধরে অনুভব করেছেন। আপনার মতামতের সম্পূর্ণ গোপনীয়তা বজায় রাখা হবে এবং উপাত্ত (Data) শুধু মাত্র গবেষণার কাজেই ব্যবহার করা হবে। (This questionnaire consists of 21 groups of statements. Please read each group of statement careful, & than pick out the one statement in each group that best describes the way you have been feeling during the past two weeks, including today. Circle the number beside the statement you have picked.)

১/ বিষণ্ণতা (Sadness)-

- ০/ আমি বিষণ্ণতা বোধ করি না।
(I don't feel Sad)
- ১/ আমি বেশির ভাগ সময় বিষণ্ণতা বোধ করি।
(I feel sad much of the time)
- ২/ আমি সব সময় বিষণ্ণতা বোধ করি।
(I am sad all the time)
- ৩/ আমি এতটাই বিষণ্ণ এবং অসুখী যে আমি আর ঠিক থাকতে পারছি না।
(I am so sad or unhappy that I am can't stand it)

২/ ভবিষ্যৎ নিয়ে আশা (Pessimism)-

- ০/ আমি আমার ভবিষ্যৎ সম্পর্কে উদাসীন নই।
(I am not discouraged about my future.)
- ১/ আমি আমার ভবিষ্যৎ নিয়ে স্বাভাবিকের থেকেও অধিক পরিমাণে নিরুৎসাহ বোধ করি।
(I feel more discouraged about my future than I used to be.)
- ২/ আমি আমার জন্য কোন কিছু আশা করি না।
(I do not expect things to work out for me.)

- ৩/ ভবিষ্যৎ নিয়ে আমার কোন আশা নেই এবং আমার খারাপই হবে।
(I feel my future is hopeless and will only get worse.)

৩/ অতীতের ব্যর্থতা (Past failure)-

- ০/ আমি যে ব্যর্থ তা আমি মনে করি না।
(I do not feel like a failure)
- ১/ আমার যতটা ব্যর্থ হওয়া উচিত ছিল তার চেয়ে বেশি ব্যর্থ হয়েছি।
(I have failed more than I should have)
- ২/ পিছনের দিকে তাকালে আমি আমার অনেক ব্যর্থতাই দেখতে পাই।
(As I look back, I see a lot of failures.)
- ৩/ আমি মনে করি যে আমি একজন পুরোপুরি ব্যর্থ ব্যক্তি।
(I feel I am a total failure as a person)

৪/ সুখানুভব হারানো (Loss of pleasure)-

- ০/ কোন বিষয় থেকে আমি যতটা আনন্দ উপভোগ করছি আমি সর্বদা ততটা বেশি আনন্দ পাই।
(I get much pleasure as I ever did from the things I enjoy.)
- ১/ কোনো বিষয় থেকে আমি যতটা বেশি আনন্দ উপভোগ করতাম এখন ততটা আনন্দ উপভোগ করি না।
(I don't enjoy things as much as I used to.)
- ২/ কোনো বিষয় থেকে যতটা আনন্দ উপভোগ করতাম সেই সব বিষয় থেকে আমি খুবই অল্প আনন্দ পাই।
(I get very little pleasure from the things I used to enjoy.)
- ৩/ কোনো বিষয় থেকে আমি যতটা আনন্দ করেছি আমি এখন তেমন কোন আনন্দ পাই না।
(I can't get any pleasure from the things I used to enjoy.)

৫/ অপরাধবোধ (Guilty feelings)-

- ০/ আমি নিজেকে বিশেষ ভাবে দোষী মনে করি না।
(*I don't feel particularly guilty.*)
- ১/ আমি নিজেকে দোষী মনে করি অনেক কিছুতেই।
(*I feel guilty over many things I have done or should done.*)
- ২/ অধিকাংশ সময় আমি নিজেকে দোষী মনে করি।
(*I feel quite guilty most of the time.*)
- ৩/ আমি সব সময় নিজেকে দোষী মনে করি।
(*I feel guilty all of the time.*)

৬/ শাস্তি পাওয়া নিয়ে অনুভূতি (Punishment feelings)

