III. METHODOLOGY

III.1 Scope of the Study

This study was implemented at one of the cities in the South of India, Mysore. The senior students both boys and girls of colleges in different courses between the ages of 19 and 22 years were selected. Regarding India as a multicultural country, the religious background of the students were: Hinduism, Muslim, Christian. Mainly their language is Kannada, but they may speak other languages. Although in recent years the socio-economic changes have taken place in India, the people are traditional and sociologically India is a collectivistic society and the joint family is still prevalent.

There are two types of colleges in Mysore; Government and private, most of the colleges are English medium and some of them Kannada medium. The students for this research were selected from the both Government and private. With regard to aims of the research, this study concentrated on individual, family background and other social factors which affect optimism and psychological well-being of students.
III.2 Formulation of the Problem

The impact of optimism and psychological well-being on health spring from the progress in psychology and social psychology in the course of time. Today’s therapeutic aspect of a problem is a comprehensive measure, it includes physical, psychological and social efforts. It is obvious that social support and socio-economic conditions have a beneficial effect on physical and psychological health.

In the last decade, in spite of an increased attention to role of optimism/pessimism and psychological well-being in recovery from chronic diseases and psychological distress like depression, anxiety, and other problems; role of social issues received little attention.

Scheier and Carver (1985) explain optimism/pessimism on the basis of expectancy about the future; and Ryff (1989) defines psychological well-being as self realization through six dimensions which one noted earlier. With this in mind, it seems that social conditions of an individual can facilitate access to self growth and positive attitudes.

Family can be a mediator between flourishing optimism and well-being of children, of course fulfilling this role depends on others social factors such as: family satisfaction, job satisfaction and life satisfaction. In other words, our positive attitude and well-being are conditioned not only by our personality, but also by social factors like: income, education, material possession, social relationships.

Scheier and Carver (1985) define optimism/pessimism based on a model of behavioral self-regulation. According to this model, if an individual believes in her/his ability to cope with the challenges successfully, the outcome is renewed her/his efforts. On the other hand, if an individual experiences failure as the result, she/he reduces the efforts and disengages herself/himself from efforts.
This self regulating model focuses on the individual and overlooks the macro-level of social factors like social, economic, or education disparities that can influence an individual. Scheier and Carver (1985) suggest that individuals who successfully handle challenges are more likely to become optimists; by contrast, individuals who are unable to handle the challenges, they develop pessimism.

However, economic status may help a privileged individual to manage the problems successfully and develop optimism. Or other social factors such as education may contribute to how a person with a low educational level and low social class cannot handle challenges and develop pessimism.

Also the studies reveal that happy people have meaningful relationships with others and strong social skills. Bianch and John Robinson (1997) in their studies on well-being found that social relationships were one of the strongest correlates of positive emotions and lack of social support and close relationships can have far-reaching effects. It is well-documented that the socio-economic condition has a pervasive role in well-being.

Therefore, from this point of view, social factors along with other psychological factors are antecedents to optimism/pessimism and psychological well-being; because role of social factors in developing or hindering optimism and psychological well-being are pervasive that cannot be overlooked.
III.3 Aim of the Study

The principal aim of this research was to study social factors which impact optimism and psychological well-being of undergraduate students in Mysore city.

III.4 Objectives of the Study

The intent of this research was to explore the social correlates of optimism and psychological well-being among undergraduate students in Mysore city, among variables in previous studies associated with optimism and psychological well-being were physical, personality, and some of the social factors specifically, social relationships, social support, religiousness, and socioeconomic status. To be more inclusive and socially sensitive to see the impact of education, income, occupation, family relationships, religious belief on optimism and psychological well-being, the present study was conducted with the following objectives:

1. To assess the level of optimism and psychological well-being of undergraduate students.
2. To understand the impact of optimism on psychological well-being of undergraduate students.
3. To study social factors such as: Educational level, income, and occupation of students’ family, also family relationships, the religious belief of students and other social factors which affect optimism and psychological well-being of undergraduate students.
III.5 Hypotheses

On the basis of personal experience, the review of literature, and consultation with the experts in the field the following hypotheses are proposed:

1. Level of optimism among students and feeling of psychological well-being are positively correlated.

2. The intimate relationships in family and being optimistic and having psychological well-being are positively correlated.

