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Personality Style, Anxiety Sensitivity and Perceived Social Support among the Pregnant Women

M.Phil. Dissertation in Clinical Psychology

Mangaleshwari Manjari. N. M.Sc., M.Phil.
manjarinarendiran@gmail.com

PERSONALITY STYLE, ANXIETY SENSITIVITY AND PERCEIVED SOCIAL SUPPORT AMONG THE PREGNANT WOMEN

Dissertation submitted to the Osmania University, Hyderabad

In the partial fulfillment of the requirement for the degree of

M.Phil in Clinical Psychology, In June 2011

Submitted By

MANGALESHWARI MANJARI. N.

Under the guidance of

Dr. K.B. KUMAR

Dean and Head

Department of Clinical Psychology

Sweekaar Rehabilitation Institute for Handicapped

Secunderabad

CERTIFICATE

This is to certify that this dissertation entitled "**Personality Style, Anxiety Sensitivity and Perceived Social Support among the Pregnant Women**" is a bonafide work carried out by **Mangaleshwari Manjari. N.** in Department of Clinical Psychology, Sweekaar Rehabilitation Institute for Handicapped, Secunderabad, under my supervision and guidance.

This is to certify that this work submitted by my candidate as a dissertation in partial fulfillment of the requirements for the M.Phil. in Clinical Psychology has not formed the basis for the award of any degree or diploma to any candidate. This is a record of the candidate's personal effort.

Guide: **Forwarded by:**

Dr. K.B. Kumar

Dean and Head,

Department of Clinical Psychology,

Sweekaar Rehabilitation Institute

for Handicapped,

Secunderabad-500003.

Dr. K.B. Kumar

Dean and Head,

Department of Clinical Psychology,

Sweekaar Rehabilitation Institute

for Handicapped,

Secunderabad -500003.

Place: Secunderabad.

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Co- Guide:

Dr. Murali Krishna
Professor and Head,
Department of Psychiatry,
Gandhi Medical College and Hospital,
Hyderabad - 500 020.

Date:

DECLARATION

I, **Mangaleshwari Manjari. N**, hereby declare that the study presented in this dissertation was conducted by me under the supervision of **Dr**. **K.B. Kumar**, Dean and Head, Department of Clinical Psychology, Sweekaar Rehabilitation Institute for Handicapped, Secunderabad.

I also declare that no part of this study has either been previously published or submitted as a dissertation for any degree or diploma course in any University.

Place: Secunderabad **Mangaleshwari Manjari. N.**

Date:

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N. M. Manjari

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INTRODUCTION

For many women, pregnancy is a natural and joyful event. The recognition that she is pregnant is usually accompanied by a sense of fulfillment and excitement. But, in some women there may be a psychological set back which is manifested as anxiety, depression, tension and such other emotional disturbances. Preparation for the new addition in the family and for subsequent forthcoming changes in social status of the expectant mother is generally recognized as merits of pregnancy.

The psychological factors among many other aspects of pregnancy have received considerable attention and focus in research studies. This is because of the reason that the psychological disturbances can adversely affect the course of pregnancy, labor, delivery and subsequent development of the child (Erickson, 1976). In general, pregnant women have higher anxiety in all trimesters of pregnancy than non pregnant women (cf. Fitzpatrick, 2006). The anxiety which is present in pregnant women may precipitate as psychosomatic symptoms that may be exhibited in different biological forms. Among them, the Gastro- Intestinal complaints are more common. Some others may exhibit symptoms related to the Cardio- Vascular or Genito- Urinary functions. It has been found that insomnia, tension headache, hyperactivity and restlessness are also present among the pregnant women.

Psychologically, pregnancy consists of consecutive inter-dependent phases (cf. Saisto, 2001). During the first trimester that is the initial phase, the previous identity of the women is threatened and an unconscious anxiety, fear and sorrow are found to be common. During the second trimester, the woman slowly adapts herself to the prospective motherhood and

conceptualizes the expected child as an independent being. In the middle of pregnancy, unconscious anxiety is reduced and it is replaced by more of personalized worry about the well-being of the child. The final phase of pregnancy is the time of active preparation for the child birth, its subsequent development and the new life situations.

As the women prepares for her motherhood, pregnancy is generally considered as the period of adaptation for changes, which is happening both physically and psychologically. These changes may occur due to:

→ Their personality style- The high incidence of Neuroticism in pregnant women has been reported in various studies including the study of (Kitamura et al, 1996). It has been reported that the individual who has a high neurotic trait has the tendency to worry a lot, feels nervous and be emotionally insecured.

→ Their fear of anxiety related sensations- The study of (Areskog et al, 1983) found that, the women having the fear of childbirth are often generally anxious. Anxiety proneness can be seen as an individual characteristic, which reflects the way people anticipate and experience various life events like pregnancy and childbirth (cf. Saisto, 2001).

→ Their perceived social support- Research findings show that increased social support positively influences the pregnancy outcomes. If the woman feels supported, she is much better prepared in handling the demands of pregnancy than the woman who feels alone, isolated and who lack social support. The perceived social support is the support that is believed to be available in accordance or in contrast to that which is actually available (cf. Ayers et al, 2007).

Thus, the purpose of the present study is to examine whether or not the psychological and somatic symptoms experienced by the pregnant women during the second and third trimester are related to their personality traits, anxiety sensitivity and perceived social support.

This Dissertation is divided into five chapters. The present introductory chapter is intended to provide the context and background for the study. Chapter 1 provides an overview of pregnancy and the reviews related to the psychological aspects of pregnant women. Chapter 2 discusses the methods, Chapter 3 is about the results obtained, Chapter 4 is the discussion about the results and finally the last Chapter 5 gives us the summary and conclusions of the study. The references and appendices are followed after the summary and conclusions.

CHAPTER 1

PREGNANCY: AN OVERVIEW

Pregnancy is a normal life process but, it brings in a lot of changes in many perspectives of a woman's life. The duration of pregnancy averages 266 days (38 weeks) after ovulation which equals to 10 lunar months. It has been regarded as a time of psychological and biological crisis with emotional upheaval. As pregnancy follows similar physiological courses among women, each woman has her own experiences during that period and each pregnancy for the same woman will be different and unique.

Bibring postulated that pregnancy, "like puberty or menopause, is a period of crisis involving profound psychological as well as somatic changes" (cf. Stotland and Stewart, 2001). A pregnant mother's responses to this period may have direct and significant effects on both her own outcomes and also her fetus and its development (cf. Gurung et al, 2005). However, it is only during the past century that mental health professionals have begun to contribute to the understanding of the psychological aspects of pregnancy and the psychosocial phases that women pass through on their journey into motherhood.

STAGES OF PREGNANCY

Once conception has occurred, there are three distinct psychological phases that most women pass through during their pregnancies. These stages roughly correspond to the three trimesters of pregnancy and appear to be triggered by various psychological, biological and cultural influences.

→ The first stage which is considered as the first trimester (1-13 weeks) begins when the woman initially feels either excited or shocked about her pregnancy. Even if the pregnancy is desired intensely, a certain amount of ambivalence i.e. the feeling of uncertainty during the pregnancy and increased emotional expressions are common. The expectant mother develops new and often uncomfortable physical symptoms such as nausea and vomiting associated with feeling sick, irritable, fatigue and moody. Ultimately, in a wanted pregnancy the fundamental task of the first stage is the acceptance of the pregnancy. Women struggling with this task may show behavioral signs, such as denial of the pregnancy or unusually react to the various bodily changes. The fear of miscarriage has been predominantly expressed by women during the first trimester of a wanted pregnancy and thus many women continue to keep the pregnancy secret until they have passed into the second trimester (cf. Fenster et al, 1994).

→ The second psychological phase of pregnancy or the second trimester (14-28 weeks) is initiated by the experiences of quickening i.e. the fetal movements and by hearing the fetal heart beat. Gradually, as the pregnancy progresses the expectant mother undeniably realizes that life exists within her. Regardless, with the reduction or disappearance of many unpleasant physical symptoms, the second trimester of a woman's pregnancy is considered as the time of relative peace and fulfillment. The most important tasks for a woman in this stage are initiating an emotional affiliation with, or attachment to the fetus. Leifer (1977) identified several behaviours indicative of attachment such as talking to the fetus or calling the fetus by a pet name. During this phase the woman may become more extroverted (cf. Stotland and Stewart, 2001).

→ The final psychological stage of pregnancy is considered as the third trimester (29- 38 weeks) which begins when physical discomforts again predominate and the mother has a sense of her infant as viable. During this stage maternal- fetal attachment is expected to be at its highest and "nesting behaviour" starts to occur. During this final stage, expectant mothers again focus on bodily sensations and appearance and it may become an increasing concern for them. At this time in the pregnancy, sleep disturbances, backaches, leg cramps, increased anxiety about the delivery, worry about the health of the fetus, pain and loss of control during delivery are the major concerns of the pregnant women (cf. Stotland and Stewart, 2001).

Although pregnancy shall be a wonderful experience for many women, a variety of Biomedical (medical high risk conditions), Psychological (an unwanted pregnancy) and social factors (lack of support from the spouse or family) may make it a time of stress (cf. Gurung et al, 2005).

THE MEDICAL COMPLICATIONS OF PREGNANCY

There are some factors associated with increased risk during pregnancy in the expectant mothers and they include hypertension, diabetes, cardiovascular disease, renal disease, malignancies and HIV. Obstetric factors that increase the risk in pregnancy include habitual abortion, multiple gestation, placenta praevia and abruptio placentae. Miscarriage is a common problem in pregnancy and the other possible contributing factors include chromosomal abnormalities, dysfunction of the maternal endocrine system, infection, structural anomalies of the reproductive tract (e.g. cervical incompetence) and underlying maternal disease (Pernoll and Garmel, 1994). Fetal complications that cause a pregnancy to be designated as high risk include

Intra Uterine Growth Retardation (IUGR) which complicates 3-7 percent of all pregnancies and Intrapartum Fetal Distress (cf. Stotland and Stewart, 2001).

THE PSYCHOLOGICAL ADAPTATION OF PREGNANCY

The Psychological factors such as increased depression (Tobin, 1957), Psychological tension (Grimm, 1961; Light and Fenster, 1974), anxiety in the first and third trimester (Lubin, Gardener and Roth, 1975), mood liability (Jarrahi-Zadeh, Kane, Van DeCastle, Lachenbruch and Ewing, 1969), diminished cognitive acuity in the first trimester (Murai and Murai, 1975) and in the third trimester (Jarrahi-Zadeh et.al., 1969) and altered perceptual processes (Davids, DeVault and Talmadge, 1966; Colman, 1969) have been noted among the pregnant women (cf. Fenster et al, 1994).