- ০/ আমি মনে করি না যে আমি শাস্তি পাব।
(*I don't feel I am being punished*)
- ১/ আমি মনে করি যে আমি শাস্তি পেতেও পারি।
(*I feel I may be punished*)
- ২/ আমি শাস্তি প্রত্যাশা করি।
(*I expect to be punished*)
- ৩/ আমি মনে করি আমি শাস্তি পাব।
(*I feel I am being punished*)

৭/ অপছন্দ (Self-dislike)-

- ০/ আমি যা নিজেকে তাই মনে করি।
(*I feel the same about myself as ever.*)
- ১/ আমি নিজের প্রতি বিশ্বাস হারিয়েছি।
(*I have lost confidence in myself*)
- ২/ আমি নিজেকে নিয়ে হতাশ।
(*I am disappointed in myself*)
- ৩/ আমি নিজেকে অপছন্দ করি।

(I dislike myself)

৮/ আত্মসমালোচনা (Self-criticalness)-

- ০/ আমি সচরাচর নিজের সম্পর্কে সমালোচনা করি না।
(I don't criticize or blame myself more than usual)
- ১/ আমি অধিক সময় নিজের সম্পর্কে সমালোচনা করি।
(I am more critical of my self than I used to be)
- ২/ আমি সব ব্যাপারে নিজের সমালোচনা করি।
(I criticize myself for all of my faults)
- ৩/ যা কিছু খারাপ ঘটেছে তার জন্য নিজেকে দায়ি মনে হয়।
(I blame myself for everything bad that happens.)

৯/ আত্মহত্যামূলক চিন্তা (Suicidal thoughts)-

- ০/ আত্মহত্যা করার ব্যাপারে আমার মধ্যে কোন চিন্তা ভাবনা নেই।
(I don't have any thoughts of killing myself.)
- ১/ আমার নিজেকে শেষ করে দিতে ইচ্ছে করে কিন্তু পারি না।
(I have thought of killing myself but, I would not carry them out.)
- ২/ আমার অবশ্যই নিজেকে শেষ করে দিতে ইচ্ছে করে।
(I would like to kill myself.)
- ৩/ যদি আমি কোন সুযোগ পাই তাহলে আমি নিজেকে শেষ করে দেবো।
(I would kill myself I had the chance.)

১০/ কান্না করা (Crying)-

- ০/ কোন ব্যাপারে আমি স্বাভাবিকের চেয়ে বেশি কান্না করি না।
(I don't cry anymore)
- ১/ আমি স্বাভাবিকের চেয়ে বেশি কান্না করি।
(I cry more than use to.)
- ২/ যেকোনো ছোট ছোট ব্যাপারে আমি কান্না করি।
(I cry over every little thing)

- ৩/ আমার খুব কাঁদতে ইচ্ছে করে কিন্তু কাঁদতে পারি না।
(*I feel like crying but I can't*)

১১/ বিশ্রাম নেওয়া (Rest)

- ০/ আমি স্বাভাবিক বিশ্রাম নিই।
(*I am not more restless or wound up than usual*)

- ১/ আমি স্বাভাবিকের চেয়ে কম বিশ্রাম নিই।
(*I feel more restless or wound up than usual*)

- ২/ আমি কোন কাজে বেশিক্ষণ মন দিতে পারি না তাই স্থির হয়ে বসতে পারি না।

(*I am so restless or agitated that it's hard to stay still*)

- ৩/ সব সময় অস্থির হয়ে থাকি বিশ্রাম নিতে পারি না।

(*I am so restless or agitated that I have to keep moving or doing something*)

১২/ আগ্রহ হারানো (Loss of interest)

- ০/ অন্যান্য মানুষ বা কাজ কর্মের প্রতি আমি আগ্রহ হারাই নি।
(*I have not lost interest in other people or activities*)

- ১/ অন্য লোকজন বা কাজ কর্মের প্রতি আমি কম আগ্রহী।
(*I am less interested in other people or things than before*)

- ২/ অন্য লোকজন বা কাজ কর্মের প্রতি অধিকাংশ আগ্রহ হারিয়েছি।
(*I have lost most of my interest in other people*)

- ৩/ কোন কিছুর প্রতি আগ্রহ দেওয়া খুব কঠিন হয়ে পরেছে।
(*It's hard to get interested in anything*)