3. The students who have religious belief, they are more optimists and have greater psychological well-being.

4. Economic status of family, the level of optimism and psychological well-being among students are positively correlated.

5. Students in two-parent families are more optimistic and have greater psychological well-being than single-parent families.

6. Educational level of parents has a significant impact on optimism and psychological well-being of students.
III.6 Research Design

The study is an exploratory one using a survey method; it involves the use of primary and secondary data. Regarding the objectives of the study and hypotheses, the primary data were collected through two psychological tests and a structured questionnaire. In pretesting the questionnaire and psychological scales were tested for the understandability and reliability of psychological well being scale and LOT-R scale by students, moreover to what extent the questionnaire was clear and reliable for data gathering.

The research theme is based on the secondary information sources which are listed on bibliography. The response to the questionnaire and psychological tests were collated with the help of a SPSS package, and factor analysis was adopted to arrive to meaningful conclusions. This design outlines the methodology of the research study. It has the following sections:

(i) Variables
(ii) Population
(iii) Sampling
(iv) Instruments
(v) Pre-testing
(vi) Procedure of data collection
(vii) Statistical analysis
III.7 Variables

a. Dependent Variables: Level of Optimism and Psychological well-being of students.

These dependent variables were measured by using psychological well-being scales (Ryff, 1989) and LOT-R (Scheier and Carver, 1994).

b. Independent variables: Gender, income of parents, education of parents, occupation of parents, family relationships, religious belief, economic status. These independent variables were measured by using a questionnaire.

III.8 Population

The sample was selected among undergraduate students who were in the last year of colleges in Mysore City. They were asked to fill out two psychological tests and one questionnaire. The age of students was between 19 and 22 years old, both males and females.
III.9 Sampling

According to the College Development Council of Manasagangotri in Mysore city, there were 61545 undergraduate students (junior, sophomore, and senior students) in all colleges in Mysore including districts, both Government and private in 2008-2009, also there were 42 colleges in Mysore in 2008, for this research women, medical, engineer colleges and training institutes were left out, 8 colleges by simple random method were selected. Total number of third year students was 5500. Among 8 colleges, 280 students were selected, so the sample size of this study was 280.

<table>
<thead>
<tr>
<th>Colleges Name</th>
<th>Total of Students</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. S. B. R. R. Mahajana</td>
<td>514</td>
<td>83</td>
</tr>
<tr>
<td>2. Basudeva Somani</td>
<td>187</td>
<td>31</td>
</tr>
<tr>
<td>3. J. S. S. Arts, Science and Commerce</td>
<td>183</td>
<td>30</td>
</tr>
<tr>
<td>4. Mallamma Marimallappa Science and BBM</td>
<td>102</td>
<td>17</td>
</tr>
<tr>
<td>5. Maharaja’s</td>
<td>420</td>
<td>70</td>
</tr>
<tr>
<td>6. Government first grade College Kuyempunager</td>
<td>187</td>
<td>22</td>
</tr>
<tr>
<td>7. N.I. E. Science</td>
<td>55</td>
<td>14</td>
</tr>
<tr>
<td>8. Sarada Vilas Law College</td>
<td>57</td>
<td>13</td>
</tr>
</tbody>
</table>

III.9.1 Inclusion and Exclusion Criteria

Inclusive: Boys and girls in the 19-22 years age group

Indian students

Senior students of colleges in Mysore city

Exclusive: Women’s colleges

Medical colleges

Engineer colleges

Foreign students
III.10 Instruments

III.10.1 The Revised Life Orientation Test (LOT-R)

The LOT-R was administered to assess the optimism and pessimism status of the students. The test was developed by Scheier and Carver to assess optimism versus pessimism (Scheier and Carver, 1994). The Life Orientation Test is a well researched measure. As mentioned earlier, the LOT-R is based on direct belief model or dispositional view of optimism. It is used to measure how optimistic or pessimistic a person is and not why they are this way.

