CHAPTER III

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The main objective of this study was to examine perceived social support in relation to various personality and cognitive variables. As a consequence several hypotheses were formulated. The empirical verification of the proposed hypotheses, however, depends upon:

1) Selection of adequate sample,
2) Tools used for collecting data, and
3) Methods and procedures employed for deriving conclusions from different measures.

Thus, it seems appropriate to describe the sample, the tools used and the methods and procedures employed in completing the research being reported. Presented in this chapter is a description of the sample used for collecting reliable measures pertaining to the objectives of the study. The information concerning different tests is also given. Also presented in this chapter is a description of the procedures followed for the administration and scoring of different tests. This chapter also includes the procedure followed for the analysis of data.

Sample

150 male and 150 female adolescents participated in the study. The universe of the current study was different colleges in Haryana. Haryana state was divided in to four different zones on the basis of geographical and cultural similarities.

Zone I - Ambala, Kurukshetra, Karnal, Panipat
Zone II - Hisar, Sirsa, Fatehabad, Kaithel, Jind
Zone III - Bhiwani, Rohtak, Bhadurgarh, Sonepat.
Zone IV - Gurgoan, Rewari, Mahenderghar, Faridabad
The current study was delimited to zone III because of its proximity to Delhi. 150 males and 150 females in the age range of 17-20 years (late adolescent) were selected from different colleges in the four districts of Zone III.

The majorities of the participants were from upper/middle class families and lived with both parents. The subjects to be included in this study were also required to be showing:

1) No evidence of drug addiction or alcoholism, and
2) Not currently in treatment for diagnosed psychiatric disorder.

Several demographic characteristics, for example, marital status, employment status, education and place of residence (urban/rural) were controlled in the sense that participants were unmarried, unemployed and belonged to urban areas. Moreover, they were college students.

The sample was limited to participants who were available to participate in this study, thus limiting the assumption of randomization.

Tests Used

The following measures were used:

A) Measures of Cognitive Dysfunction

a) Automatic Thought Questionnaire (ATQ: Hollon & Kendall, 1980).

b) Hopelessness Scale (Beck, Weissman, Lester, & Trexler, 1974).

B) Measures of Depressive tendencies/ Symptoms

Beck Depression Inventory (BDI: Beck, Ward, Mendelson, Mock, & Erbaugh, 1961).

C) Measures of Social Support

Social Support Questionnaire (SSQ: Sarason, Levine, Basham, & Sarason, 1983).
D) Measures of Personality

a) Eysenck Personality Questionnaire (Eysenck & Eysenck, 1975).

b) IPAT Anxiety Scale Questionnaire (Cattell, & Scheier, 1953).

E) Measures of Loneliness

Revised UCLA Loneliness Scale (Russell, Peplau, & Cutrona, 1980).

A) Measures of Cognitive Dysfunction

Although a number of structured self-report questionnaires have been developed to measure various thinking styles associated with depression in adults, most notably the Attributional Style Questionnaire (Seligman, Abramson, Semmel, & Von Baeyer, 1979), the Automatic Thought Questionnaire (Hollon & Kendall, 1980), the Cognitive Bias Questionnaire (Krantz & Hammen, 1979; Hammen & Krantz, 1976), the Dysfunctional Attitude Scale (Weissman, 1979), and the Irrational Beliefs Tests (Jones, 1968), only Lefebvre (1980, 1981) devised a measure with separate subscales for the specific cognitive errors described by Beck et al. (1979).

In the present study, the following measures were used, since they have been extensively used in the existing literature.

a) Automatic Thoughts Questionnaire (ATQ: Hollon & Kendall, 1980)

The Automatic Thoughts Questionnaire is a measure of negative automatic thoughts. The respondents rate on a 5 point scale how often they have experienced 30 depression related cognitions during the past month.

Example of typical items included in ATQ are:

1) I am no good.

2) My life is a mess.

3) I am a failure.
4) I am worthless.
5) My future is bleak.
6) It’s just not worth it.
7) I feel so helpless.
8) I can’t finish anything.

Scores on the 30 items are summed to give total score for ATQ negative. It yields a score ranging from 30 to 150, with higher scores indicating more frequent negative thoughts. To assess criterion validity, the scores on the Automatic Thoughts Questionnaire were correlated with the scores on Beck Depression Inventory and the Minnesota Multiphasic Personality Inventory- Depression scale. The correlations ranged from .45 to .70 in a sample of 348 college students. High internal reliability and correlation with severity of depression were also found in investigations by Dobson & Breiter (1983), and Harrell & Ryan (1983). Thus the ATQ was the most sensitive measure related to level of depression.

