SUMMARY
CHAPTER 6
SUMMARY

6.0 INTRODUCTION

Problems of education are found in each and every country in the world. These problems vary in their kind and degree, but they are found throughout the world. The first half of the current century has seen two deadly world wars. Arms race in the developed countries is still at its peak. Battles have been fought in various countries. Aligned and non-aligned groups have been formed for maintaining a balance of power that a country may protect itself during war. The present industrial, scientific and technological advancement have led us to the juncture when the entire human civilization may be annihilated if a certain super power so intends. The educationists and leaders all over the world are opining that the prevailing pattern of education has not helped man to find out his soul. It has rather led him into jealousies, rivalries and intricacies of diplomacy. Everywhere there is unhappiness, lack of accord and understanding, tension and miseries, disease and scarcity of various types.

Gone are the days when the life was very simple. While in modern times, the path to a meaningful and successful life has become much more uneasy and full of tension. The closing decades of the 20th century have brought revolutionary changes in the lives of human beings. Today, there seems to be throat-cut-competition in every field of life. In order to remain up to mark, people have to face the critical competition. Today the life has become so complex that every one has the hard experiences of frustration. The 20th century has been regarded as "the century of anxiety and stress" (Coleman 1976) and "as an age of depression, of psychological and cultural regression" (Schimel 1977). As we are moving toward the scientific development in 21st century we are also in the grip of depression. Current researches
show that up to 2010 depression will be the second common illness in the world, so, now a day depression has become the part & parcel of our life.

Depression is an affective disorder characterized by a disturbance of mood or feeling. It has effect on physical, mental and emotional well being. Depression is a self-punishing, emotional state and harmful way of adjustment, which may result, from failure to achieve some important desired goal or from cognitive or subjective incompetence to solve persistent personal problems. Depression and moodiness have traditionally viewed as normal phenomenon of students. As per American Psychiatric Association (1980), general depression features pertaining to students are delineated to such age specific associated features as negative or antisocial behaviour, substance abuse, negligence of personal appearance, increased emotionality, withdrawal from social activities, sulkiness, restlessness, aggression reluctance to participate in family activities, desire to leave home with an accompanying feeling of not being understood and sensitivity to rejection in a romantic relationship. Several recent studies have surveyed non-clinical populations of students to determine the incidence and prevalence of depressed mood.

Kandel and Davis (1982) found that the proportion of youth experiencing delinquency and/or depression was identical in both sexes, but boys were less likely to be both delinquent and depressed. Kalpan et al (1984) found that the differences were not be found between the sexes when age and socio-economic status were more depressed than those who were from higher-class families and were younger. Harris and Howard (1987) reported that the intense feeling of depression was more frequent in girls whereas intense feeling of anger was more in boys; a negative self image that included a sense of incompetence was more a characteristics of subjects who were prone to feeling to depression than of those who were prone to feeling of anger and perceived acceptance by parents, of those who were prone to feeling of anger and perceived acceptance by parents. Particularly mother, was negatively correlated with the frequency of the feelings of depression and anger in both boys and girls. McDermatt (1987) found that depression was commonly experience by women and men, but with greater frequency and intensity by women and it is found that
depression of a transient nature could be more common among university students than what had been widely believed.

Depressive disorders incorporate a spectrum of psychobiological dysfunctions, which vary considerably in severity, frequency and duration. At one end of the spectrum, is the experience of normal depression, a transient period of sadness and fatigue, generally responding to clearly identifiable stressors? The moods associated with normal depression vary in length, but usually continue for no longer than two weeks. If the depressed mood continues for a longer period of time, sleep difficulties, eating, problems and growing thoughts of despair and hopelessness develop; the problem approaches clinical depressive disorders. At the disorder end of the spectrum are a number of manifestations including psychotic depression, in which a person not only suffers sadness and despair, but also may lose contact with reality and develop delusions, hallucinations and severe motor and psychological retardation. A major problem in the study of the depressive disorders is that "depression" is be often used indiscriminately for the entire spectrum of experiences. It thus comes to describe a mood, a symptom and a syndrome.