LOT-R is briefer than the original; the revision omitted or rewrote items that did not focus explicitly on expectancies. The original LOT was criticized because the pessimistic and optimistic item sets form two factors that are not always strongly inter-related; further it gradually became apparent that some of the items asked about things slightly different from expectations per se. (Scheier and Carver, 1985).

Therefore, the test was revised. The test consists of ten items measure with four filler items, three positively worded items and three reverse coded items. Respondents indicated their degree of agreement with statements from “strongly disagree” to “strongly agree.”

The scores are based on responses to these items using a five –point likert scale. Higher scores on the LOT-R generally reflect a greater tendency to expect more positive outcomes. Total scores can range from a low of 6 to a high of 30. This model is based on the premise that low scores define pessimism and high scores indicate optimism. See appendix B for entire test.

Reliability and validity: Internal validity using Cronach’s alpha has been found to be \( r = 0.78 \) and test, retest reliability after 28 months was reported to be \( r = 0.79 \). Scheier and Carver (1994) in their re-evaluation and revision computed means and standard deviation of 2055
college students (M = 14.33, SD = 4.28). The researcher for this study used reliability test for internal consistency of LOT-R, the result of alpha was $r = 0.65$.

The LOT-R also has been used extensively with other cultures. It is easily adapted to various Languages and has been used by the following types of cultural groups: Japanese, Asian American, British, and Hong Kong college students (Dewberry and Richardson, 1990; Lai, 1994; Koisumi, 1995; Chang and McBride Chang, 1996).

**III.10.2 Psychological Well-Being Scale (PWB) (RYFF, 1989)**

Psychological well-being was assessed by Ryff’s scales of psychological well-being. She generated definition of six dimensions of psychological well-being from the multiple theoretical accounts of positive functioning.

These dimensions measuring the following: 1) Self-Acceptance: measure a positive, accepting view of the self, 2) Positive Relations with others: measures positive relationships, empathy and intimacy, 3) Autonomy: measures independence and self-regulation of behavior, 4) Environmental Mastery: measures perceptions of competence in life, 5) Purpose in Life: measures a sense of direction and meaning in life. 6) Personal Growth: measures feelings of perceptions of growth, realizing potential and being open to new experiences.

The response scale was a 6 point continuum, ranging from *completely disagree to completely agree*. Possible score for each dimension ranged from a low of 14 to a high of 84. Overall, a high score indicated high Psychological well-being and a low score indicated low psychological well-being. See appendix C for entire test.

**Reliability and validity:** the original 20 item per scale version of the Scales of Psychological well-being was validated in a community based sample of 321 men and women from multiple age groups (Ryff, 1989a).
Analyses revealed that each of the 6 dimensions had high levels of internal consistency with alpha coefficients ranging from 0.86 to 0.93. Test – retest reliability (over 6 weeks) was acceptable, ranging from 0.81 to 0.88 for the six scales.

The scales also showed good construct validity, significantly correlating with Bradburn Affect Balance Scale (correlation coefficients ranged from 0.25 to 0.62) and Neugarten’s Life Satisfaction Index (Coefficients ranged from 0.26 to 0.73) (all p< 0.001), and Rosenberg’s Self-Esteem Scale (correlation coefficients ranged from 0.36 to 0.62, p< 0.001) (Egert, 1996).

The researcher for this study used reliability test for internal consistency of PWB, the result of alpha was r = 0.92.

III.10.3 Questionnaire:

The structured questionnaire was used to assess the social, economic, religion status of students. Open and Closed Ended questions were employed.

A twenty-five item questionnaire assessed socioeconomic, religious, family relationships of students. Five questions were related to demographic information. To assess SES, participants were asked to indicate whether or not their permanent home was owned by their parents, what are their parents' occupation, education of parents, and income of family. A ratio for family members was determined by asking: "how many people live in your home."

The questions regarding parent socioeconomic security were assessed by asking questions regarding their satisfaction of pocket money and their contentment of quantity of their pocket money.

Participants were asked five questions for determining their religious belief; the religious belief is related to practicing, participating, and behavior: “how much participating in religion gathering is important for you”? “I have often a strong sense of a divine presence”, “I try hard to
live all my life according to my religious belief”. I go to Temple/Church/Mosque because I enjoy seeing people I know.” The responses of participants were ranged from always, sometimes, seldom, and not at all. The rating range was assessed on four scales from 0 to 4.