The questionnaire has been shown to differentiate depressed and non-depressed samples (Dobson & Breiter, 1983) and to have greater specificity to depression than the Dysfunctional Attitude Scale (Hollon, Kendall, & Lumry 1986). The questionnaire has also been used in Indian set up and demonstrated to possess adequate psychometric characteristics (Upmanyu & Reen, 1991).

b) Hopelessness Scale (Beck, Weissman, Lester, & Trexler, 1974)

Considerable work in recent years has focused on the importance of hopelessness in a variety of psychopathological conditions. The major cognitive theories of depression, the reformulated learned helplessness theory (Abramson, Seligman, & Teasdale 1978) and Beck’s (1967, 1976) cognitive model, emphasize the importance about the future in the etiology, maintenance and treatment of depression. Empirical research has demonstrated that depressed individuals endorse hopeless statements about the future more than do non-depressed individuals (e.g., Minkoff,
Thus, hopelessness has been identified as one of the core characteristics of depression and has been implicated in a variety of other conditions such as suicide, schizophrenia, alcoholism and physical illness.

Although a number of measures of attitudes toward the future have been developed, they have not been designed to quantify hopelessness specifically (Gunn & Pearman, 1970; Bezies, Fonte, & Fawcett, 1970; Crumbaugh & Maholick, 1969). In order to facilitate the study of hopelessness in various psychopathological conditions, Beck constructed an instrument designed to reflect the respondent’s negative expectancies.

Two sources were utilized in selecting items for the 20 - item true/false Hopelessness Scale (HS). Nine items were selected from a test of attitudes about the future structured in a semantic differential format. These items were then revised to make them appropriate for the present test. The remaining 11 items were drawn from a pool of pessimistic statements made by psychiatric patients who were adjudged by clinicians to appear hopeless. Those statements were selected which seemed to reflect different facets of the spectrum of negative attitudes about the future and which recurred frequently in the patients verbalization.

The final format consisted of 20 true/false statements of which 9 were keyed false and 11 were keyed true. For every statement, each response was assigned a score of 0 or 1, and 1 or 0 and total “Hopelessness score” was the sum of the scores on the individual items. Thus, the possible range of scores was from 0 to 20. This measure has been evaluated in a number of studies (Upmanyu & Recen, 1991) and has been found to be reliable, sensitive and easily administered.

B) Measures of Depressive tendencies/ Symptoms

Depression has featured throughout history as perhaps the most pervasive of all psychopathology (Boyd et al., 1982). This is partly reflected in the numerous self-report measures, which have been devised to quantify human depression. Reviews of the literature pertaining to depression measurement have been undertaken by Hughes et al., (1982), Mayer (1977), Levitt & Lubin (1975), Becker (1974), as well as by
Kazdin & Petti (1982). Among the frequently employed self-report measures are the Minnensote Multiphasic Personality Inventory – D Scale; the Beck Depression Inventory (BDI: Beck, et al., 1961); the Zung Self-Rating Depression Scale (ZSRS : Zung, 1965), Multiple Affect Adjective Checklist (MAACL : Zuckerman & Lubin, 1965), the Depression Adjective Checklist (DACL : Lubin, 1967); the Institute for Personality and Ability Testing (IPAT) Depression Scale (Krug & Laughlin, 1976); and the Center for Epidemiological Studies Depression Scale (CES-D Scale : Radloff & Locke, 1984). In the current study, Beck Depression Inventory was used because it has been extensively used by researchers for assessing depression. A brief description of the inventory is given below.

**Beck Depression Inventory (BDI: Beck, Ward, Mendelson, Mock, & Erbaugh, 1961).**

The Beck Depression Inventory is a 21-item scale measuring attitudes and symptoms associated with depression. Each item is scored 0 to 3 and all items are summed to produce a total score that range from 0 to 63; higher scores indicate greater severity of depressive symptomatology. A typical item is as follows:

0 - I can sleep as well as usual.

1 - I wake up more tired in the morning than I used to.

2 - I wake up 1-2 hours early than usual and find it hard to get back to sleep.

3 - I wake up early everyday and cannot get more than 5 hours of sleep.