In considering the psychological adaptation to high-risk pregnancy, it is important to recognize that even women with normal pregnancies may perceive themselves to be "at risk". Anxiety about the wellbeing of the fetus ranks the highest among their concerns and how a woman adjusts to her role as parent is influenced by many factors such as the way the woman was brought up, the values their parents had for children and parenthood in her family of origin, the expectant mothers' personality i.e. her ability to adapt to change and also the past experiences with pregnancy play an important role in the way a woman adapts herself to the current pregnancy.

According to Allport, Personality is defined as the "dynamic organization within the individual of those psychophysical systems that determine his/her unique adjustment to his/her environment." In other words, it is a way of describing the dynamical processes that occur within the person to shape and adapt to life experiences by self-aware learning and proactive planning.

Thus, the maturation and integration of human personality involves growing in self awareness through experiences across a wide range of situations.

Anxiety Sensitivity is the fear of anxiety-related bodily sensations, which is thought to arise from beliefs that these sensations have harmful somatic, social or psychological consequences (cf. Taylor, 1998). People vary greatly in their proneness to experience anxiety and the construct of trait anxiety denotes these individual differences in anxiety proneness.

The perceived social support is the support that is believed to be available in accordance or in contrast to that which is actually available (cf. Ayers et al, 2007). Supportive relationships may enhance feelings of well being, personal control and positive effect in order to help the women to perceive pregnancy- related changes as less stressful (cf. Collins et al, 1993).

PSYCHOLOGICAL ASPECTS OF PREGNANT WOMEN

Bailey and Hailey (1987) conducted an objective study to substantiate the assertion that pregnant women have different psychological experiences and emotional needs than non-pregnant women and the investigation results indicated that the pregnant women differed from the non-pregnant women on some fundamental dimensions of personality which included a stronger introverted, inward personality orientation and a lower level of self- acceptance and independence.

Bussel et al., (2009) conducted a study to determine the influence of general anxiety symptoms and specific anxiety in pregnant and postpartum women. It also focused the maternal antenatal orientations on the personality traits, cognitive and behavioural coping styles and attachment. Thus, the higher scores on the Neuroticism and the general and pregnancy related anxiety measures were reported.

Kitamura et al., (1996) conducted a study on depression occurring during pregnancy i.e. antenatal depression. A controlled study showed that the rate of antenatal depression was significantly higher than that of depression among non-pregnant women. The antenatal depression was found to be associated with: Obstetric factors (first pregnancy, first delivery and past history of abortion), early experiences (loss of father), personality (higher neuroticism score), attitudes towards the present pregnancy (perplexity of the husband), accommodation factors (non- detached housing and expected crowdedness after birth of the child) and social support (low level of intimacy with the husband).

Lubin et al., (1975) conducted the study in a predominantly white, middle class sample of pregnant women, who completed the anxiety and depression questionnaires and the Symptom Checklist for assessing the Somatic symptoms during the second, fifth and eighth months of pregnancy. The analyses revealed that anxiety varied significantly as a function of trimester and the previous pregnancy history interacted significantly with trimester. Depressive mood was not significantly affected by any of the sources of variation. The Correlational analysis indicated that there is a significant relationship between somatic symptoms and anxiety, but not between somatic symptoms and depressive mood.

Buckwalter and Simpson (2002) found that the assumption is frequently made that women with severe nausea and vomiting during pregnancy are transforming psychological distress into physical symptoms and they concluded that, the psychological responses can interact with the physiology during pregnancy to exacerbate the condition.

Chen et al., (2004) surveyed women attending antenatal clinics and reported that 20 percent had clinically significant depressive symptoms (cf. Kaaya, 2010). Fatoye et al., (2004)

concluded that the higher rates of depressive and anxious symptoms in pregnant women than non-pregnant women (cf. Fisher et al, 2007). Gurung et al., (2005) found that the mother's prenatal anxiety is high in the third trimester than the second trimester and greater the social support, lower the level of anxiety.

Kelly et al., (2001) conducted a study on the experience of somatic symptoms as a predictor of depression and anxiety disorders among pregnant women and the results indicated that the women with anxiety and/or depression were significantly more likely to report more somatic symptoms when compared to the woman without anxiety or depression.

Janssen (1996) conducted a study which investigated on the hypothesis that following a pregnancy loss, women have more mental health complaints and it was found that those who had previous abortions had reported high on depression, anxiety and Somatization symptoms on the SCL-90 scale.

Adler et al., (1990) conducted the study on the psychological responses after abortions and the results concluded that, the distress is generally greatest among the women before the abortions and that the incidence of severe negative responses is low.

Hussein (2006) conducted a study on normal pregnant women and the results indicated that the anxiety is associated with somatic complaints during pregnancy. Otchet et al., (1999) found that there are several significant distressing psychological symptoms such as Somatization, Obsessive- Compulsive and Hostility in SCL-90 in pregnant women.

PERSONALITY TRAITS OF PREGNANT WOMEN

Podolska et al., (2010) conducted the study to analyze the relationship between personality traits and the risk of perinatal depression in pregnant and postpartum women. Two self-report questionnaires for screening the depressive symptoms and the evaluation for five personality traits were used and found that the personality trait like Neuroticism as measured by the NEO-FFI is associated with a greater risk of perinatal depression.

Saisto et al., (2001) conducted a study to examine the personality traits, socioeconomic factors, life and partnership satisfaction and pregnancy or delivery associated anxiety by using questionnaire survey in the 30^{th} week of pregnancy i.e. during the third trimester in 278 women and their partners. The results indicated that the more anxiety, Neuroticism, vulnerability, depression, low self-esteem, dissatisfaction with the partnership and lack of social support the women reported, the more was the pregnancy related anxiety and fear of vaginal delivery. Thus, the personality of both the pregnant woman and her partner and their relationship influences the woman's attitude to her pregnancy and her forthcoming delivery.

Canals (2002) evaluated the development of anxiety from the pre-conception stage to the postpartum stage. It was found that the sociodemographic variables and Neuroticism traits were significantly related with the anxiety levels and they suggested that support offered at this stage would enhance the health of the mother and her new born baby.

Shakya et al., (2008) found that the pregnant women having clinical symptoms of depression represented more somatic symptoms. The depression level was high among the primigravida than the multigravida.

ANXIETY SENSITIVITY AMONG THE PREGNANT WOMEN

Jayasvasti (2005) found that the pregnant women undergo marked psychological changes. Their attitudes toward pregnancy depends upon the relationship with the spouse, age of life stage, even planned or unplanned and also the women who were sensitive to anxiety related situation had higher Neurotic traits.

PERCEIVED SOCIAL SUPPORT OF PREGNANT WOMEN

Costa et al., (2000) conducted the study which prospectively examined the influence of maternal stress, social support and coping style on labor or delivery complications and infant birth weight from the beginning of the third month of pregnancy upto a month after the delivery. In each trimester the data on social support, coping strategies, lifestyle behaviours and pregnancy progress were collected. The final results demonstrated that, the women who experienced greater stress during pregnancy had more difficulty during labor, the perceived prenatal social support emerged as a predictor of infant birth weight and women who reported less satisfaction with their social support in the second trimester gave birth to infants of lower birth weight. Finally, it was suggested that there is an association between specific psychosocial variables and negative birth outcome.

Elsenbruch (2007) conducted a study to find the effects of social support during pregnancy on maternal depressive symptoms, Quality of Life and pregnancy outcomes during the first and third trimester. The sample was divided into quartiles yielding groups of low, medium and high social support based on perceived social support and the results indicated that pregnant women with low support reported increased depressive symptoms and reduced Quality of Life.

Besser et al., (2002) explored the effects of interactions between pregnancy risk and perceptions of social support. The results revealed that there was an attachment to the social support from the spouse which reduced the depressive symptoms in child bearing women.

Rudnicki et al., (2001) conducted a study to evaluate several psychosocial correlates of depressed mood during pregnancy. The psychosocial factors examined included background characteristics, perceived social support and coping styles and the results concluded that, the women who perceive less social support utilized more avoidant coping strategies and experienced greater depression mood during pregnancy.

CHAPTER 2

METHODS

OBJECTIVE

To examine whether or not the psychological and somatic symptoms experienced by the women during their second and third trimester are related to their personality traits, anxiety sensitivity and perceived social support.

SAMPLE

Women (N=185) who have conceived naturally and attending antenatal checkups at the OBG department, Gandhi Hospital, Secunderabad, constituted the sample. Following the requisite permission from the concerned authorities all pregnant women attending the OPD during their second or third trimester from March to April, 2011 were screened using the following inclusion and exclusion criteria.

PROCEDURE

The sample meeting the criteria were requested for an interview and the objectives of the study were explained. Those willing to participate in the study and given written consent were recruited. The confidentiality of the information collected was assured in all cases. The recruited women were taken to a separate room located within the OPD area and measures were administered. If some women preferred to work out another appointment for undergoing the testing the same was accepted, a convenient time was fixed and the tests were administered. If the subjects had difficulty in understanding any part of the questionnaires the researchers assisted

by explaining and/or interpreting the statements or questions. Measures were administered in the same order to all women.

INCLUSION CRITERIA

→ Pregnant women who have conceived naturally (Primigravida and Multigravida), attending antenatal check-ups during second and third trimester.

→ Age between 20 and 35 years.

→ No past or current history of psychiatric illness and/or psychological treatment

→ No medical complication reported in the current pregnancy such as Eclampsia (seizures in pregnant women), Gestational Diabetes, Anemia, Hepatic disorders, Hypertension, Infectious diseases and Oligoamnios (serious deficiency of amniotic fluid during pregnancy), or any other significant systemic illness.

→ Able to read and comprehend Telugu or English.

→ Consenting to participate in the study.

EXCLUSION CRITERIA

→ Unmarried status, divorced and separation (from the spouse for more than 6 months in a year).

→ History of past or current substance use.

MEASURES

1. **Symptom Check List (SCL-90)**

The Symptom Check List (SCL-90) was developed by Leonard R. Derogatis et al (1973). It is a multidimensional tool that assesses nine symptoms of psychopathology. The SCL-90 test contains of 90 items and it can be completed in just 12-15 minutes. The nine domains that are measured in SCL-90 are Somatization (SOM) which contains 12 items, Obsessive-Compulsive (O-C) containing 10 items, Interpersonal Sensitivity (I-S) with 9 items, Depression (DEP) with 13 items, Anxiety (ANX) containing 10 items, Hostility (HOS) containing 6 items, Phobic Anxiety (PHOB) with 7 items, Paranoid Ideation (PAR) with 6 items, Psychoticism (PSY) containing 10 items and additional items of 7. The internal consistency coefficient alphas for the nine symptom dimensions ranged from .77 for Psychoticism, to a high of .90 for Depression. The construct validity of this test ranged from poor to good.