Participants were asked five questions for determining their family relationships. “how often do you discuss with your family?” does your family have good relationships with each other?” “How often does your family go to cinema together?” The rating range was assessed on four scales from 1 to 4. See Appendix A for the entire questionnaire.

III.11 Pre-testing

In order to collect data for pre-testing, the researcher got permission from the Principal of college and contacted the third –year- students. After establishing a rapport, students in the classes were told the research was conducted on optimism and psychological well-being and how social factors may be related to optimism and psychological well-being. Then the researcher explained that participation in the study required them to answer two psychological tests and one questionnaire that took 30 minutes of their time.

The information sheet explained the purpose of the study as well as containing information to assure students of the confidentiality and anonymity of their replies. For convenience of students and accuracy of responses, the questionnaire and tests were translated in to their local language (Kannada), the students however chose the English, 30 questionnaires and tests were tested.

Respondents understood the questions and direction in the questionnaire, but they did not answer questions related to unemployment in family and feeling of isolation, the questionnaire was lengthy and it took 45- 60 minutes; hence, those questions were omitted and two hypotheses related to those questions were left out.
III.12 Procedure

The researcher approached the principals of two colleges three times for getting permission for data collection, but it was not possible because the students had regular class. Hence, the researcher established a rapport with some of the third year students outside the colleges and they were told about the topic and aim of the data collection, the students who were content to fill out the questionnaire and tests; they received a package including two psychological tests and a questionnaire in English or Kannada (local language of Mysore) containing information on confidentiality of the information they provided. The next day they handed in the package to the researcher.

Among 300 questionnaires and tests which were given to students, the researcher received 280 but 40 of them were incomplete; therefore the analysis was carried out on the basis of 240 questionnaires and tests.

Responses to psychological well-being test were hand scored by the researcher; scores were obtained by reversing the order of the responses on the items that were positively worded such as: I am not afraid to voice my opinion, even when they are in opposition to the opinions of most people.

The response ranged from 1 (very strongly disagree) to 6 (very strongly agree), and negatively worded items such as, sometimes I changed the way I act or think to be more like those around me, the response ranged from 6 (very strongly disagree) to 1 (very strongly agree). A total psychological well-being was obtained by summing all six dimensions; each dimension had 14 items. Possible scores for each dimension ranged from 14 to 84.

The higher total scores indicated that the participant had a higher level of psychological well-being; other participants who had low score indicated that they reported a lower level of
psychological well-being. The level of total psychological well-being in present study ranged from 230 to 452.

Responses to LOT-R were hand scored by the researcher, LOT-R scores were obtained by reversing the order of the responses on the items that were positively worded such as: In uncertain situation, usually expect the best.

The response ranged from strongly agree 5 score to strongly disagree score 1, and negatively worded items such as, if something can go wrong for me, it will go. The response ranged from strongly agree score 1 to strongly disagree score 5. A total LOT-R was obtained by summing six questions.

The higher total LOT-R scores indicated that the participant had a higher level of optimism, other participants who had a low score indicated that they reported a lower level of optimism. Indeed, the total score ranged from a low of 6 to a high of 30; total score of this study ranged from 11-28.

For analyzing the questionnaire, after editing and coding, they were transferred in to a master table which the researcher organized by hand. The questions included demographic information like: age, gender, type of school, religion, education, income.

Other questions related to level of family relationships of students, level of religious belief, and level of satisfaction with their pocket money. These questions had likert format, they ranged from “always” scored 4 to “not at all” scored 0. Or “very good” scored 4 to “not at all” scored 0.
III.13 Statistical Method

Univariate statistic, including frequencies and distribution were run on demographics to describe types of variables; contingency coefficient was used for significant and non significant of variables, and hypotheses were tested by various methods.

For hypothesis 1: Pearson correlation was used to test for a positive correlation between optimism and psychological well-being.

For hypothesis 2: Family relationships were independent variable and optimism and psychological well-being were dependent variables. A Pearson correlation was used to test the correlation between variables, and to test the hypothesis that family relationships would be a better predictor of optimism and psychological well-being step wise multiple regressions was used.