১৩/ সিদ্ধান্তহীনতা (Indecisiveness)

- ০/ আমি আগের মতো সিদ্ধান্ত নিতে পারি।
(*I make decisions about as well as ever*)
- ১/ আমি দেখেছি সিদ্ধান্ত নিতে স্বাভাবিকের চেয়ে কঠিন লাগছে।
(*I find it more difficult to make decisions than usual*)
- ২/ সিদ্ধান্ত নিতে আমার স্বাভাবিকের চেয়ে খুব কঠিন হয়ে পরেছে।
(*I have much greater difficulty in making decisions than I used to*)
- ৩/ আমার যে কোন সিদ্ধান্ত নিতে খুব সমস্যা হচ্ছে।
(*I have trouble making any decisions*)

১৪/ নিজেকে অপদার্থ মনে করা (Worthlessness)

- ০/ আমি নিজেকে অপদার্থ মনে করি না।
(*I don't feel I am worthless.*)
- ১/ আমি স্বাভাবিকের চেয়ে নিজেকে প্রয়োজনীয় বলে বিবেচনা করতে পারছি না।
(*I don't consider myself as worth while and useful as I used to*)
- ২/ আমি নিজেকে বেশি অপদার্থ মনে করি এবং অন্যের সাথে তুলনা করি।
(*I feel more worthless as compared to other people*)
- ৩/ আমি নিজেকে সম্পূর্ণ অপদার্থ বলে মনে করি।
(*I feel utterly worthless*)

১৫/ কর্ম শক্তি হারানো (Loss of energy)

- ০/ আমার আগের মতোই কর্ম শক্তি রয়েছে।
(*I have much energy as ever.*)
- ১/ স্বাভাবিকের চেয়ে আমার কম কর্ম শক্তি রয়েছে।
(*I have less energy than I used to have*)
- ২/ খুব বেশি কাজ করার মতো আমার বেশি কর্ম শক্তি নেই।
(*I don't have enough energy to do very much.*)
- ৩/ কোন কিছু কাজ করতেই আমার ভাল লাগে না।
(*I don't have enough energy to do anything*)

১৬/ ঘুমের ধরন পরিবর্তন (Changes in sleeping pattern)

- ০/ ঘুমের ধরন পরিবর্তনের ব্যাপারে কোন ধারণা নেই।
(I have not experienced any change in my sleeping pattern)
- ১/ ক। আমি স্বাভাবিকের চেয়ে কিছু বেশি ঘুমাই।
(I sleep somewhat more than usual)
- খ। আমি স্বাভাবিকের চেয়ে কিছু কম ঘুমাই।
(Sleep somewhat less than usual)
- ২/ ক। আমি স্বাভাবিকের চেয়ে অনেক বেশি ঘুমাই।
(I sleep a lot more than usual)
- খ। আমি স্বাভাবিকের চেয়ে অনেক কম ঘুমাই।
(sleep a lot less than usual)
- ৩/ ক। আমি দিনের অধিকাংশ সময় ঘুমাই।
(I sleep most of the day)
- খ। আমি তারাতিড়ি এক থেকে দুই ঘণ্টা মধ্যে ঘুম থেকে জাগতে পারি এবং আর ঘুম ধরেনা।
(I wake up 1-2 hours early and can't get back to sleep)

১৭/ বিরক্ত হওয়া (Irritability)

- ০/ আমি স্বাভাবিকের তুলনায় বেশি খিটখিটে নই।
(I am no more irritable than usual)
- ১/ আমি স্বাভাবিকের তুলনায় বেশি খিটখিটে বোধ করি।
(I am more irritable than usual)
- ২/ আমি স্বাভাবিকের তুলনায় অনেক বেশি খিটখিটে বোধ করি।
(I am much more irritable than usual)
- ৩/ আমি সর্বদা খিটখিটে বোধ করি।
(I am irritable all the time)

১৮/ খাওয়াদাওয়ায় পরিবর্তন(Changes in appetite)

- ০/ আমার মনে হয় না আমার খাবার ব্যাপারে কোন পরিবর্তন হয়েছে।
(I have not experienced any change in my appetite)