2. **Hospital Anxiety Depression Scale (HADS)**

The HADS was developed by Zigmond and Snaith (1983). The scale was designed to assess the presence and severity of anxiety and depression in patients in non-psychiatric hospital settings. It would take less than 10 minutes to administer. It is a self administered rating scale of symptoms and functioning and can be used by patients either in an in-patient or an out-patient setting. Anxiety and depression are assessed as separate components, each with seven items that are rated from 0 to`3; and the scores are totaled for each component. A score of less than **7** in a component is considered to be normal, 8–10 indicates mild symptoms, 11–14 indicates moderate symptoms and 15 or more indicates severe symptoms. The scores for the two components can also be added together to give a composite anxiety–depression score. Internal consistency in terms of Cronbach Alpha (α) was found to be 0.80 for depression and 0.76 for anxiety

components. The Pearson's correlation between the anxiety and depression subscales of HADS was found to be 0.49-0.63.

3. NEO- Five Factor Inventory (NEO-FFI)

The NEO Five-Factor Inventory (NEO-FFI) was developed by Paul T. Costa and Robert R. Mc Crae (1992). It is a shortened version of the NEO PI-R, designed to give quick, reliable and valid measures of the five domains of adult personality. It consists of 60 items that are rated on a five point scale i.e. strongly disagree to strongly agree. The five domains are Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism. The NEO-FFI scales show correlations of .75 to .89 with the NEO-PI validimax factors and the internal consistency values range from .74 to .89.

4. Multidimensional Scale of Perceived Social Support (MSPSS)

The Multidimensional Scale of Perceived Social Support is the most widely used psychological instrument for measuring the perception of social support. The scale assesses self-reported amounts of social support which was developed by Zimet et al., (1988). The MSPSS is a 12- item questionnaire containing three subscales measuring perceived social support from Friends (e.g., "My friends really try to help me"), Family (e.g., "I can talk about my problems with my family"), and a Significant Other (e.g., "There is a special person in my life who cares about my feelings"). The items are divided into factor groups relating to the source of the social support, family (3,4,8,11), friends (6,7,9,12) and Significant Other (1,2,5,10).

The items are scored on a 7-point Likert- type scale, ranging from 1 (Very Strongly Disagree) to 7 (Very Strongly Agree) for each item. Each subscale consists of four items and has a possible score range of 4 to 28. High scores reflect high levels of perceived social support. The

reliability and validity of the MSPSS has excellent internal consistency, with alpha of .90 for the total score and .90 to .95 for the subscales. The authors claim good test- retest reliability as well. The MSPSS has good factorial and concurrent validity.

5. **Anxiety Sensitivity Index (ASI)**

The Anxiety Sensitivity Index was developed by Steven Reiss (1986). It is a 16-item self-report questionnaire. Each item is rated on a 5-point Likert-type scale, where respondents has to indicate the extent to which each item corresponds to their beliefs about the consequences of their anxiety symptoms. Items are rated from 0 (not at all) to 4 (very much). The total Anxiety Sensitivity Index scores are obtained by summing the responses to each of the 16 items and it is interpreted as higher the score obtained, higher the Anxiety Sensitivity of the individual. The Anxiety Sensitivity Index has been shown to have excellent psychometric properties both in clinical and nonclinical samples.

STATISTICAL ANALYSIS

The Descriptive Statistics was used to analyze the percentage, mean and standard deviation. The Pearson's Product Moment Correlation, Independent Sample t- test and One-Way Analysis of Variance with Scheffe's multiple range test (< 0.05) were employed for analysis of the data using SPSS 16.0 version.

CHAPTER 3

RESULTS

Table 1: Sociodemographic Characteristics of the study population (N=185).

Age (in years)		
	20-24	117 (63.2%)
	25-29	59 (31.9%)
	30-33	9 (4.7%)
Mean age (Subject)		23.56 (SD = 2.92)
Mean age (Husband)		28.12 (SD = 3.42)
Years of marriage		3.34 (SD = 2.40)
Family Type		
	Nuclear	101 (54.6%)
	Joint	84 (45.4%)
Residence		
	Urban	177 (95.7%)
	Rural	8 (4.3%)
Socio Economic Status		
	Lower	143 (77.3%)
	Middle	42 (22.7%)

Table 2: Pregnancy related variables of the study sample (N=185).

Trimester		
	Third	130 (70.3%)
	Second	55 (29.7%)
Pregnancy		
	Multigravida	104 (56.2%)
	Primigravida	81 (43.8%)
Desirability of Pregnancy		
	Desired	181 (97.8%)
	Undesired	4 (2.2%)
Number of Pregnancies		
	First	81 (43.8%)
	Second	87 (47.0%)
	Third	17 (9.2%)
History of Abortions or Miscarriage		
	No	173 (93.5%)
	Yes	12 (6.5%)
Past Delivery		
	Normal	48 (25.9%)
	Cesarean	51 (27.6%)
	Not applicable	86 (46.5%)

The study sample consists of 185 pregnant women. There were 117 (63.2%) women who belonged to the age group of 20-24 years, 59 (31.9%) to 25-29 years and 9 (4.7%) to 30-33

years. The mean age of the study sample was 23.56 (±2.92) years, the husband's mean age was 28.12 (±3.42) years and the mean age of their years of marriage was 3.34 (±2.40) years.

In the study population, 101 (54.6%) of the sample were from the nuclear family and 84 (45.4%) were from the joint family type. In the study group, 177 (95.7%) of women had their residence in the urban area whereas, only 8 (4.3%) were residing in the rural area. Maximum number of the sample i.e. 143 (77.3%) of women hailed from the low socio economic status and only 42 (22.7%) of women were from middle socio economic status.

In the study population 130 (70.3%) of the pregnant women were in their second trimester whereas, 55 (29.7%) were in their third trimester. In the group 104 (56.2%) were multigravida (a pregnant woman who has been pregnant two or more times) and 81 (43.8%) were primigravida (a woman who is pregnant for the first time). In the study population of multigravida, 48 (25.9%) had normal delivery and 51 (27.6%) had cesarean delivery in the past. The study sample had 86 (46.5%) of pregnant women who did not have any past delivery. The women who desired for pregnancy among the group was 181 (97.8%) and those who undesired for pregnancy were 4 (2.2%).

In the study population, it was the first pregnancy for 81 (43.8%) and the remaining 87 (47.0%) and 17 (9.2%) of women were in their second and third pregnancies respectively. Majority of the group members i.e. 173 (93.5%) did not have any previous history of abortions or miscarriage but, 12 (6.5%) had previous history of abortions or miscarriage.

Table 3: Mean (±SD) score in various symptom domains of Symptom Check List-90 (SCL-90) with respect to women in second and third trimester.

Symptom Domains	Second Trimester (N=55)	Third Trimester (N=130)	't'	'p'
Somatization	10.72 (3.81)	12.51 (3.79)	2.92	0.004
Obsessive Compulsive	2.76 (1.80)	3.76 (2.40)	2.76	0.006
Interpersonal Sensitivity	3.00 (2.21)	3.56 (2.94)	1.28	0.199
Depression	3.98 (2.49)	5.48 (3.10)	3.18	0.002
Anxiety	4.98 (2.74)	7.00 (3.92)	3.48	0.001
Hostility	1.49 (0.97)	1.60 (1.15)	0.65	0.511
Phobic Anxiety	4.65 (3.32)	6.81 (4.28)	3.34	0.001
Paranoid Ideation	1.49 (1.64)	1.79 (1.95)	1.00	0.317
Psychoticism	0.50 (0.74)	0.90 (1.26)	2.13	0.034
Total	38.14 (14.25)	48.90 (17.79)	3.97	0.001

The mean score on the various symptom domains of Symptom Check List-90 (SCL-90) with respect to the women during the second and third trimester signifies that the women in third trimester had higher mean values in all the domains than the women in the second trimester. The

mean score of Somatization domain is 12.51 (±3.79) is higher and it is significant at the level of 0.004 in the third trimester than the mean score of 10.72 (±3.81) in the second trimester. In the same manner, the mean score of Obsessive Compulsive domain is 3.76 (±2.40) in the third trimester is higher and significant at 0.006 level than the mean score of 2.76 (±1.80) in the second trimester.

In the Depression domain the mean score in the third trimester is 5.48 (±3.10) which is significant at 0.002 level is higher than the mean score of 3.98 (±2.49) in the second trimester. In the Anxiety domain the mean score in the third trimester is higher 7.00 (±3.92) and it is significant at 0.001 level than the mean score of 4.98 (±2.74) in the second trimester. In the Phobic Anxiety domain the mean score in the third trimester is higher 6.81 (±4.28) than the mean score in the second trimester 4.65 (±3.32) which is significant at 0.001 level. In the Psychoticism dimension the mean score is higher in the third trimester 0.90 (±1.26) than the mean score in the second trimester 0.50 (±0.74) at the significant level of 0.034 and the overall total score mean value is also higher in the third trimester 48.90 (±17.79) than the mean value of 38.14 (±14.25) in the second trimester at the significant level of 0.001.

In the other domains such as Interpersonal Sensitivity the mean score in the third trimester is 3.56 (±2.94) which is higher than the mean score in the second trimester 3.00 (±2.21). In the Hostility domain the mean score of the third trimester women is 1.60 (±1.15) which is higher than the mean of second trimester women 1.49 (±0.97) and in the Paranoid Ideation the mean score of women in third trimester is 1.79 (±1.95) which is higher than the women in the second trimester 1.49 (±1.64). Even though the mean scores were higher during the third trimester than the second trimester in the domains such as Interpersonal Sensitivity,

Hostility and Paranoid Ideation, the scores were not significant and their values were greater than 0.05 level.

Table 4: Mean (±SD) score of Hospital Anxiety Depression Scale (HADS) and Anxiety Sensitivity Index (ASI) with respect to women in second and third trimester.