For hypothesis 3: Pearson correlation was used to test the hypothesis that religious belief of students had positive correlation with optimism and psychological well-being; also step wise multiple regression was used to test that religious belief as an independent variable would account for a significant amount of relationship in optimism and psychological well-being as dependent variables.

For hypothesis 4: Pearson correlation was used to test the correlation between economic status and optimism and psychological well-being; also step wise multiple regression was run on this hypothesis to determine economic status as an independent variable accounted for a significant relationship between noted variables.

For hypothesis 5: Analysis of variance (ANOVA), one-way classification (ANOVA), post hoc tests, was used to find the difference between students who lost their parents and their level of optimism and psychological well-being, and relationship between variables.
For hypothesis 6: Education as an independent variable and optimism and psychological well-being as dependent variables were used to test the hypothesis analysis of variance (ANOVA), and one-way classification (ANOVA) post hoc tests, was used to test the difference between level of education, and its relationship with psychological well-being.
III.14 Operational Definitions

Bordens and Abbott (2002) stated that operational definition is a definition of a variable in terms of the operations used to measure it.

1. Optimism: an individual’s mood or attitude towards his or her environment as measured by LOT-R (Scheier and Carver, 1994).

2. Psychological well-being: an individual’s positive feeling, attitude towards his or her environment in order to actualize her/his real self as measured by Ryff’s Scale (1989a).

3. Age: The age of the students as identified in the questionnaire schedule designed by the researcher.

4. Gender: a response of being male or female as identified in the questionnaire schedule designed by the researcher.

5. Occupation: The occupation of the parents of students as identified by students in the questionnaire and designed as business, manager, farmer, labor, civil service, engineer, teacher, and housewife by the researcher.

6. Education: a response of students to level of their parents’ education, i.e. illiterate, high school, PUC, graduate, post graduate as identified in the questionnaire schedule designed by the researcher.

7. Income: a response of students to income of their parents as identified in the questionnaire, below 10000, 11000-20000, 21000-30000, 31000-40000, 50000+

8. Family relationships: a response of students to the extent of their relationships with family in the questionnaire schedule designed by the researcher.

9. Religious faith: a response of students to the extent of their belief in the questionnaire as designed by the researcher.
10. Economic status: a response of students to family income, accommodation, satisfaction with pocket money, and type of the occupation of their family.

III.15 Limitations

In this study, self-report tests were used, although self-report tests do not have self-rating bias like overrating or underestimating; it cannot be totally overlooked.

For data collection, the researcher had to spend a lot of time. During the working hour, the students often were busy and it was difficult to collect data; therefore, the researcher had to ask them and make an appointment with them outside college. For this reason, data collection took six months.

Regarding the characteristic of social science, it is important to bear in mind that the results of this study cannot be generalized to those beyond the sample.

Also the library of the University of Mysore with respect to accessibility to various journals, books was weak and the facilities of library did not satisfy my need during my study; however, recently some changes have taken place and students have access to journals and theses through the internet at the library.
III.16 Chapterisation

The current study consists of five chapters; chapter one, introduction, including definition of optimism, different view of optimism, explanatory style of optimism, dispositional style of optimism, unrealistic optimism, realistic optimism, etiology of optimism, concept of well-being, subjective well-being, psychological well-being, self-determination theory, how does socioeconomic condition impact psychological well-being and optimism/pessimism, and research questions.

Chapter two consists of a review of literature on positive psychology, positive social science, consequences of optimism/pessimism, the impact of optimism on psychological well-being, psychosocial theories and psychological development of early adulthood, theoretical background of socioeconomic status, impact of social factors on optimism and psychological well-being, and summary.

Description of method used in this research is presented in chapter three such as scope of the study, formulation of the study, aim of the study, objectives of the study, hypotheses, Research design (variables, population, sampling, instrument, pre-testing, procedure, statistical method, operational definitions, limitation, and chapterisation).

Chapter four includes the statistical analysis procedure and results of these analyses. And chapter five reports the discussion of the findings, conclusion, implications, and suggestions of the study.