- ১/ ক। আমার খিদে স্বাভাবিকের চেয়ে কিছুটা কমেছে।
(*My appetite is somewhat less than usual*)
- খ। আমার খিদে স্বাভাবিকের চেয়ে কিছুটা বেশি হয়েছে।
(*My appetite is somewhat greater than usual*)
- ২/ ক। আমার খিদে আগের চেয়ে অনেক কমে গিয়েছে।
(*My appetite is much than before*)
- খ। আমার খিদে আগের চেয়ে অনেক বেশি হয়েছে।
(*My appetite is much greater than usual*)
- ৩/ ক। আমার একদমই কোন খিদে নেই।
(*I have no appetite at all*)
- খ। আমার সব সময় খিদে পায়।
(*I crave food all the time*)

১৯/ মনোযোগের অসুবিধা (Concentration difficulty)

- ০/ আমি আগের মত মনোযোগ দিতে পারি।
(*I can concentrate as well as ever*)
- ১/ আমি স্বাভাবিকের মত মনোযোগ দিতে পারি না।
(*I cannot concentrate as well as usual*)
- ২/ অনেক দীর্ঘায়িত বিষয়বস্তু মনে রাখতে অসুবিধা হয়।
(*It's hard to keep my mind on anything for very long*)
- ৩/ আমি কোন কিছুতেই আর মনোযোগ দিতে পারি না।
(*I find I can't concentrate on anything*)

২০/ অবসাদ হওয়া (Tiredness or fatigue)

- ০/ আমি স্বাভাবিকের চেয়ে বেশি ক্লান্ত ও অবসন্ন হই না।
(*I am no more tired or fatigued than usual*)

- ১/ আমি সহজেই স্বাভাবিকের চেয়ে অনেক ক্লান্ত ও অবসন্ন হই।
(I get more tired or fatigued more easily than usual)
- ২/ যখন আমি অনেক কাজ করি তখন অত্যাধিক ক্লান্ত ও অবসন্ন হয়ে যাই।
(I am too tired or fatigued to do a lot of the things I used to do)
- ৩/ আমি যখনই কিছু করি তখনই খুব বেশি ক্লান্ত ও অবসন্ন হয়ে পড়ি।
(I am too tired or fatigued to do most of the things I used to do)

২১/ বিপরীত লিঙ্গের প্রতি আগ্রহ হারানো (Loss of interest in sex)

- ০/ বিপরীত লিঙ্গের প্রতি আমার একই রকম আগ্রহ আছে।
(I have noticed any recent change in my interest in opposite sex)
- ১/ আমার বিপরীত লিঙ্গের প্রতি আগ্রহ আগের থেকে কমে গেছে।
(I am less interested in opposite sex than I used to be)
- ২/ এখন আমার বিপরীত লিঙ্গের প্রতি আগ্রহ অনেক কম।
(I am much less interested in opposite sex now)
- ৩/ আমি সম্পূর্ণভাবে বিপরীত লিঙ্গের প্রতি আগ্রহ হারিয়ে ফেলেছি।
(I have lost interest in opposite sex completely)