It is reported to possess adequate internal consistency (Upmanyu & Reen, 1990, 1991; Vrendenburg, Krames, & Flett, 1985; Dobson & Breiter, 1983) and test-retest reliability (Peterson, Semmel, Von Baeyer, Abramson, Metalsky, & Seligman, 1982; Golin, Sweeney, & Schaeffer, 1981).

Furthermore, a number of studies have also shown adequate reliability and validity when used with both clinical (Barrera & Garrison-Jones, 1988; Schaefer et al., 1985; Stober et al., 1981; Nussbaum, Wittig, Hanlon, & Kurland, 1963) and
non-clinical (Barrera and Gibson-Jones, 1988; Teri, 1982) samples of adolescents.

Another study (Baron & Laplante, 1984 cited in Baron & Perron, 1986) conducted with a sample of 374 adolescents (185 males, 189 females) coming from similar environment indicated that the BDI psychometric characteristics were quite satisfactory. In both psychiatric and student samples; the BDI has also shown high convergent validity with psychiatric rating of depression severity (Metacalf & Goldman, 1981; Blumberry, Oliver, & McClure, 1978) and behavioural items on the Health Behaviour Questionnaire (Kaplan, Nussbaum, Skomorowsky, Shenker, & Ramsey, 1980).

Although, there has been some controversy concerning the use of BDI, Beck, Steer, & Garbin (1988) have reviewed a large number of studies that demonstrate the reliability and validity of this measure, and Hill, Kemp-Wheeler, & Jones (1986) have recently provided evidence of discriminant validity in college student samples. Beck, Steer, & Garbin (1988) reported that the BDI has now been used in more than 1,000 different studies. Although, Beck recommended a cutpoint of 10 for mild to moderate depression, a number of authors, especially Pyszczynski, Hamilton, Herring, & Greenberg, 1989; Crockery, Alloy, & Tabachnik Kayne, 1988; Pyszczynski & Greenberg, 1985; Martin et al., Tabachnik, Crocker, & Alloy, 1983; Alloy et.al. 1984; Abramson, 1982; Harvey, 1981; Krantz & Hammen, 1979; Nelson & Craighead, 1977; Miller & Seligman, 1976) used a cutpoint of 9 to distinguish depressed from nondepressed in college student samples. Pyszczynski et al., (1989) reanalyzed the data using 10 as the cutpoint of inclusion in the depression category and found that the results were unaltered.

In this study, the Beck Depression Inventory has not been used for classifying subjects into different groups, but the inventory has been used to obtain global measures of depressive symptoms among adolescents. Scores on the BDI represent the severity of depressive symptoms but are not necessarily indicative of the presence of the full clinical syndrome of depression.
C) Social Support Questionnaire (SSQ: Sarason, Levine, Basham, & Sarason, 1983)

Social support questionnaire (SSQ) developed by Sarason, Levine, Basham, & Sarason (1983) consists of 27 items. Each of the 27 items ask a question to which a two-part answer is requested. The item asks the subject (a) to list the people to whom they can turn and on whom they can rely in given sets of circumstances, and (b) indicate how satisfied they are with these supports on a 6 point likert scale (very satisfied, fairly satisfied, a little satisfied, a little dissatisfied, fairly dissatisfied, very dissatisfied). The SSQ yields two scores: (a) Perceived availability of the number of supportive persons listed (SSQ-N), and satisfaction with available support (SSQ-S). The number (N) score for each item of the SSQ is the number of support persons listed. The social support available to deal with given problem is rated on a scale ranging from “very satisfied” to “very dissatisfied”. This yields a satisfaction score (S) score for each item that ranges between 1 and 6.

The social support questionnaire has been found to have a number of desirable psychometric properties. It was found to have (a) stability over a 4 week period of time, and (b) high internal consistency among items.

The authors concluded that the modest correlation between SSQ – N and SSQ – S provides a strong basis for analyzing social support into its components. The perceived availability of support reflected by the SSQ-N score, and the satisfaction with the support that is available, reflected by the SSQ-S score, each appear to be worthy of study and analysis.

Kumari & Sharma (1990) concluded that very high SSQ-N/SSQ-S correlation in Indian culture raises some doubt about the cross-cultural generalizability. Sarason et al., (1983) claim that social support is not a unitary concept when assessed by the SSQ and the perceived availability of support and satisfaction with the support that is available are worthy of study and analysis.

The authors further concluded that factor analysis of the two SSQ scales in Indian and other Asian culture will, however be desirable before a firm statement on
this issue can be made. Despite these concerns, which are significant, it can be stated that SSQ is a useful tool for research aiming at examining the role of social support.