The mean score on the Anxiety domain of HADS is higher in the women in third

Measures	Second Trimester (N=55)	Third Trimester (N=130)	't'	'p'
HADS:				
Anxiety	7.47 (3.29)	8.39 (3.71)	1.59	0.113
Depression	6.87 (3.86)	8.04 (3.92)	1.86	0.064
ASI	28.07 (11.68)	28.14 (10.44)	0.04	0.966

trimester 8.39 (±3.71) than the women during the second trimester 7.47 (±3.29). In also the Depression domain of HADS, the mean score is higher among the third trimester women 8.04 (±3.92) than the women in her second trimester 6.87 (±3.86). The mean score of the Anxiety Sensitivity is also seem to be higher among the women in the third trimester 28.14 (±10.44) than the women in the second trimester 28.07 (±11.68) but, none of them were significant at 0.05 level.

Table 5: Mean (±SD) score on various domains of NEO- Five Factor Inventory (NEO-FFI) with respect to women in second and third trimester.

Domains	Second Trimester (N=55)	Third Trimester (N=130)	't'	'p'
Neuroticism	57.40 (9.93)	59.06 (10.18)	1.02	0.308
Extraversion	51.16 (7.31)	50.33 (6.87)	0.73	0.465
Openness	37.34 (7.06)	37.26 (7.42)	0.07	0.943
Agreeableness	39.30 (11.01)	39.61 (11.00)	0.17	0.863
Conscientiousness	49.34 (9.73)	47.78 (10.24)	0.96	0.338

The mean score of Neuroticism during the third trimester is 59.06(±10.18) which is higher than the mean score of women in the second trimester 57.40 (±9.93) and in the Agreeableness domain the mean score is higher in the third trimester 39.61 (±11.00) than the mean score of women in the second trimester 39.30 (±11.01) but, the values were not significant at 0.05 level.

The mean score of Extraversion during the second trimester 51.16 (±7.31) is higher than that of the mean in the third trimester 50.33 (±6.87). In the same manner, the mean score of the Openness domain during the second trimester 37.34 (±7.06) is higher than the mean in the third trimester 37.26 (±7.42). The Conscientiousness domain's mean score is also higher during the

second trimester 49.34 (±9.73) than the mean score during the third trimester 47.78 (±10.24). The results were not significant in any of the domains at 0.05 level.

Table 6: Mean (±SD) score on various subscales of Multidimensional Scale of Perceived Social Support with respect to women in second and third trimester.

Subscales	Second Trimester (N=55)	Third Trimester (N=130)	't'	'p'
Family	25.61 (4.09)	25.11 (4.14)	0.75	0.450
Friends	20.85 (4.85)	20.82 (5.17)	0.03	0.969
Significant Others	20.25 (4.50)	19.98 (4.34)	0.38	0.703
Total	66.72 (10.62)	65.93 (11.05)	0.45	0.651

The mean scores of the women during the second trimester were higher in the family 25.61 (±4.09), friends 20.85 (±4.85) and significant others 20.25 (±4.50) subscales than the mean scores of the women during the third trimester in the family 25.11 (±4.14), friends 20.82 (±5.17) and significant others 19.98 (±4.34) subscales. The values were not significant at 0.05 levels in any of the subscales.

Table 7: Mean (±SD) score on various symptom domains of Symptom Check List-90 (SCL-90) with respect to primigravida and multigravida.

Symptom Domains	Primigravida (N=81)	Multigravida (N=104)	't'	'p'
Somatization	11.14 (3.88)	12.63 (3.75)	2.63	0.009
Obsessive Compulsive	3.30 (2.42)	3.58 (2.17)	0.82	0.413
Interpersonal Sensitivity	3.71 (3.17)	3.15 (2.35)	1.38	0.169
Depression	4.88 (3.45)	5.15 (2.62)	0.59	0.554
Anxiety	6.24 (3.79)	6.52 (3.68)	0.51	0.611
Hostility	1.54 (1.12)	1.59 (1.08)	0.32	0.747
Phobic Anxiety	6.23 (3.94)	6.12 (4.29)	0.17	0.859
Paranoid Ideation	1.69 (1.79)	1.71 (1.92)	0.07	0.942
Psychoticism	0.85 (1.28)	0.73 (1.03)	0.71	0.479
Total	44.41 (18.43)	46.70 (16.73)	0.88	0.380

Mean (±SD) score on various symptom domains of Symptom Check List-90 (SCL-90) with respect to primigravida and multigravida signifies that the mean score of the women who are multigravida is higher in the Somatization domain 12.63 (±3.75) and the value is significant

at the level of 0.009 than the women who are primigravida 11.14 (±3.88). The mean scores were also observed to be higher in the multigravida in the Obsessive Compulsive domain were the mean score of multigravida is 3.58 (±2.17) than the mean score of primigravida 3.30 (±2.42). In the Depression domain, the mean score of the multigravida is 5.15 (±2.62) which is higher than the mean score of primigravida 4.88 (±3.45).

The mean score of multigravida 6.52 (±3.68) was observed to be higher in the Anxiety domain than the mean score of primigravida 6.24 (±3.79). In the same manner, the mean score of multigravida 1.59 (±1.08) in the Hostility domain is found to be higher than the mean score of primigravida 1.54 (±1.12). The mean score is higher among the multigravida 1.71 (±1.92) in Paranoid Ideation domain than the mean score of primigravida 1.69 (±1.79). The mean score of the overall total of all the domains are also higher in the multigravida women 46.70 (±16.73) than the women who are primigravida 44.41 (±18.43).

In the Interpersonal Sensitivity domain, the mean score of primigravida 3.71 (±3.17) is higher than the mean score of multigravida women 3.15 (±2.35). In the Phobic Anxiety domain the mean score of primigravida is 6.23 (±3.94) is higher than the mean score of multigravida women 6.12 (±4.29). In the Psychoticism domain, the mean score of primigravida 0.85 (±1.28) is higher than the mean score of multigravida 0.73 (±1.03). The values were not significant at 0.05 level in all the domains expect the Somatization domain

Table 8: Mean (±SD) score of Hospital Anxiety Depression Scale (HADS) and Anxiety Sensitivity Index (ASI) with respect to primigravida and multigravida.

The mean score of the Anxiety domain of HADS is higher among the multigravida 8.24 (±3.64) than the mean score of primigravida 7.96 (±3.57) and in the Depression domain, the mean score of multigravida 8.12 (±3.89) is higher than the mean score of primigravida 7.14 (±3.94). The mean score of Anxiety sensitivity is high among the primigravida 28.88 (±11.45) than the mean score of multigravida 27.52 (±10.26). There were no significant results found at less than 0.05 level in any of the measures.

Measures	**Primigravida (N=81)**	**Multigravida (N=104)**	**'t'**	**'p'**
HADS:				
Anxiety	7.96 (3.57)	8.24 (3.64)	0.51	0.605
Depression	7.14 (3.94)	8.12 (3.89)	1.68	0.094
ASI	28.88 (11.45)	27.52 (10.26)	0.84	0.397

Table 9: Mean (±SD) score on various domains of NEO- Five Factor Inventory (NEO-FFI) with respect to primigravida and multigravida.

The Mean (±SD) score on various domains of NEO- Five Factor Inventory (NEO-FFI) with respect to primigravida and multigravida signifies that the mean score in Neuroticism

Domains	**Primigravida (N=81)**	**Multigravida (N=104)**	**'t'**	**'p'**
Neuroticism	57.39 (10.47)	59.48 (9.77)	1.39	0.165
Extraversion	51.01 (6.97)	50.25 (7.03)	0.73	0.464
Openness	37.83 (7.58)	36.85 (7.07)	0.90	0.365
Agreeableness	40.98 (11.42)	38.38 (10.53)	1.60	0.110
Conscientiousness	48.67 (9.87)	47.91 (10.30)	0.51	0.610

domain is higher among the multigravida 59.48 (±9.77) than the primigravida whose mean score is 57.39 (±10.47). In all the other domains, the mean score of primigravida is higher than the multigravida. In the extraversion domain, the mean score of primigravida is 51.01 (±6.97) and the mean score of multigravida is 50.25 (±7.03). In the Openness domain, the mean score of primigravida is 37.83 (±7.58) whereas the mean score of multigravida is 36.85 (±7.07).

In the agreeableness domain the mean score of primigravida is 40.98 (±11.42) and the mean score of multigravida is 38.38 (±10.53). In also the Conscientiousness domain, the mean

score of the primigravida is higher 48.67 (±9.87) than the mean score of multigravida 47.91 (±10.30) but, none of the values were significant at less than 0.05 level.

Table 10: Mean (±SD) score on various subscales of Multidimensional Scale of Perceived Social Support with respect to primigravida and multigravida.

Mean (±SD) score on various subscales of Multidimensional Scale of Perceived Social Support with respect to primigravida and multigravida signifies that the mean score of

Subscales	**Primigravida (N=81)**	**Multigravida (N=104)**	**'t'**	**'p'**
Family	25.04 (4.20)	25.43 (4.07)	0.62	0.532
Friends	21.03 (5.23)	20.67 (4.95)	0.48	0.629
Significant Others	20.04 (4.61)	20.07 (4.20)	0.04	0.966
Total	66.01 (11.25)	66.28 (10.68)	0.17	0.865

multigravida is higher 25.43 (±4.07) than the mean score of primigravida 25.04 (±4.20) in the family subscale. The same was observed in the Significant Others Subscale in which the mean score of multigravida is 20.07 (±4.20) whereas the mean score of primigravida is 20.04 (±4.61) and the total mean score is also higher in the multigravida 66.28 (±10.68) than the mean score of primigravida 66.01 (±11.25). In the Friends subscale, the mean score of primigravida 21.03 (±5.23) is higher than that of the mean score of multigravida 20.67 (±4.95). Among the different subscales, none of the values were significant at less than 0.05 level.

Table 11: Mean (±SD) score on various symptom domains of Symptom Check List-90 (SCL-90) in women who scored high or low on Anxiety Sensitivity Index (ASI).