Depressive disorders generally involve an unpredictable pattern of symptoms including (1) depressed mood, (2) low self-esteem, (3) general fatigue, (4) guilt feelings, (5) appetite sexual and sleep impairments, (6) anger and irritability and sometimes (7) delusions and hallucinations. A number of competing systems of classification emphasizing unitary, dualistic and pluralistic dimensions have developed. Unitary approaches assume there is only one type of disorder, which varies in severity. This view enjoys only limited popularity. Dualistic systems assume that there are two types of depression. The names assigned to these types include reactive versus autonomous depression, neurotic versus psychotic depression, exogenous versus endogenous depression and justified versus somatic depression. In general, dualistic types are based on distinctions between patterns of depression with psychological etiologies, short-term courses and relatively benign outcomes (e.g. reactive, neurotic, exogenous & justified) and those depressions considered to have long-term courses, high recurrence rates and relatively poor
outcomes (e.g., autonomous, psychotic, endogenous and somatic). Another dualistic system, primary versus secondary, is based on whether the depression is the primary disorder or a secondary result of physical diseases of other causes.

A popular dualistic conception of depression is unipolar versus bi-polar, a classification used to identify subtype of severe depression that often reach psychotic proportions. Unipolar depression is diagnosed in those instances in which there are simply one or more episodes of depression, while bipolar depression is diagnosed when there are episodes of mania and depression as well as family histories of depression and positive responses to treatment with drugs. Unipolar depression has sometimes defined operationally as any non bi-polar depression.

Pluralistic systems of classification assume there are four patterns of depression based on a factor analysis of behaviors, moods, response and treatment. These types included (1) empty depression, (2) angry depression, (3) anxious depression and (4) hypochondriacal depression. Their system heavily emphasizes subjective experiences in arriving at a pluralistic system of classification. American Psychiatric Association (1980) is classified Diagnostic and Statistical manual (DSM-III), which lists more than a dozen different types of depressive disorders including various schizoid affective disorders, psychotic depressive disorders and depressive personality types.

6.1 NEED OF THE STUDY

Modern world is full of tension. Competition in every field of life brings complexity in life. Day by day, increasing tendency of these complexes, competitiveness and confusedness finally throw almost all human being into depression. Researches on depression find out that, students are most favorable victim of "depression"). Depression is an effective disorder characterized by a disturbance of mood or feeling. It affects physical, mental and emotional well-being.
Different studies show that depression lies mostly in students at secondary stage. Depression affects every field of life. A depressed man cannot think and do better and can not give his maximum performance. Therefore, it is a serious threatening towards forthcoming future of our nation.

The present study is unique and challengeable for any researcher. This is likely to be a new area of study and an effort to explore which is yet unknown. It is expected that the study will likely to provide guidelines to educational planners and administrators to improve the areas, which influence the process of teaching learning. It will help directly to the guidance and counseling of the students at secondary stage. The novelty and validity of the proposed problem for study justify with the time to study and explore, the unknown; so that progress of the students as well as of the nation can be accelerated.

6.2 STATEMENT OF THE PROBLEM

“RELATIONSHIP OF PROBLEM SOLVING ABILITY AND SOME DEMOGRAPHIC VARIABLES WITH GENERAL DEPRESSION OF STUDENTS AT SECONDARY STAGE”

6.3 OPERATIONAL DEFINITIONS OF THE TERMS USED

6.3.1 PROBLEM SOLVING ABILITY

Problem solving forms part of thinking. Considered the most complex of all intellectual functions, problem solving has defined as higher-order cognitive process that requires the modulation and control of more routine or fundamental skills. It occurs if an organism or an artificial intelligence system does not know how to proceed from a given state to a desired goal state.
6.3.2 DEPRESSION

Depressive disorders incorporate a spectrum of psychobiological dysfunctions which vary considerably in severity, frequency and duration. At one end of the spectrum, is the experience of normal depression, a transient period of sadness and fatigue, generally responding to clearly identifiable stresses? The mood associated with normal depression varies in length, but usually continues for no longer than two weeks. If the depressed mood continues for a longer period-time and sleep difficulties, eating problems and growing thoughts of despair and hopelessness develop, the problem approaches clinical depressive disorders.