D) Measures of Personality

a) Eysenck Personality Questionnaire (Eysenck & Eysenck, 1975)

The Eysenck Personality Questionnaire (EPQ), separately for children and adults, is a development of various earlier personality questionnaires; it differs from the latest of these (Eysenck Personality Inventory) by including an additional scale (P-scale), and hopefully by having made certain improvements in the other scales. The first questionnaire in this series was the forty items measure of neuroticism. This was followed by the Maudsley Personality Inventory (M.P.I.), which contained scales for the measurement of neuroticism and extraversion-introversion (Eysenck, 1959). It was in turn followed by the Eysenck Personality-Inventory (Eysenck & Eysenck, 1964); this added a “lie” (L) scale to measure dissimulation. It was also designed in order to provide certain psychometrically desirable improvements over the M.P.I.: e.g., the dimensions of E and N were completely independent in the E.P.I., whereas they had been slightly correlated in the M.P.I. More precisely speaking, Eysenck’s earlier questionnaires were concerned with two major personality dimensions, extraversion (E) and neuroticism (N).

The main advantage of the new scale (EPQ) is the introduction of a new dimension, which has been labeled P for Psychoticism, although this psychiatric term should not be taken to imply that the scales are not useful for the measurement of these personality traits in normal persons.

The EPQ provides a measure for a new dimension, namely psychoticism (P), also called “tough-mindedness”. The P scale of the EPQ is the result of prolonged efforts having undergone numerous item revisions and tunings of item amalgams along the way to better meet the several theoretically given desiderata. Unlike N and E, P was not formulated to account for empirical data; rather, it was postulated on theoretical grounds, and items with content validity were then selected over a series of

The questionnaire in the current form presents a three-dimensional analysis of personality with orthogonal factors of extraversion-introversion (E-I), neuroticism (N), and psychoticism (P). In addition, it includes some lie-scale (L) items.

Eysenck, Eysenck, & Barret (1985) have published a revised version of the Psychoticism Scale in order to improve the psychometric characteristics of the previously introduced Psychoticism Scale (Eysenck & Eysenck, 1975). Another study of Torrubla & Muntaner (1987) revealed that revised Psychoticism Scale, which has been found to improve the psychometric properties of the original psychoticism scale, does not differ greatly from its predecessor in its relationship to other personality variables. Moreover, the Pearson’s correlation coefficient between two versions of the P scale was 0.86 for males and 0.79 for females. The original P scale was used in the present study since further work is still needed on the revised version of the psychoticism scale.

Regarding the scores on Lie-scale items, a number of interpretations has been offered by different persons. It is variously described as “desire to conform to social norms” (Edwards & Heathers, 1962; Edwards, 1959), “ideal self” (Michaelis & Eysenck, 1971), “nice personality” (Skinner et al., 1970), “motivational distortion” (Cattell, 1965), etc. It is assumed that the subject has a motivation to give a false picture of self, rather a better picture of self than he really is.

As has been noted by numerous researchers (Kendall, 1981; Wiggins, 1973; Edwards, 1970; Nunnally, 1967), a major challenge to the veracity of self-report measures is that persons may not respond to items on the basis of honest self-evaluation, but rather on the basis of an organized disposition to respond in a socially desirable fashion in a consistent manner across a variety of domains (Wiggins, 1973). Edwards (1957), who has pioneered much of the research in this area, defined socially desirable response style as “the tendency of subjects to attribute to themselves, in self-
description, personality statements with socially desirable scale values and to reject those with socially undesirable scale values. Indeed, social desirability has emerged as the first factor in a multitude of studies examining the factor structure of personality assessment inventories (cf. Wiggins, 1973; Edwards, 1970).

More precisely speaking, in the earlier stages, this tendency was viewed more or less as an error to be avoided or response bias to be overcome counter balanced or suitably corrected. Lately there has been a tendency amongst various investigators to consider it as a separate, independent, powerful personality variable, to be measured in its own right (Verma, 1977; Michaelis & Eysenck, 1971; Edwards, 1964). Nunally (1967) concluded that social desirability scales account for so much variance of individual differences in responses to self-report inventories that the major arguments now concern the psychological nature of social-desirability score in relation to personality inventories. Linehan & Nielsen (1983) emphasized that social desirability as a potential confound in the interpretability of psychological tests is a “dead horse issue”. Nevid (1983) argued that the “sacred cow” status of social desirability as a potential confound to the interpretability of psychological tests should be reexamined. The author further argued that social desirability responding may reflect a dimension of personality that is similarly tapped by other tests of personality (e.g. the first factor of the Minnesota Multiphasic Personality Inventory) rather than simply a test-taking style (Block, 1965). The present study did not attempt to exclude cases on the basis of lie-scale. Instead Lie-scale is used as an important dimension of personality.