Symptom Domains	High Anxiety Sensitivity (N=103)	Low Anxiety Sensitivity (N=82)	't'	'p'
Somatization	13.01 (3.93)	10.68 (3.40)	4.26	0.001
Obsessive Compulsive	3.54 (2.50)	3.36 (1.97)	0.52	0.600
Interpersonal Sensitivity	3.83 (3.10)	2.85 (2.12)	2.44	0.016
Depression	5.32 (3.07)	4.68 (2.90)	1.43	0.153
Anxiety	7.42 (3.84)	5.12 (3.14)	4.38	0.001
Hostility	1.71 (1.07)	1.39 (1.11)	2.03	0.044
Phobic Anxiety	7.34 (4.07)	4.69 (3.72)	4.57	0.001
Paranoid Ideation	2.04 (2.04)	1.26 (1.52)	2.88	0.004
Psychoticism	0.91 (1.22)	0.62 (1.02)	1.71	0.088
Total	50.68 (18.59)	39.43 (13.71)	4.57	0.001

Mean (±SD) score on various symptom domains of Symptom Check List-90 (SCL-90) in women who scored high or low on Anxiety Sensitivity Index suggest that the mean scores of

women who had scored high on the ASI is higher in all the domains of SCL-90 than the women who had scored low on ASI. The mean scores of the women who had scored high in the various domains of SCL-90 are Somatization 13.01 (±3.93) which is significant at 0.001 level, Obsessive Compulsive 3.54 (±2.50), Interpersonal Sensitivity 3.83 (±3.10) which is significant at 0.01 level, Depression 5.32 (±3.07), Anxiety 7.42 (±3.84) which is significant at 0.001 level, Hostility 1.71 (±1.07) which is significant at 0.04 level, Phobic Anxiety 7.34 (±4.07) which is significant at 0.001 level, Paranoid Ideation 2.04 (±2.04) significant at 0.004 level, Psychoticism 0.91 (±1.22) and the overall total mean score is 50.68 (±18.59) which is significant at 0.001 level seem to be higher than the mean scores of the women who has scored low on ASI in various domains of SCL-90 such as Somatization 10.68 (±3.40), Obsessive Compulsive 3.36 (±1.97), Interpersonal Sensitivity 2.85 (±2.12), Depression 4.68 (±2.90), Anxiety 5.12 (±3.14), Hostility 1.39 (±1.11), Phobic Anxiety 4.69 (±3.72), Paranoid Ideation 1.26 (±1.52), Psychoticism 0.62 (±1.02) and the overall total mean score is 39.43 (±13.71).

Table 12: Mean (±SD) score on Hospital Anxiety Depression Scale (HADS) in women who scored high or low on Anxiety Sensitivity Index.

Mean (±SD) score on Hospital Anxiety Depression Scale (HADS) in women who scored high or low on Anxiety Sensitivity Index signify that the mean scores of the symptoms such as

Measures	**High Anxiety Sensitivity (N=103)**	**Low Anxiety Sensitivity (N=82)**	**'t'**	**'p'**
HADS:				
Anxiety	9.00 (3.63)	7.00 (3.27)	3.90	0.001
Depression	8.62 (4.02)	6.53 (3.50)	3.70	0.001

Anxiety 9.00 (±3.63) and Depression 8.62 (±4.02) were higher among the women who had scored high on the ASI than the mean scores of the symptoms such as Anxiety 7.00 (±3.27) and Depression 6.53 (±3.50) of the women who had scored low on ASI. The values of Anxiety and Depression were significant at 0.001 level.

Table 13: Mean (±SD) score on various domains of NEO- Five Factor Inventory (NEO-FFI) in women who scored high or low on Anxiety Sensitivity Index.

Domains	High Anxiety Sensitivity (N=103)	Low Anxiety Sensitivity (N=82)	't'	'p'
Neuroticism	60.20 (9.05)	56.51 (11.02)	2.50	0.013
Extraversion	50.38 (6.97)	50.82 (7.06)	0.42	0.672
Openness	35.86 (7.22)	39.07 (7.04)	3.03	0.003
Agreeableness	37.85 (11.27)	41.62 (10.27)	2.34	0.020
Conscientiousness	48.12 (10.23)	48.40 (9.98)	0.18	0.854

Mean (±SD) score on various domains of NEO- Five Factor Inventory (NEO-FFI) in women who scored high or low on Anxiety Sensitivity Index signify that the mean score on the Neuroticism domain 60.20 (±9.05) is higher in women who has scored high on ASI than the mean score of women who had low on ASI 56.51 (±11.02) and the values were found to be significant at 0.01 level.

In the Extraversion domain, the mean score of women who had scored high in anxiety sensitivity is higher 50.82 (±7.06) than the mean score of women who had scored low on anxiety sensitivity 50.38 (±6.97) but, the values were not significant. In the Openness domain, the mean score of women who had scored low on anxiety sensitivity is higher 39.07 (±7.04) than the mean score of women who had scored high on anxiety sensitivity 35.86 (±7.22) and it is found to be significant at 0.003 level.

In the Agreeableness domain, the mean score of women who had scored low on anxiety sensitivity is higher 41.62 (±10.27) than the mean score of women who had scored high 37.85 (±11.27) and it is significant at 0.020 level. In the Conscientiousness domain, the mean score of women who had scored low on anxiety sensitivity is higher 48.40 (±9.98) than the mean score of women who had scored high 48.12 (±10.23) but, it was not significant at less than 0.05 level.

Table 14: Relationship between Anxiety Sensitivity and the symptom domains of Symptom Check List-90 (SCL-90).

Symptom Domains	'r'	'p'
Somatization	0.35	0.001
Obsessive Compulsive	0.27	0.715
Interpersonal Sensitivity	0.12	0.097
Depression	0.06	0.420
Anxiety	0.36	0.001
Hostility	0.13	0.067
Phobic Anxiety	0.34	0.001
Paranoid Ideation	0.19	0.008
Psychoticism	0.16	0.029
Total	0.33	0.001

The table signifies that there is a relationship between anxiety sensitivity and the various symptom domains of SCL-90 such as Somatization, Anxiety, Phobic Anxiety, Paranoid Ideation and the total of all the domains in which the correlation is significant at 0.01 level and in the Psychoticism domain, the correlation is significant at the 0.05 level. In the other domains such as Obsessive Compulsive, Interpersonal Sensitivity, Depression and Hostility, the correlation was not significant.

Table 15: Relationship between Anxiety Sensitivity and the symptoms of Hospital Anxiety and Depression Scale (HADS)

Measures	**'r'**	**'p'**
Anxiety	0.35	0.001
Depression	0.30	0.001

The Relationship between anxiety sensitivity and the symptoms such as Anxiety and Depression of HADS were found to be correlated and thus it is highly significant at 0.01 level.

Table 16: Mean (±SD) scores of levels of the neuroticism domain of NE0-Five Factor Inventory (NEO-FFI) with respect to the various symptom domains of Symptom Check List-90 (SCL-90).

SCL Domains	Average Scores (N=42)	High Scores (N=121)	Low Scores (N=22)	F	df	'p'
Somatization	10.69 (3.98)	12.91 (3.64) [a]	9.31 (2.95) [b]	12.42	2,182	0.001
Obsessive Compulsive	2.64 (1.57)	3.85 (2.44) [a]	2.86 (1.98)	5.56	''	0.005
Interpersonal Sensitivity	2.26 (1.82)	4.03 (2.92) [a]	2.09 (2.09) [b]	10.20	''	0.001
Depression	3.59 (1.97)	5.79 (3.17) [a]	3.63 (2.12) [b]	12.40	''	0.001
Anxiety	5.00 (3.26)	7.16 (3.79) [a]	4.90 (2.92) [b]	7.82	''	0.001
Hostility	1.16 (0.96)	1.78 (1.11) [a]	1.18 (0.95) [b]	6.90	''	0.001
Phobic Anxiety	4.50 (3.24)	7.18 (4.14) [a]	3.81 (3.69) [b]	11.88	''	0.001
Paranoid Ideation	1.00 (1.16)	2.09 (2.05) [a]	0.86 (0.99) [b]	8.58	''	0.001
Psychoticism	0.38 (0.76)	1.00 (1.27) [a]	0.36 (0.58) [b]	6.55	''	0.002
Total	35.88 (13.84)	51.30 (17.05) [a]	33.63 (10.78) [b]	22.24	''	0.001

Table 17: Mean (±SD) scores of levels of the neuroticism domain of NE0-Five Factor Inventory (NEO-FFI) with respect to the various symptoms of Hospital Anxiety and Depression Scale (HADS) and Anxiety Sensitivity Index (ASI).

Measures	Average Scores (N=42)	High Scores (N=121)	Low Scores (N=22)	F	df	'p'
HADS:						
Anxiety	6.59 (3.29)	9.17 (3.45) [a]	5.22 (2.20) [b]	19.10	2,182	0.001
Depression	6.42 (3.33)	8.76 (3.84) [a]	4.27 (2.78) [b]	17.61	"	0.001
ASI	27.45 (10.78)	29.98 (10.10)	19.18 (10.27) [ab]	10.38	"	0.001

[a] = Significantly different from the group obtained average scores.

[b] =Significantly different from the group obtained high scores.

There is a significant difference observed among the scores on the neuroticism domain. The post hoc analysis indicated that the groups which scored high were significantly different from the average scores in all the domains of SCL-90 and HADS and the low scores were significantly different from the high scores in all the domains of SCL-90 except obsessive-compulsive domain and HADS.

Table 18: Mean (±SD) scores of levels of the extraversion domain of NE0-Five Factor Inventory (NEO-FFI) with respect to the various symptom domains of Symptom Check List-90 (SCL-90).

SCL Domains	Average Scores (N=123)	High Scores (N=33)	Low Scores (N=29)	F	df	'p'
Somatization	12.01 (3.71)	11.00 (4.32)	12.96 (3.86)	2.02	2,182	0.136
Obsessive Compulsive	3.67 (2.33)	2.96 (2.43)	3.13 (1.74)	1.60	”	0.204
Interpersonal Sensitivity	3.59 (2.81)	1.96 (2.40) [a]	4.20 (2.32) [b]	6.35	”	0.002
Depression	5.35 (3.20)	3.78 (2.44) [a]	5.10 (2.36)	3.65	”	0.028
Anxiety	6.05 (3.25)	6.60 (3.53)	7.65 (5.34)	2.24	”	0.108
Hostility	1.56 (1.10)	1.24 (1.09)	1.96 (1.01) [b]	3.41	”	0.035
Phobic Anxiety	6.41 (4.10)	4.24 (3.67) [a]	7.34 (4.15) [b]	5.20	”	0.006
Paranoid Ideation	1.86 (1.92)	0.78 (1.16) [a]	2.03 (1.99) [b]	5.14	”	0.007
Psychoticism	0.78 (1.19)	0.60 (0.82)	0.96 (1.26)	0.75	”	0.471
Total	46.58 (17.19)	37.84 (17.04) [a]	50.89 (16.92) [b]	4.96	”	0.008

Table 19: Mean (±SD) scores of levels of the extraversion domain of NE0-Five Factor Inventory (NEO-FFI) with respect to the various symptoms of Hospital Anxiety and Depression Scale (HADS) and Anxiety Sensitivity Index (ASI).