6.3.3 DEMOGRAPHIC

Demographic refers to selected population characteristics as used in government, marketing or opinion research, or the demographic profiles used in such research. Commonly-used demographics include race, age, income, disabilities, mobility, educational attainment, home ownership, employment status, and even location. Some frequently used demographic variables are age, sex, race or ethnicity, education, location of residence, socio-economic status (SES), income, employment status, religion, marital status, ownership, language, mobility.

The research scholar has used the following demographic variables for this study:

6.3.4 SEX

Sex refers to the male and female duality of biology and reproduction.

6.3.5 CASTE

The system of dividing society into classes based on differences in family origin, rank or wealth.
6.3.6 SOCIO-ECONOMIC STATUS

Socio-economic status is the position that an individual or family occupies with reference to prevailing average standards of cultural possessions, effective income, material possessions, level of education & aspiration and participation in group activity of community.

6.3.7 RESIDENT

Resident refers to the area or region, where the subject belongs from i.e. urban and rural.

6.3.8 SECONDARY STAGE

The research scholar has considered the secondary stage of education pattern which refers from 9th to +2 class level. In this study, the researcher has delimited secondary stage to +1 class only.

6.4 VARIABLES INVOLVED

In this study, Problem Solving Ability and Depression were treated as dependent variables and Demographic variables were treated as independent variables.

6.5 OBJECTIVES OF THE STUDY

The present study was carried out with the following objectives:

1. To find the relationship between problem solving ability and depression of the secondary stage students.
2. To find the relationship between problem solving ability and depression of the male secondary stage students.
3. To find the relationship between problem solving ability and depression of the female secondary stage students.
4. To find the differences between the correlation coefficients (correlation between problem solving ability and depression) of male and female secondary stage students:
5. To find the relationship between problem solving ability and depression of general caste secondary stage students.
6. To find the relationship between problem solving ability and depression of OBC secondary stage students.
7. To find the relationship between problem solving ability and depression of SC/ST secondary stage students.
8. To find the differences between the correlation coefficients (correlation between problem solving ability and depression) of general and OBC secondary stage students:
9. To find the differences between the correlation coefficients (correlation between problem solving ability and depression) of general and SC/ST secondary stage students:
10. To find the differences between the correlation coefficients (correlation between problem solving ability and depression) of OBC and SC/ST secondary stage students:
11. To find the relationship between problem solving ability and depression of high SES secondary stage students.
12. To find the relationship between problem solving ability and depression of low SES secondary stage students.
13. To find the differences between the correlation coefficients (correlation between problem solving ability and depression) of high SES and low SES secondary stage students:
14. To find the relationship between problem solving ability and depression of the rural secondary stage students.
15. To find the relationship between problem solving ability and depression of the urban secondary stage students.
16. To find the difference between the correlation coefficients (correlation between problem solving ability and depression) of rural and urban secondary stage students:
17. To find the relationship between problem solving ability and depression of the government school secondary stage students.
18. To find the relationship between problem solving ability and depression of the private school secondary stage students.
19. To find the difference between the correlation coefficients (correlation between problem solving ability and depression) of government and private school secondary stage students.

6.6 HYPOTHESES OF THE STUDY

Based upon the above mentioned objectives, the following hypotheses were formulated:

$H_{01}$ There is no significant relationship between problem solving ability and depression of the secondary stage students.

$H_{02}$ There is no significant relationship between problem solving ability and depression of the male secondary stage students.