The questionnaire is backed by a growing body of evidence bearing on such matters as factor stability and reliability (Eysenck & Eysenck, 1968, 1975, 1976), differentiation of drug users from non-drug users (Teasdale, Segraves, & Zacune, 1971), as well as imprisoned criminals and matched controls (Eysenck & Eysenck, 1971). In addition, Farely & Goh (1976), Hundal & Upmanyu (1981), and Upmanyu, Gill, & Singh (1982) found that most of the reliability estimates are satisfactory for most uses.

Bishop (1977) made an appraisal of Eysenck’s psychoticism scale. Bishop pointed out that the value of the P scale rests on its validity as a measure of
predisposition to psychosis. He showed that validation data presented by Eysenck and Eysenck are at best unconvincing and, at worst, contrary to their hypothesis.

Eysenck (1977) in a brief rejoinder to Bishop’s critique of the Eysenck Personality Questionnaire and in particular the concept of Psychoticism (P), emphasized that when all the evidence now available is taken into account and when the theory is seen in the proper development, the criticisms advanced by Bishop will be seen not to be tenable. The author concluded that there is much evidence for the viability of the concept of psychoticism and for the validity of the questionnaire measurement of P.

Block (1977) also showed concern with the psychoticism scale of the Eysenck Personality Questionnaire. The author pointed out that “the recent reply by Eysenck to Bishop’s criticism of the psychoticism scale of the Eysenck Personality Questionnaire relies heavily for its rebuttal on information and argument contained in a new book by Eysenck (1976) that was unavailable to Bishop for her critique. However, consultation of this new additional evidence does not provide reassurance regarding the usefulness and validity of the P-scale. More work is needed on the P scale before it is offered for use to the scientific and professional communities.

Further work is still needed to deal with some criticism directed towards the original P-scale (Claridge, 1981), particularly regarding its usefulness in discriminating between schizophrenic’s and normal subjects.

Despite these concerns, it can be noted from researches that the Eysenck Personality Questionnaire has been extensively used.
b) IPAT Anxiety Scale Questionnaire (Cattell & Scheier, 1963)

Our era has been called “the age of anxiety,” and anxiety manifestations are certainly widespread. In clinical practice or research, whether the diagnosis is for psychotherapeutic purposes, or for internal medicine caused by life stress, it is increasingly necessary to have standards and dependable estimates of the role of anxiety. There are also many situations in educational and social psychology where accurate measurement of anxiety level is of prime importance.

IPAT ANXIETY SCALE was developed from extensive research and practice (Rawn, 1958; Cattell, 1955; Rosenthal, 1955; Scheier & Cattell, 1958) as a means of getting principal anxiety information rapidly, objectively, and in standard manner. It is a brief, non-stressful, clinically-valid questionnaire for measuring anxiety, suitable to all but the lowest educational levels and appropriate for measuring anxiety suitable to all but the lowest educational levels and appropriate for ages of 14 of 15 years on upward throughout the adults range. The scale gives an accurate appraisal of free anxiety level, supplementing clinical diagnosis, and facilitating all kinds of responses of mass screening operations where very little diagnostic or assessment time can be spent with each examinee.

The filled-out test booklet itself constitutes a useful record of total anxiety level and even the specific qualities form of the symptoms as indicated by the examinee’s answers to individual questions. The scale can be used not only for initial diagnosis, but also in follow-ups as a “clinical thermometer” for charting progress or change of level with psychotherapy, medication, change of situation, etc., in research or practice.