Measures	**Average Scores (N=123)**	**High Scores (N=33)**	**Low Scores (N=29)**	**F**	**df**	**'p'**
HADS:						
Anxiety	8.12 (3.39)	6.51 (3.14)	9.93 (4.19) [b]	7.39	2,182	0.001
Depression	8.00 (3.76)	4.87 (3.30) [a]	9.58 (3.76) [b]	13.88	"	0.001
ASI	27.60 (11.53)	28.21 (9.32)	30.20 (9.03)	0.67	"	0.509

[a] = Significantly different from the group obtained average scores.

[b] =Significantly different from the group obtained high scores.

In the extraversion domain there was a significant difference observed in the domains like Interpersonal Sensitivity, Depression, Phobic Anxiety, Paranoid Ideation, the total mean score of SCL-90 and the Depression symptom domain of HADS. They were significant at 0.01 level in all the above mentioned domains except the Depression domain of SCL-90 which was significant at 0.05 level.

There were also a significant difference observed among the domains such as Interpersonal Sensitivity, Hostility, Phobic Anxiety, Paranoid Ideation, the total mean score of SCL-90 and the Anxiety and Depression symptoms of the HADS measure. The values were found to be significant at 0.01 level in all the above mentioned domains except the Hostility domain of SCL-90 which was significant at 0.05 level.

Table 20: Mean (±SD) scores of levels of the agreeableness domain of NE0-Five Factor Inventory (NEO-FFI) with respect to the various symptom domains of Symptom Check List-90 (SCL-90).

SCL Domains	Average Scores (N=35)	High Scores (N=15)	Low Scores (N=135)	F	df	'p'
Somatization	10.40 (3.67)	12.26 (5.09)	12.36 (3.69)	3.71	2,182	0.026
Obsessive Compulsive	4.05 (2.73)	4.66 (3.90)	3.17 (1.82) [b]	4.49	"	0.012
Interpersonal Sensitivity	2.45 (1.93)	4.06 (6.09)	3.57 (2.29)	2.80	"	0.063
Depression	5.40 (3.21)	5.93 (6.50)	4.84 (2.28)	1.20	"	0.304
Anxiety	6.17 (3.70)	8.73 (5.11)	6.20 (3.48) [b]	3.26	"	0.040
Hostility	1.65 (1.37)	1.20 (0.86)	1.59 (1.04)	0.98	"	0.376
Phobic Anxiety	3.54 (2.50)	5.66 (4.71)	6.91 (4.14)	10.30	"	0.001
Paranoid Ideation	0.91 (1.29)	1.66 (2.63)	1.91 (1.85)	4.10	"	0.018
Psychoticism	0.82 (1.24)	1.06 (1.83)	0.74 (1.02)	0.57	"	0.565
Total	39.74 (14.46)	50.60 (31.34)	46.70 (15.85)	2.90	"	0.058

Table 21: Mean (±SD) scores of levels of the agreeableness domain of NE0-Five Factor Inventory (NEO-FFI) with respect to the various symptoms of Hospital Anxiety and Depression Scale (HADS) and Anxiety Sensitivity Index (ASI)

Measures	**Average Scores (N=35)**	**High Scores (N=15)**	**Low Scores (N=135)**	**F**	**df**	**'p'**
HADS:						
Anxiety	6.37 (2.64)	5.60 (3.08)	8.85 (3.61) [b]	11.77	2,182	0.001
Depression	5.14 (2.55)	3.66 (2.69)	8.80 (3.75) [b]	26.25	"	0.001
ASI	21.51 (10.09)	30.73 (10.52) [a]	29.54 (10.41)	8.87	"	0.001

[a] = Significantly different from the group obtained average scores.

[b] =Significantly different from the group obtained high scores.

In the agreeableness domain, there was a significant difference observed in the Obsessive- Compulsive and Anxiety domains of SCL-90, Anxiety and Depression symptoms of HADS and the Anxiety Sensitivity.

Table 22: Mean (±SD) scores of levels of the conscientiousness domain of NE0-Five Factor Inventory (NEO-FFI) with respect to the various symptom domains of Symptom Check List-90 (SCL-90).

SCL Domains	Average Scores (N=89)	High Scores (N=41)	Low Scores (N=55)	F	df	'p'
Somatization	11.76 (3.71)	11.56 (4.05)	12.65 (3.97)	1.21	2,182	0.299
Obsessive Compulsive	3.66 (2.24)	3.26 (2.81)	3.29 (1.89)	0.64	”	0.526
Interpersonal Sensitivity	3.48 (2.10)	2.95 (4.14)	3.60 (2.38)	0.72	”	0.484
Depression	5.21 (2.66)	4.73 (4.23)	4.98 (2.43)	0.37	”	0.691
Anxiety	6.30 (3.56)	6.78 (3.51)	6.29 (4.16)	0.26	”	0.767
Hostility	1.59 (1.07)	1.29 (1.00)	1.74 (1.18)	2.04	”	0.133
Phobic Anxiety	6.38 (4.26)	5.68 (4.18)	6.20 (3.91)	0.40	”	0.670
Paranoid Ideation	1.85 (1.62)	1.17 (1.82)	1.85 (2.18)	2.16	”	0.117
Psychoticism	0.76 (1.01)	0.68 (1.33)	0.89 (1.22)	0.40	”	0.666
Total	46.22 (15.55)	42.97 (21.65)	46.89 (17.11)	0.66	”	0.517

Table 23: Mean (±SD) scores of levels of the conscientiousness domain of NE0-Five Factor Inventory (NEO-FFI) with respect to the various symptoms of Hospital Anxiety and Depression Scale (HADS) and Anxiety Sensitivity Index (ASI).

Measures	**Average Scores (N=89)**	**High Scores (N=41)**	**Low Scores (N=55)**	**F**	**df**	**'p'**
HADS:						
Anxiety	8.07 (3.34)	6.24 (2.94) [a]	9.58 (3.85) [b]	11.16	2,182	0.001
Depression	7.82 (3.52)	5.43 (3.64) [a]	9.18 (4.06) [b]	11.97	"	0.001
ASI	27.31 (10.95)	27.24 (12.07)	30.09 (9.37)	1.30	"	0.274

[a] = Significantly different from the group obtained average scores.

[b] =Significantly different from the group obtained high scores.

In the Conscientiousness domains, none of the groups were significantly different from the others in any of the SCL-90 domains. Whereas, in the Anxiety and Depression symptom of HADS there was a significant difference among the average and high scorers and average and low scorers.

CHAPTER 4

DISCUSSION

Most of the women undergo marked psychological changes during pregnancy and many evidences have been provided that there is a significant relationship between the somatic symptoms and anxiety (Lubin et al, 1975) which also overlaps with depression level of the individual, increased risk of psychiatric morbidity and higher neurotic traits which was significantly associated with their anxiety sensitivity. Invariably, all women attending antenatal clinics during pregnancy were found with clinically significant anxiety and depressive symptoms. There were also findings that social support and close relationship play a major role in both the psychological well being of pregnant mothers as well as the birth outcomes.

The attitudes of the women towards pregnancy or their symptoms attribution may vary depending upon their month of pregnancy (trimester), the number of pregnancy, history of abortions if any, or even depends upon planned or unplanned pregnancy. Thus, the attempt of examining whether the symptoms experienced by the women during the second and third trimester are related to their personality traits, anxiety sensitivity and perceived social support were formulated and the following results were found to be significant in the present study. The Table 1 explains the sociodemographic details of the sample of 185 pregnant women which represented more of multigravida, women in their third trimester and who had a desired pregnancy.

In Table 3, it has been found that the symptoms attributed during the third trimester women were significantly more than the symptoms attributed by the second trimester women. In the SCL-90 scale, the domains such as Somatization, Obsessive-Compulsive, Depression,

Anxiety, Phobic Anxiety, Psychoticism, the overall domain scores and also in the Table 4, the symptoms such as Anxiety and Depression of HADS scale and Anxiety Sensitivity were found to be high among the third trimester women than the second trimester women. The above finding was associated with the study of (Lubin, 1975) which concluded that there is a significant difference in anxiety scores over trimesters i.e. anxiety decreases in the second trimester and increases in the third trimester, the mean score of SCL during the second trimester was significantly different than the third trimester SCL scores and the depression is more in the third trimester. The above finding was also in line with the study of (Gurung et al, 2005) which concluded that the mother's prenatal anxiety is high in the third trimester.

It was evident in the Table 7 that the Somatization domain score in the SCL-90 scale was found to be significantly higher among the multigravida than the primigravida which is found to be in line with the previous study of (Otchet et al, 1999) which reported significantly higher distressing psychological symptoms including Somatization, Obsessive-Compulsive and Hostility in pregnant women. From Table 8 it has been found that, the symptoms such as Anxiety and Depression scores of the HADS scale were found to be higher among the multigravida than the primigravida which is contradictory to the previous study of (Kitamura et al, 1996) which concluded that the antenatal depression was found to be associated with the primigravida and also contradictory with another study of (Hammarberg, 2008) in which the results suggested that the mood disturbance was more common in primiparous than multiparous. But, even though the anxiety was high among the multigravids in the present study, the Anxiety Sensitivity of the pregnant women was found to be high among the primigravida than the multigravida, which explains that the fear of anxiety related sensations were more among the first time mothers.

The results in Table 14 revealed that the Anxiety Sensitivity was significantly correlated with various SCL-90 domains such as Somatization, Anxiety, Phobic Anxiety, Paranoid Ideation and Psychoticism and it could be interpreted as, the women who are highly sensitive to anxiety related sensations are more prone to attribute more of imagined physical dysfunctions, apprehension and has excessive irrational fear towards person, place, situations or objects and they may also show minor levels of interpersonal alienation, which is associated with the study of (Hussein, 2006) which concluded that the anxiety is associated with somatic complains during pregnancy. The results in the Table 15 indicated that the Anxiety Sensitivity was also significantly correlated in the Anxiety and Depression symptoms of HADS scale. The higher an individual's anxiety sensitivity, the more that individual is likely to experience anxiety symptoms (Stein, 1999).

From Tables 5 and 9 the results of NEO-FFI scale revealed that there were no significant findings in any of the personality dimensions but, the overall mean scores were higher in the Neuroticism, Extraversion and Conscientiousness domains among the women during second and third trimester and among the primigravida and multigravida. It shall be interpreted that the pregnant women who had scored high in Neuroticism are more prone to psychological distress such as increased attribution of physical complaints, self conscious, feels nervous and is greatly associated with anxiety and depression which is consistent with the previous studies of (Kitamura et al, 1996; Saisto et al, 2001; Canals 2002; Bussel et al, 2009 and Podolska 2010). The finding that the primigravida were more extroverted than the multigravida was contradictory to the study of (Bailey and Hailey, 1987) which concluded that the primigravida are introverted. The facet of those who had scored higher in Extraversion domain are warmth, assertive,

excitement seeking and has positive emotions whereas, the Conscientiousness domain reflects the extent to which the person is organized and has high standards.