Appendix 2 : Tabulation of Data

VARIABLE	CATEGORY	LEVEL OF DEPRESSION				
			MINIMAL	MILD	MODERATE	SEVERE
GENDER	MALE	Total Number	34	47	44	9
		Percentage (%)	30.1%	32.9%	30.8%	6.3%
	FEMALE	Total Number	76	100	83	127
		Percentage (%)	26.9%	35.3%	29.3%	29.8%
LOCALITY OF SCHOOL	RURAL	Total Number	69	99	97	18
		Percentage (%)	24.4%	35.0%	34.3%	6.4%
	URBAN	Total Number	50	48	30	15
		Percentage (%)	35.0%	33.6%	21.0%	10.5%
CASTE OF STUDENT	SC	Total Number	113	136	112	31
		Percentage (%)	28.8%	34.7%	28.6%	7.9
	ST	Total Number	6	11	15	2
		Percentage (%)	17.6%	32.4%	44.1%	5.9%
STRUCTURE OF FAMILY	JOINT FAMILY	Total Number	32	55	31	8
		Percentage (%)	25.4%	43.7%	24.6%	6.3%
	NUCLEAR FAMILY	Total Number	87	92	96	25
		Percentage (%)	29.0%	30.7%	32.0%	8.3%
NUMBR OF SIBLING (S)	SINGLE	Total Number	7	2	1	1
		Percentage (%)	63.6%	18.2%	9.1%	9.1
	ONE SIBLING	Total Number	47	47	41	10
		Percentage (%)	32.4%	32.4%	28.3%	6.9%
	MORE THAN ONE	Total Number	65	98	85	22
		Percentage (%)	24.1%	36.3%	31.5%	8.1%
CLASS OF STUDENT	CLASS-IX	Total Number	16	8	9	3
		Percentage (%)	44.4%	22.2%	25.0%	8.3%
	CLASS-X	Total Number	44	54	40	9
		Percentage (%)	29.9%	36.7%	27.2%	6.1%
	CLASS-XI	Total Number	59	85	78	21
		Percentage (%)	24.3%	35.0%	32.1%	8.6%
EDUCATION OF FATHER	ILLITERATE	Total Number	21	30	23	7
		Percentage (%)	25.9%	37.0%	28.4%	8.7%
	UP TO SECONDARY	Total Number	85	102	94	24
		Percentage (%)	27.9%	33.4%	30.8%	7.9%
	UP TO HS	Total Number	8	10	6	2
		Percentage (%)	30.8%	38.5%	23.1%	7.7%
	HIGHER EDUCATION	Total Number	5	5	4	0
		Percentage (%)	35.7%	35.7%	28.6%	0.0%
EDUCATION OF MOTHER	ILLITERATE	Total Number	29	45	37	9
		Percentage (%)	24.2%	37.5%	30.8%	7.5%
	UP TO SECONDARY	Total Number	81	93	81	23
		Percentage (%)	29.1%	33.5%	29.1%	8.3%
	UP TO HS	Total Number	7	5	6	1
		Percentage (%)	22.2%	26.3%	31.6%	5.3%
	HIGHER EDUCATION	Total Number	2	4	3	0
		Percentage (%)	22.2%	44.4%	33.3%	0.0%
	<5000	Total Number	74	88	87	25

FAMILY INCOME		Percentage (%)	27.0%	32.1%	31.8%	9.1%
	5000-9000	Total Number	31	28	30	4
		Percentage (%)	33.3%	30.1%	32.3%	4.3%
	10000-15000	Total Number	9	18	6	4
		Percentage (%)	24.3%	48.6%	16.2%	10.8%
	>15000	Total Number	5	13	4	0
Percentage (%)		22.7%	59.1%	18.2%	0.0%	
OVERALL	Total Number		119	147	127	33
	Percentage (%)		27.9%	34.5%	29.8%	7.7%

Appendix 3: List of School

SL NO	NAME OF THE SCHOOL	LOCATION OF THE SCHOOL	NO OF STUDENTS
1	Jalpaiguri Higher Secondary School	Urban	33
2	Kadamtala Girls' High School	Urban	30
3	Central Girls' High School	Urban	27
4	Sonali Girls' High School	Urban	53
5	Barapatia Pachiram Nahata High School (HS)	Rural	91
6	Mohitnagar Colony Tara Prasad Girls' High School (HS)	Rural	67
7	Mohitnagar Colony Tara Prasad High School(XII)	Rural	22
8	Berubari Tapashili Free High School(H.S)	Rural	81
9	Kaliaganj Uttameswar High School	Rural	22



EDUCATION IN 21ST CENTURY: ISSUES AND CHALLENGES



ONE DAY INTERNATIONAL SEMINAR

ON

Date : 1st April 2019

Venue - Belda College

This is to certify that Mr. / Mrs. / Mts. / Dr. Partha Das

of Jadamprusa College / University, participated / Presented / Participated

& Presented the paper entitled Depression among Adolescents in Jadamprusa

Distrikt

in the International Seminar on "Education in 21st Century: Issues and Challenges" organized by the Department of Education,

Belda College in collaboration with Department of Education, Jaduppur University, on 1st April, 2019 at Belda College.

Handwritten signature

Dr. Manabendra Mondal
Principal, Belda College
&
President Organizing Committee

Handwritten signature

Dr. Bishnupada Nanda
Joint Coordinator
Organizing Committee

Handwritten signature

Mr. Manikanta Paria
Joint Coordinator
Organizing Committee