The IPAT anxiety scale consists of 40 questions distributed among the five anxiety measuring factors (or components) according to each personality component’s centrality as or expression of anxiety. The distribution of factors is summarized in Table 1.
### Table 1: Item Composition of the IPAT Anxiety Scale

<table>
<thead>
<tr>
<th>The Five Factors Which Group Together as Anxiety Components</th>
<th>Weight (Number of Items)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q₃(-) Defective Integration, Lack of Self Sentiment</td>
<td>8</td>
</tr>
<tr>
<td>C(-) Ego Weakness, Lack of Ego Strength</td>
<td>6</td>
</tr>
<tr>
<td>L Suspiciousness or Paranoid Insecurity</td>
<td>4</td>
</tr>
<tr>
<td>O Guilt Proneness</td>
<td>12</td>
</tr>
<tr>
<td>Q₄ Frustrative Tension or Id Pressure</td>
<td>10</td>
</tr>
</tbody>
</table>

**Scoring**

Higher score always means more anxiety. Three kinds of scores are possible:

1) A single total anxiety score based on all 40 items. This is all recommended or needed in the majority of cases.

2) A breakdown into (a) an unrealized, covert anxiety score, Score A, for the 20 items and (b) an overt anxiety score, Score B, for the last 20 items.

3) A breakdown of total anxiety into the five personality components namely Factor Q₃, C, L, O, and Q₄.

The psychometric characteristics of this scale have been well documented in Indian studies (Upmanyu & Singh, 1984; Upmanyu, Gill, & Singh, 1982; Hundal & Upmanyu, 1974, 1981; Hundal, Sudhakar, & Sidhu, 1972)
E) Measures of Loneliness

Recent treatment of loneliness (Weiss, 1987) has focused on the need for theoretically derived measurement instruments which address the multidimensional nature of loneliness. Currently, the majority of loneliness measures fall within one of two general conceptual approaches. Most have evolved from a uni-dimensional construct of loneliness. This perspective views loneliness as a unitary phenomenon which varies in experienced frequency or intensity (Russell, 1982). Within this view there is a fundamental commonality in the experience of loneliness regardless of cause. The Revised UCLA Loneliness Scale (Russell, Peplau, & Cutrona, 1980), perhaps the most frequently used loneliness scale, falls within this category, as do measures developed by Paloutzian & Ellison (1982), Young (1982), and Belcher (1973).

In contrast, the multidimensional perspective views loneliness as a multifaceted phenomenon that cannot be captured by a single global measure (Russell, 1982). This conceptualization promotes the differentiation of various hypothesized typologies of loneliness. From this viewpoint, the loneliness experienced by the college student away from home for the first time may be qualitatively different from the experience of a person who has lost a spouse (Schmidt & Sermat, 1983; DeJong-Gierveld & Raadschelders, 1982; Weiss, 1973).

One of the proposed typologies of loneliness that has received attention is Weiss (1973) distinction between the loneliness of social isolation (social loneliness)\(^1\) and that of emotional isolation (emotional loneliness)\(^2\). Measures that are based on Weiss’ formulation have been developed for children. Asher, Hymel, & Renshaw (1984) have developed a measure for children which appear to assess what Weiss has described as social loneliness. Complementing this scale, Heinlin & Spinner (1985) have devised a measure specifically aimed at assessing emotional loneliness in children. In adult

\(^1\) Social loneliness results from an inadequate social network.
\(^2\) Emotional loneliness stems from the absence of a close emotional attachment relationship.
populations, work by Russell, Cutrona, Ross, & Yurko (1984) and Rubenstein & Shaver (1982) supports the notion that emotional loneliness and social loneliness are distinct states. Rubenstein & Shaver (1982) in examining people’s feelings associated with loneliness found that two of their feeling factors corresponded closely to Weiss notion of emotional and social loneliness. Similarly, two of their factors associated with reasons for being lonely, also reflected emotional and social loneliness. This prompted them to conclude that “the prominence of these dimensions in our data is strong evidence of their validity and a sign that separate scales could be constructed to measure emotional and social isolation” (p.219).

In the light of above discussion, the present study included in its purview the following unidimensional measure of loneliness.