The Table 13 revealed that the women who had scored high in Anxiety Sensitivity Index has also scored high in the Neuroticism domain of the NEO-FFI, which is on par with the previous study of (Cox, 1999) which concluded that the anxiety sensitivity was significantly associated with the personality domains of NEO-FFI such as Neuroticism and Extraversion.

One Way Analysis of Variance was used to test the significance of differences of the various symptoms experienced among the three groups i.e. those who scored high, average and low scores in the Neuroticism, Extraversion, Agreeableness and Conscientiousness domain of NEO-FFI and the Post Hoc test was used to compare the means of various symptoms. Whereas, in the Openness domain, no one had scored higher and thus the comparison of means among the different groups was not possible.

The results in Table 16 and 17 was found that there is a significant difference among the group who had scored high, average and low scores in the Neuroticism domain of NEO-FFI which could be explained as, the women who had reported with more psychological and somatic symptoms in SCL-90, HADS scale and the higher Anxiety Sensitivity had also scored significantly higher in the Neuroticism domain. The finding of the present study was found to be consistent with the previous study of (Jayasvasti, 2005) which concluded that, the women who are highly anxiety sensitive had higher neurotic traits and the finding was also on par with another study of (Saisto et al, 2001) which concluded that the higher score in Neuroticism resulted in more of pregnancy related anxiety and physical complaints. In general the individual who score average in Neuroticism domain tend to be calm and will be able to deal with stress,

those who score high on this trait are sensitive and emotional and the individual who score low on this trait are secure, hardy and relaxed even under stressful situations.

From Table 18 and 19, it was found that in the Extraversion domain of NEO-FFI, there were a significant difference among the pregnant women in some domains of SCL-90 such as Interpersonal Sensitivity, Depression, Hostility, Phobic Anxiety, and Paranoid Ideation. The Anxiety and Depression symptoms of the HADS scale was also found to be significantly different in the study sample. Normally, the individuals who score average range on this trait tend to be moderate in activity, enthusiastic and enjoys the company of others but also values privacy. Whereas the individuals who score high on this trait are outgoing, active, high-spirited and prefer to be around people most of the time and the individuals who score low are reserved, serious and prefer to be alone or with few close friends.

In the Agreeableness domain of NEO-FFI, it has been found from Table 20 and 21 that there was significant difference among the women in the domains such as Somatization, Obsessive-Compulsive, Anxiety, Phobic Anxiety and Paranoid Ideation of SCL-90 and Anxiety, Depression symptoms of HADS scale and also the Anxiety Sensitivity. In general, the individuals who score average in this trait is tend to be warm, trusting and agreeable. The individuals who had score high on this trait are compassionate, eager to cooperate, straightforward, and avoids conflict and the low scorers in this trait is skeptical, cynical, suspicious, irritable, expresses anger directly and manipulative.

The Conscientiousness domain of NEO-FFI which is explained in Table 22 and 23, found that there is a significant difference among the group in the Anxiety and Depression symptoms of HADS scale. In general, the individuals who score average in this trait is tend to be

dependable, moderately well-organized and generally have clear goals. The individuals who had score high on this trait are well-organized, have high standards and always strive to achieve the goals and the low scorers in this trait are easygoing, not very well-organized, sometimes careless and prefer not to make plans.

The Tables 6 and 10 explains the perceived social support by the pregnant women who were in the second and third trimester and women who were primigravida and multigravida respectively. It was found that the women who were in the second trimester were perceiving more social support from family members, friends and also significant others than the women who were in their third trimester. The multigravidas perceived more support from the family and significant others than primigravidas, whereas primigravidas perceived more support from friends than the multigravidas. Even though the perceived social support was present from all the groups, their symptoms experienced did not vary significantly in any scales. Thus, the finding was supportive with the previous study of (Donaldson and Connelly, 1998) which revealed that the pregnancy status was not associated with perceived social support.

CHAPTER 5

SUMMARY AND CONCLUSIONS

The period of pregnancy is a tremendous transformation for every child bearing women both physically and psychologically. From a Psychological perspective, even a healthy pregnancy is a challenging time. To be prepared emotionally and practically for the arrival of a baby, a number of psychological tasks such as accepting the reality of the pregnancy, facing the consequences of being pregnant, coping with physical changes, coping with uncertainty and unpredictability and coping with change in role and relationships has to be taken care.

Research on incidences of various symptoms attributed during pregnancy appears to vary greatly depending on the cultural context. Pregnancy and childbirth are gaining recognition as significant risk factors in the development and exacerbation of mental health issues because of the biological, psychological and social stressors of the woman's life. Thus, the study mainly focused on the experiences of different symptoms by normal pregnant women, particularly during their second and third trimester.

The structured assessment with various psychological measures for assessing the personality traits, anxiety sensitivity, perceived social support and also the psychological and somatic symptoms were carried out among the randomly selected pregnant women who came to the OBG department at Gandhi hospital for antenatal checkups. The women who had naturally conceived were recruited for the study after taking their consent. The study population consisted of non psychiatric as well as women without any medical complications.

In analyzing the responses of the pregnant women, several consistent trends were noted and the significant findings of the study were:

1. There was a significant relationship between the Neuroticism personality trait and the experience of psychological and somatic symptoms by the women during the second and third trimester.

2. There was a relationship between the experience of various psychological and somatic symptoms and the Anxiety Sensitivity of women during the second and third trimester.

3. There was no association between the perceived social support and the experience of symptoms by the women during the second and third trimester.

In conclusion, the antenatal clinics should have facilities for early recognition of psychological symptoms among the pregnant women. Ultimately, a better understanding of the psychological distress during pregnancy may assist in the care of pregnant women and benefit maternal mental health.

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APPENDICES

CONSENT FORM

You are requested to participate in a research study titled **"Personality Style, Anxiety Sensitivity and Perceived Social Support among the Pregnant Women"** conducted by **Mangaleshwari Manjari.N.** under the guidance of **Dr. K. B. Kumar**, Dean & Head, Dept of Clinical Psychology, Sweekaar Academy of Rehabilitation Sciences, Secunderabad.

You may not be expected to get any direct benefit from being a part of the study. But the results of the research may provide benefits to the society in form of advanced of psychological knowledge. I assure that the collected details from you for the study will kept confidential. Your participation in this study not affect your relationship with the researcher or the institution where you are associated.

I, _____, hereby declare that I am willing to undergo the psychological assessment under the study entitled "Personality, Perceived Social Support and Anxiety Sensitivity among the Pregnant Women" conducted by N.Mangaleshwari Manjari under the guidance of Dr. K. B. Kumar, Dean & Head, Dept of Clinical Psychology, Sweekaar Academy of Rehabilitation Sciences, Secunderabad. I understood that the information collected from me for the study will be kept confidential. I have been explained about the nature, purpose and the procedure involved in the study. I can withdraw from the study at any time without giving any reason and this will not affect me in any ways.

Date: Signature of the participant:

Signature of the researcher:

SOCIO-DEMOGRAPHIC DATA SHEET

Study Title:

Sample No:

Put a (✓) mark for the questions which has options in it.

1. Name :
2. Age :
3. Number of years of Marriage :
4. Occupation :
5. Husband's Age :
6. Husband's Occupation :
7. Family Type : Nuclear/ Joint
8. Residence : Rural /Urban
9. Socio-Economic Status : Lower /Middle /Upper
10. Address and Phone Number :

11. Month of Pregnancy :
12. Pregnancy desired? : Yes No

13. _____ Pregnancy

14. Any abortion/miscarriage in the past (Details) :

15. Month and year of last delivery :

16. Nature of last delivery and any complications :

17. H/o of any psychiatric illness in the past :

18. Complication/s, if any, as reported by the doctor:

19. Anticipated normal delivery? : Yes No

20. HIV status if known (optional) :

Symptom Check List -90 (SCL-90)

Instruction: Please read each one carefully. After you have done so, please fill in the number (0 to 4, see below) which best describes how much that problem has bothered or distressed you during the past 4 weeks including today. Choose only one number for each problem and do not skip any items. If you change your mind, erase your first answer and fill in the new one.

0 = Not at all; 1 = A little bit; 2 = Moderately; 3 = Quite a bit; 4 = Extremely

S. No		
1.	Headaches	
2.	Nervousness or shakiness inside	
3.	Unwanted thoughts or ideas that won't leave your head	
4.	Faintness or dizziness	
5.	Loss of sexual interest or pleasure	
6.	Feeling critical of others	
7.	The idea that someone else can control your thoughts	
8.	Feeling others are to blame for most of your troubles	
9.	Trouble remembering things	
10.	Worried about sloppiness or carelessness	
11.	Feeling easily annoyed or irritated	
12.	Pains in heart or chest	
13.	Feeling afraid in open spaces or on the street	
14.	Feeling low in energy or slowed down	
15.	Thoughts of ending life	
16.	Hearing voices that other people do not hear	
17.	Trembling	
18.	Feeling that most people cannot be trusted	
19.	Poor appetite	
20.	Crying easily	
21.	Feeling shy or uneasy with the opposite sex	
22.	Feeling of being trapped or caught	

23.	Suddenly scared for no reason	
24.	Temper outbursts that you could not control	
25.	Feeling afraid to go out of your house alone	
26.	Blaming yourself for things	
27.	Pains in lower back	
28.	Feeling blocked in getting things done	
29.	Feeling lonely	
30.	Feeling blue	
31.	Worrying too much about things	
32.	Feeling no interest in things	
33.	Feeling fearful	
34.	Your feelings being easily hurt	
35.	Other people being aware of your private thoughts	
36.	Feeling others do not understand you or are unsympathetic	
37.	Feeling that people are unfriendly	
38.	Having t o do things very slowly	
39.	Heart pounding or racing	
40.	Nausea or upset stomach	
41.	Feeling inferior to others	
42.	Soreness of your muscles	
43.	Feeling that you are watched or talked about by others	
44.	Trouble falling asleep	
45.	Having to check and double check what you do	
46.	Difficulty making decisions	
47.	Feeling afraid to travel on buses, subways or trains	
48.	Trouble getting your breath	
49.	Hot or cold spells	
50.	Having to avoid certain things, places or activities	
51.	Your mind going blank	
52.	Numbness or tingling in parts of your body	