$H_{03}$ There is no significant relationship between problem solving ability and depression of the female secondary stage students.

$H_{04}$ There is no significant difference between the correlation coefficients (correlation between problem solving ability and depression) of male and female secondary stage students.

$H_{05}$ There is no significant relationship between problem solving ability and depression of general caste secondary stage students.

$H_{06}$ There is no significant relationship between problem solving ability and depression of OBC secondary stage students.
H₀₇ There is no significant relationship between problem solving ability and depression of SC/ST secondary stage students.

H₀₈ There is no significant difference between the correlation coefficients (correlation between problem solving ability and depression) of general and OBC secondary stage students.

H₀₉ There is no significant difference between the correlation coefficients (correlation between problem solving ability and depression) of general and SC/ST secondary stage students.

H₀₁₀ There is no significant difference between the correlation coefficients (correlation between problem solving ability and depression) of OBC and SC/ST secondary stage students.

H₀₁₁ There is no significant relationship between problem solving ability and depression of high SES secondary stage students.

H₀₁₂ There is no significant relationship between problem solving ability and depression of low SES secondary stage students.

H₀₁₃ There is no significant difference between the correlation coefficients (correlation between problem solving ability and depression) of high SES and low SES secondary stage students.

H₀₁₄ There is no significant relationship between problem solving ability and depression of the rural secondary stage students.

H₀₁₅ There is no significant relationship between problem solving ability and depression of the urban secondary stage students.

H₀₁₆ There is no significant difference between the correlation coefficients (correlation between problem solving ability and depression) of rural and urban secondary stage students.

H₀₁₇ There is no significant relationship between problem solving ability and depression of the government school secondary stage students.
H₀₁₈  There is no significant relationship between problem solving ability and depression of the private school secondary stage students.

H₀₁₉  There is no significant difference between the correlation coefficients (correlation between problem solving ability and depression) of government and private school secondary stage students.

6.7  DELIMITATIONS OF THE STUDY

Keeping in view the time available and limited resource, the present study was delimited to the following aspects:-

1. The study was delimited only to government and private schools in three districts Jhajjar, Sonipat and Rohtak of Haryana state.
2. The study was delimited only to the students of secondary stage.
3. The study was delimited only to find out the relationship of variables such as problem solving ability, depression and demographic variables taken (Sex, Caste, Socio-Economics Status and Resident).

6.8  CHAPTERISATION SCHEME

Out of six chapters, Chapter I is introduction, which includes Need of the Study, Variables involved, Objectives, Hypotheses and delimitations of the study. Chapter-II is devoted to the Review of the Related Literature. In Chapter III, the Design of the Study, Sample, Tools, Procedure and Statistical Techniques have been presented. Chapter IV deals with the Analysis and Interpretation of Data along with the Discussion of Results. In Chapter V, the Findings, Educational Implications of the study and Suggestions for Further Research have been given. Chapter VI is devoted to the Summary of the study.
6.9 DESIGN OF THE STUDY

The researcher had kept her data on following groups suitable to investigate present problem.

**Group A:**

- **Group A**
  - (Sex)
  - \( A_1 \) (Male)
  - \( A_2 \) (Female)

**Group B:**

- **Group B**
  - (Caste)
  - \( B_1 \) (General Caste)
  - \( B_2 \) (Reserved Caste)
    - \( B_{2,1} \) (OBC Caste)
    - \( B_{2,2} \) (SC/ST Caste)

**Group C:**

- **Group C**
  - (Socio-Economic Status)
  - \( C_1 \) (High - Level)
  - \( C_2 \) (Low - Level)
6.10 POPULATION

A population is any group of individuals that have one or more characteristics in common that are of the interest to the investigator. It may be all the individuals of a particular type or a restricted part of that group (Best, 1977). Thus a population refers to any collection of specified group of human beings or of non-human entities such as objects, educational institutions, time units, geographical areas etc.
Secondary stage students of Haryana State constituted the target population for the present study.