**The Revised UCLA Loneliness Scale (UCLA-LS: Russel, Peplau, & Cutrona, 1980)**

The Revised UCLA Loneliness scale (Russell, Peplau, & Cutrona, 1980) is a 20 item instrument designed to measure self-reported experiences and behaviours theoretically related to loneliness, including perceived aloneness, social isolation, and disturbed interpersonal relationship (Russell, 1982). In order to decrease response bias, the revised loneliness scale includes 10 positively worded items and 10 negatively worded items, instead of all 20 of the items being worded in the same (“Lonely”) direction as they were in the original loneliness scale (Russell, Peplau, & Ferguson, 1978). The revised loneliness scale yields a single score reflecting the self-report of current loneliness (Russell, Peplau, & Cutrona 1980). The higher the score, the more loneliness reported. Typical items include. “I lack companionship”, “I am unhappy being so withdrawn”. Respondents indicate on a 4-point scale ranging from never (1) to often (4) how often each statement is true for them. The total score is the sum of all 20 items after having reversed the scoring of positively worded items. The higher the score on the loneliness scale, the higher the assessment of loneliness. Russell et al., (1980) and Russell (1982) reported good reliability (rtt > .90) and evidence of validity for the Revised UCLA Loneliness Scale.
Another study (Upmanyu et al., 1993) with a sample of adolescents reported Cronbach alpha to be equal to .90. Validation studies have demonstrated that UCLA Scale has very high concurrent and discriminant validity. Concurrent validity for the new measure was indicated by demonstrating that lonely people report experiencing emotions unrelated to loneliness. Lonely individuals also report more limited social activities and relationships. Discriminant validity for revised loneliness scale was indicated by the evidence that scores on the scale were not confounded by social desirability. Scores on the scale were also found to correlate more highly with other measures of loneliness than with other measures of psychopathology (Upmanyu, Upmanyu, & Dhangra, 1992) The Revised UCLA Loneliness Scale has also been used in a large number of researches in India (Upmanyu, Upmanyu, & Bhardwaj 1994; Upmanyu, Upmanyu, & Dhangra 1992, 1993). The psychometric characteristics have been well documented.

In summary, there is a large literature using the Revised UCLA loneliness Scale and documenting its usefulness, validity, reliability, and its centrality in the measurement armamentarium for researchers interested in examining different facets of loneliness feelings.

**Procedure**

Prior to the administration of the tools, permission was sought from the concerned authorities in charge of the colleges. All the subjects were appraised about the nature and purpose of research and their willingness ascertained before targeting them for participation. The respondents for testing sessions were contacted personally in their classrooms in order to obtain their cooperation and inform them about the testing schedule. Respondents were assured that the information given would be kept strictly confidential and will be used for research purpose only. There were about 8 to 10 respondents for each session. Participants were seated individually and were asked to remain silent while filling out the questionnaire. Each form was checked to see if any omissions were there and if so, the particular subject was asked to complete the questions. Questions about the meaning of a word, format, etc. were addressed to the researcher. Participants were advised that they could stop at any stage during the
session. Strict supervision was exercised in order to see that the subjects do not discuss or take help from each other while performing on the tests. The general testing conditions were satisfactory. Sincere efforts were made to establish rapport with the subjects in order to elicit reliable and authentic information.

Testing schedule started by asking the participants to fill in the general information portion and then proceed on to responding to the tests one after another until all the questions were answered. The sequence of administration of different tests was kept confidential and used for research purpose only. Tests were administered strictly in accordance with the instructions given in test manuals and in classroom situation. There was no time limit for these tests. However, each of these tests approximately took twenty minutes to half an hour. Therefore, each testing session lasted about an hour and a half.

**Scoring of Tests**

The tests were scored strictly in accordance with the procedures suggested by the authors of different tests.

As a result of scoring different tests, several measures mentioned below were obtained.

I. Two measures of cognitive dysfunction;

1) Negative automatic thoughts

2) Hopelessness

II. Depression scores obtained by scoring Beck Depression Inventory;

III. Social Support Questionnaire was scored for two measures, namely SSQ-N (quantitative social support) and SSQ-S (qualitative social support).

IV. Four measures concerning psychoticism, neuroticism, extraversion, and social desirability were obtained by scoring Eysenck Personality Questionnaire.
V. IPAT Anxiety Scale Questionnaire was scored for deriving scores pertaining to Factors Q3, C, L, O, Q4.

VI. Loneliness scores were obtained by scoring Revised UCLA Loneliness Scale.

**Ethical Considerations:**

All the subjects were appraised about the nature and purpose of research and their willingness ascertained before targeting them for participation.

Informed consent was obtained prior to the administration of the psychological assessment scales.

They were assured that they have the right to withdraw at any time from the study.

The researcher assured that no attempt was made to invade into the personal identities of the subjects and it would not form the subject of research.

Respondents were assured that the information provided would be kept strictly confidential and will be used exclusively for research purposes only.

**Analysis**

The data were analyzed to obtain the following information:

1) Descriptive Statistics for comparing male and female adolescents.

2) Factor analysis for understanding the structure of perceived social support, separately for male and female adolescents.