53.	A lump in your throat	
54.	Feeling hopeless about the future	
55.	Trouble concentrating	
56.	Feeling weak in parts of your body	
57.	Feeling tense or keyed up	
58.	Heavy feelings in your arms or legs	
59.	Thoughts of death or dying	
60.	Overeating	
61.	Feeling uneasy when people are watching or talking about you	
62.	Having thoughts that are not your own	
63.	Having urges to beat, injure or harm someone	
64.	Awakening in the early morning	
65.	Having to repeat the same actions such as touching, counting, washing	
66.	Sleep that is restless or disturbed	
67.	Having urges to break or smash things	
68.	Having ideas or beliefs that others do not share	
69.	Feeling very self-conscious with others	
70.	Feeling uneasy in crowds such as shopping or at a movie	
71.	Feeling everything is an effort	
72.	Spells of terror or panic	
73.	Feeling uncomfortable about eating or drinking in public	
74.	Getting into frequent arguments	
75.	Feeling nervous when you are left alone	
76.	Others not giving you proper credit for your achievements	
77.	Feeling lonely even when you are with people	
78.	Feeling so restless you couldn't sit still	
79.	Feeling of worthlessness	
80.	Feeling that familiar things are strange or unreal	
81.	Shouting or throwing things	

82.	Feeling afraid you will faint in public	
83.	Feeling that people will take advantage of you if you let them	
84.	Having thoughts about sex that bother you a lot	
85.	The idea that you should be punished for your sins	
86.	Feeling pushed to get things done	
87.	The idea that something serious is wrong with your body	
88.	Never feeling close to another PERSONAL	
89.	Feelings of guilt	
90.	The idea that something is wrong with your mind	

Hospital Anxiety and Depression Scale (HADS)

Name: **Date:**

Instructions: Clinicians are aware that emotions play an important part in most illnesses. If your clinician knows about these feelings he or she will be able to help you more. This questionnaire is designed to help your clinician to know how you feel. Read each item below and underline the reply which comes closest to how you have been feeling in the past week. Ignore the numbers printed at the edge of the questionnaire. Don't take too long over your replies; your immediate reaction to each item will probably be more accurate than a long, thought-out response.

A	D			A	D
		I feel tense or 'wound up'	**I feel as if I am slowed down**		
3		Most of the time	Nearly all the time		3
2		A lot of the time	Very often		2
1		From time to time, occasionally	Sometimes		1
0		Not at all	Not at all		0
		I still enjoy the things I used to enjoy	**I get a sort of frightened feeling like' butterflies' in the stomach**		
	0	Definitely as much	Not at all	0	
	1	Not quite so much	Occasionally	1	
	2	Only a little	Quite often	2	
	3	Hardly at all	Very often	3	
		I get a sort of frightened feeling as if something awful is about to happen	**I have lost interest in my appearance**		
3		Very definitely and quite badly	Definitely		3
2		Yes, but not too badly	I don't take as much care as I should		2
1		A little, but it doesn't worry me	I may not take quite as much care		1
0		Not at all	I take just as much care as ever		0

		I can laugh and see the funny side of things	**I feel restless as if I have to be on the move**		
	0	As much as I always could	Very much indeed	3	
	1	Not quite so much now	Quite a lot	2	
	2	Definitely not so much now	Not very much	1	
	3	Not at all	Not at all	0	
		Worrying thoughts go through my mind	**I look forward with enjoyment to things**		
3		A great deal of the time	As much as I ever did		0
2		A lot of the time	Rather less than I used to		1
1		Not too often	Definitely less than I used to		2
0		Very little	Hardly at all		3
		I feel cheerful	**I get sudden feelings of panic**		
	3	Never	Very often indeed	3	
	2	Not often	Quite often	2	
	1	Sometimes	Not very often	1	
	0	Most of the time	Not at all	0	
		I can sit at ease and feel relaxed	**I can enjoy a good book or radio or television program**		
0		Definitely	Often		0
1		Usually	Sometimes		1
2		Not often	Not often		2
3		Not at all	Very seldom		3

A D

NEO-Five Factor Inventory (NEO-FFI)

Instructions: This questionnaire consists of 60 statements. Read each statement carefully and pick any one of the options given below. Do not omit any of the statements.

SD = Strongly Disagree**;** **D =** Disagree**;** **N =** Neutral**;** **A =**Agree**;** **SA =** Strongly Agree

l. I am not a worrier.

2. I like to have a lot of people around me.

3. I don't like to waste my time daydreaming.

4. I try to be courteous to everyone I meet.

5. I keep my belongings clean and neat.

6. I often feel inferior to others.

7. I laugh easily.

8. Once I find the right way to do something, I stick to it.

9. I often get into arguments with my family and co-workers.

10. I'm pretty good about pacing myself so as to get things done on time.

11. When I'm under a great deal of stress, sometimes I feel like I'm going to pieces.

12. I don't consider myself especially "light hearted."'

13. I am intrigued by the patterns I find in art and nature.

14. Some people think I'm selfish and egotistical,

I5. I am not a very methodical person.

16. I rarely feel lonely or blue.

17. I really enjoy talking to people.

18. I believe letting students hear controversial speakers can only confuse and mislead them.

19. I would rather cooperate with others than compete with them.

20. I try to perform all the tasks assigned to me conscientiously.

21. I often feel tense and jittery.

22. I like to be where the action is.

23. Poetry has little or no effect on me.

24. I tend to be cynical and skeptical of others' intentions,

25. I have a clear set of goals and work toward them in an orderly fashion.

26. Sometimes I feel completely worthless.

27. I usually prefer to do things alone.

28. I often try new and foreign foods.

29. I believe that most people will take advantage of you if you let them,

30. I waste a lot of time before settling down to work.

31. I rarely feel fearful or anxious.

32. I often feel as if I'm bursting with energy.

33. I seldom notice the moods or feelings that different environments produce.

34. Most people I know like me.

35. l work hard to accomplish my goals.

36. I often get angry at the way people treat me.

37. I am a cheerful, high-spirited person.

38. I believe we should look to our religious authorities for decisions on moral issues.

39. Some people think of me as cold and calculating.

40. When I make a commitment. I can always be counted on to follow through.

4l. Too often, when things go wrong, I get discouraged and feel like giving up.

42. I am not a cheerful optimist.

43. Sometimes when I am reading poetry or looking at a work of art, I feel a chill or wave of excitement.

44. I'm hard—headed and tough—minded in my attitudes.

45. Sometimes I'm not as dependable or reliable as I should be.

46. I am seldom sad or depressed.

47. My life is fast-paced.

48. I have little interest in speculating on the nature of the universe or the human condition.

49. I generally try to be thoughtful and considerate.

50. I am a productive person who always gets the job done.

51. I often feel helpless and want someone else to solve my problems.

52. I am a very active person.

53. I have a lot of intellectual curiosity

54. If l doesn't like people, I let them know it.

55. I never seem to be able to get organized.

56. At times I have been so ashamed I just wanted to hide.

57. I would rather go my own way than be a leader of others.

58. I often enjoy playing with theories or abstract ideas.

59. If necessary, I am willing to manipulate people to get what I want.

60. I strive for excellence in everything I do.

Multidimensional Scale of Perceived Social Support (MSPSS)

Instructions: We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

Circle the number **"1"** if you **Very Strongly Disagree**

Circle the number **"2"** if you **Strongly Disagree**

Circle the number **"3"** if you **Mildly Disagree**

Circle the number **"4"** if you are **Neutral**

Circle the number **"5"** if you **Mildly Agree**

Circle the number **"6"** if you **Strongly Agree**

Circle the number **"7"** if you **Very Strongly Agree**

1. There is a special person who is around when I am in need. SO

   1 2 3 4 5 6 7

2. There is a special person with whom I can share my joys and sorrows. SO

   1 2 3 4 5 6 7

3. My family really tries to help me. Fam

   1 2 3 4 5 6 7

4. I get the emotional help and support I need from my family. Fam

   1 2 3 4 5 6 7

5. I have a special person who is a real source of comfort to me. SO

   1 2 3 4 5 6 7

6. My friends really try to help me. Fri

   1 2 3 4 5 6 7

7. I can count on my friends when things go wrong. Fri

   1 2 3 4 5 6 7

8. I can talk about my problems with my family. Fam

   1 2 3 4 5 6 7

9. I have friends with whom I can share my joys and sorrows. Fri

   1 2 3 4 5 6 7

10. There is a special person in my life who cares about my feelings. SO

    1 2 3 4 5 6 7

11. My family is willing to help me make decisions. Fam

    1 2 3 4 5 6 7

12. I can talk about my problems with my friends. Fri

    1 2 3 4 5 6 7

The item tended to divide into factor groups relating to the source of the social support, namely Family (Fam), Friends (Fri) or Significant Other (SO).

Anxiety Sensitivity Index (ASI)

Instructions: Please rate each item by selecting one of the five answers for each statement. Please answer each statement by circling the number that best applies to you.

	Very little	A little	Some	Much	Very much
1. It is important not to appear nervous.	0	1	2	3	4
2. When I cannot keep my mind on a task, I worry that I might be going crazy.	0	1	2	3	4
3. It scares me when I feel shaky.	0	1	2	3	4
4. It scares me when I feel faint.	0	1	2	3	4
5. It is important to me to stay in control of my emotions.	0	1	2	3	4
6. It scares me when I my heart beat rapidly	0	1	2	3	4
7. It embarrasses me when my stomach growls.	0	1	2	3	4
8. It scares me when I am nauseous (sick stomach).	0	1	2	3	4
9. When I notice my heart beating rapidly, I worry that I might be having a heart attack.	0	1	2	3	4
10. It scares me when I become short of breath	0	1	2	3	4
11. When my stomach is upset, I worry that I might be seriously ill.	0	1	2	3	4
12. It scares me when I am unable to keep my mind on a task.	0	1	2	3	4

ASI Contd…

	Very little	A little	Some	Much	Very much
13. Other people notice when I feel shaky.	0	1	2	3	4
14. Unusual body sensations scare me.	0	1	2	3	4
15. When I am nervous, I worry that I might be mentally ill.	0	1	2	3	4
16. It scares me when I am nervous.	0	1	2	3	4

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Mrs. Mangaleshwari Manjari. N. M.A., M.Phil. in Clinical Psychology
1 Kovaithirunagar
Civil Aerodrome P.O.
Coimbatore 641014
Tamil Nadu
India
manjarinarendiran@gmail.com