6.11 SAMPLE

Measuring the entire population is impracticable though not entirely impossible. So, one has to draw a sample from the population concerned. 300 secondary stage students were selected by the researcher. The sample drawn from the target population is shown in the table.

Table 6.1

Breakup Details of the Sample selected for the Study

<table>
<thead>
<tr>
<th></th>
<th>SCHOOL TYPE</th>
<th>MALE</th>
<th>FEMALE</th>
<th>GRAND TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three District of HARYANA</td>
<td>Govt.</td>
<td>75</td>
<td>75</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td>73</td>
<td>77</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>148</td>
<td>152</td>
<td>300</td>
</tr>
<tr>
<td>JHAJJAR</td>
<td>Govt.</td>
<td>25</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td>25</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>50</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>SONIPAT</td>
<td>Govt.</td>
<td>25</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td>24</td>
<td>26</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>49</td>
<td>51</td>
<td>100</td>
</tr>
<tr>
<td>ROHTAK</td>
<td>Govt.</td>
<td>25</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td>24</td>
<td>26</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>49</td>
<td>51</td>
<td>100</td>
</tr>
</tbody>
</table>
6.12 TOOLS USED

Table 6.2

List of Tools Used

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of Tool</th>
<th>Name of Constructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Problem Solving Ability Test (PSAT)</td>
<td>L.N Dubey</td>
</tr>
<tr>
<td>2.</td>
<td>Depression Scale</td>
<td>Shamim Karim and Rema Tiwari</td>
</tr>
<tr>
<td>3.</td>
<td>Upadhyay-Saxena Socio-Economic Status Scale (USSESS)</td>
<td>Sunil Kumar Upadhyay and Alka Saxena</td>
</tr>
</tbody>
</table>

6.13 PROCEDURE FOR DATA COLLECTION

In any type of research, exercise data are gathered so that hypotheses formulated at the planning stage may be tested. Collection of factual information or data required adaptation of a systematic procedure, because as per Whittery (1950) ‘Data are the things we think with. They are the raw material of reflection until by comparison, combination and evaluation they are stepped up to higher levels of generalization, where again they serve as basic material for further and higher thinking’. It also required collection of relevant data adequate in quality and quantity and as reliable and valid as possible.

In the beginning, all the 300 students studying at senior secondary level were administered Problem Solving Ability Test (PSAT) as per instructions given in the manual. There are 20 problems (20 items) in the test with the time limit of 40 (forty) minutes.

As the second one Depression Scale by Shamim Karim and Rema Tiwari was administered on the same students. This test consists 96 items on twelve dimensions of depression. Last and third test is Socio-Economics Status Scale (SES) was
administered on the same students. This test contains 31 items divided in 5 (five) parts related to Personal Information, Family Education, Income and others (cultural and material possessions).

After the administration of tools, the next step was scoring the answer sheets. Scoring was done strictly according to the instructions given in the concerned manual.

6.14 STATISTICAL TECHNIQUES USED

Statistical techniques are employed on the raw score to make it meaningful and to test the significance of the scores. Without use of statistical techniques raw scores do not have their own meaning and weight. Therefore the obtained data were analyzed by using the following statistical techniques:

1. Mean, standard deviation (SD), Karl Pearson correlation (‘r’ value) and ‘t’ value to find the significance of ‘r’ value were calculated to find the relationship between problem solving ability and depression of the male & female students, students of different castes, students belonging to rural & urban area, high & low socio-economic status in Jhajjar, Sonipat, Rohtak districts of Haryana.

2. ‘z’ value with two tailed (p) value was also calculated to find the significance difference between the correlations of problem solving ability and depression of the male & female students, students of different castes, students belonging to rural & urban area, high & low socio-economic status in Jhajjar, Sonipat, Rohtak districts of Haryana.
6.15 FINDINGS

In the present study the following results were found:

1. There is significant relationship between problem solving ability and depression of the students studying at secondary stage level in Haryana.
2. Significant relationship was found between problem solving ability and depression of the male students studying at secondary stage level in Haryana.
3. There is significant relationship between problem solving ability and depression of the female students studying at secondary stage level in Haryana.
4. There is no significant difference between the correlation coefficients (correlation between problem solving ability and depression) of male and female students studying at secondary level in Haryana.
5. Significant inverse relationship was found between problem solving ability and depression of the students belonging to general caste studying at secondary stage level in Haryana.
6. There is significant inverse relationship between problem solving ability and depression of the students belonging to OBC studying at secondary stage level in Haryana.
7. Significant inverse relationship was found between problem solving ability and depression of the students belonging to SC/ST studying at secondary stage level in Jhajjar district, Haryana.
8. Correlation coefficients (correlation between problem solving ability and depression) of general and OBC students studying at secondary level in Haryana state do not differ significantly.
9. Correlation coefficients (correlation between problem solving ability and depression) of general and SC/ST students studying at secondary level of Haryana state do not differ significantly.
10. Correlation coefficients (correlation between problem solving ability and depression) of OBC and SC/ST students studying at secondary level in Haryana state do not differ significantly.

11. There is significant inverse relationship between problem solving ability and depression of the students belonging to high socio-economic status studying at secondary stage level in Haryana.

12. Significant inverse relationship was found between problem solving ability and depression of the students belonging to low socio-economic status studying at secondary stage level in Haryana.

13. Correlation coefficients (correlation between problem solving ability and depression) of the students belonging to high and low socio-economic status studying at secondary level in Haryana state do not differ significantly.

14. Significant relationship was found between problem solving ability and depression of the students studying at secondary stage of rural area in Haryana.

15. There is significant inverse relationship between problem solving ability and depression of the students studying at secondary stage of urban area in Haryana.

16. Correlation coefficients (correlation between problem solving ability and depression) of the students belonging to rural and urban secondary stages in Haryana state do not differ significantly.

17. Significant inverse relationship was found between problem solving ability and depression of the students studying in government secondary stages in Haryana.

18. There was significant inverse relationship between problem solving ability and depression of the students studying in private secondary stages in Haryana state.

19. Correlation coefficients (correlation between problem solving ability and depression) of the students belonging to government and private secondary stages in Haryana state do not differ significantly.
The findings of the present study have the following implications:

1. Teachers will be able to determine the teaching methods as per the ability to solve the problems of the students.
2. Teachers will be able to set the strategy of classroom as per their demographic variables.
3. Teachers may also be benefited by making awareness for providing the learning environment for better attainment.
4. Teachers may also find the reasons for depression and impact on ability to solve the problem of the students from different area.
5. The present study will be also helpful in planning, conducting and evaluating teaching learning process as per their ability to solve the problems and depression level of the students belonging to different area.
6. This study will also helpful for educational planners for arranging the curricula accordingly.

The present study brings to light a good number of new areas to be studied by the future researchers. The area and variables which were not covered by this study may be put to test to enlighten the factors associated with the achievement/attainment in different subjects. The findings of the present study have some implications for the researchers who want to work in this area. So, the researcher may think of the following areas to study in detail:

1. The present study was confined to the senior secondary schools from three districts (Jhajjar, Sonipat, and Rohtak) of Haryana only. Similar study may be conducted in other districts of different states in the country.
2. The present study was limited to the students of senior secondary level. Similar studies may be conducted on the students belonging to other standard
in schooling or in colleges. Teacher-trainees may also be included for the further study.

3. The present study may be extended to graduate and post-graduate students in professional courses i.e. Law, Engineering, and Medicine etc.

4. Similar study may be conducted on a larger sample size.

5. Some other variables may be included to extend the study.

6. Comparative studies may also be conducted in different districts and states also.

7. This kind of study may be conducted in the field of special education.