

## **AGE, INCOME, AND MEDICO-OBSTETRIC HISTORY AS PREDICTORS OF ANXIETY AND PSYCHOLOGICAL WELL-BEING AMONG PREGNANT WOMEN IN IBADAN.**

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### **Abstract**

The objective of the study is to examine age, income, and medico-obstetric history as predictors of anxiety and psychological well-being among pregnant women in the third trimester. The participants involved 92 pregnant women with the mean age of 29.61 years (S.D. = 4.42, range = 19.42 years). The study employed one-way factorial design. The state anxiety inventory (STAI), and the general psychological well-being questionnaire were the instruments used. The result of the analysis using ANOVA, and independent t-test showed that the older pregnant women would experience lesser anxiety than the younger women ( $t = 3.68$ ,  $df = 90$ ;  $P < .05$ ). The psychological well-being of older pregnant women will be higher than younger pregnant women ( $t = 2.06$ ;  $df = 74$ ;  $P < .05$ ). Higher income earners exhibited lesser anxiety than lower income earners (F-test = 4.951;  $df = 91$ ;  $P < .0091$ ). Higher income earners showed more psychological stability than the lower income earners (F-test = 5.867,  $df = 75$ ,  $P < .0043$ ). And that the psychological well-being of pregnant women with poorer medico-obstetric history was lesser than those without medico-obstetric history ( $t = 2.636$ ,  $df = 80$ ;  $p < .05$ ). Further studies could investigate women from an entirely different culture.

**Keywords:** age, income, medico-obstetric, anxiety, psychological well-being

**Introduction.** Anxiety appears to be one of the few psychological problems from which no human organization can be free from. This is probably because the competitive world is full of many challenges and problems with which humanity must cope with. Many forces of the physical environment such as fear of failure, need for success and transition in developmental stages and socio-economic conditions tend to trigger off states of apprehension and feelings of helplessness especially when the problem is not clearly understood and of course a solution seems impossible (Ajiboye & Adeboye, 2012).

Pregnancy anxiety is defined as a negative emotional state that is associated with worries about "the health and well-being of one's baby, the impending childbirth, of hospital and health-care experience (including one's health and survival in pregnancy) during birth and parenting or maternal role (Heron, Evans, Golding, & Glover, 2004). It is considered to be distinct from the general indices of anxiety in the non-pregnant state (Dunkel, 2011).

Carol Ryff's six-factor model of psychological well-being is one of the most important models in the field of psychological well-being. Ryff has defined psychological well-being as an endeavour for perfection in realizing the real potential abilities of an individual (Ryff, 2014). Ryff has stated that well-being is multidimensional and consists of the dimensions of autonomy, personal growth, environmental mastery, purpose in life, positive relations with others, and self-acceptance (Winefield,

Gill, Taylor, Pilkington, 2012). These six factors define psychological wellbeing both theoretically and practically (Fallahian, Aghaei, Atashpoor, Kazemi, 2014). The results of previous studies show that psychological wellbeing and its components have varying status in different stages of life and relation to demographic characteristics, and various factors can impact the psychological wellbeing level of individuals (Michaeli, (2011). The experience of pregnancy, with its accompanying profound physical and mental changes in women's life, affects all dimensions of life including psychological wellbeing (O'Leary, 2015). Researchers believe that pregnancy, in addition to disruption in psychological wellbeing and mental health, creates the basis for stress, anxiety, and depression during and after pregnancy and future emotional disorders in the child, and increases the risk of behavioural issues in early childhood ( Liu, Setse, Grogan, Powe, Nicholson, 2013).

In low and middle-income countries, more importance is given towards addressing obstetric complications and reducing the maternal mortality; while a woman's emotional and mental health receives less attention than is due ( Huizink, Mulder, Robles de Medina, Visser, & Buitelaar, 2004). Symptoms suggestive of disturbed mental health such as poor sleep and tiredness are likely to be ignored and attributed to a normal physiological condition associated with pregnancy (Rahman, Patel, Maselko, & Kirkwood, 2008).

There is ample evidence that anxiety and similar mental conditions during pregnancy could increase the risk of adverse pregnancy outcomes and offspring neurodevelopment. The adverse outcomes include low birth weight, prolonged labour, preterm delivery and a higher incidence of caesarean section (Alder, Fink, Bitzer, Hösli, Holzgreve, 2007). When compared with general anxiety, pregnancy-related anxiety appears to be a stronger determinant for poor obstetric consequences, Shiva, & Krishnamurthy ( 2015); Nasreen, Kabir, Forsell, Edhborg, (2010); & Yang, Yang, & Liang, (2017).

According to a systematic review, the prevalence of anxiety during pregnancy ranges from 1% to 26% in low and middle-income countries (LMICs) (Rahman, Patel, Maselko, & Kirkwood, 2008), in a similar vein, evidence exists that published literature on anxiety during pregnancy seems to be limited in LMICs' contributing only 8% of included literature (Jha, Salve, Goswami, Sagar, & Kant, 2018).

The researcher in this study seeks to understand the influence of age, income and medico-obstetric history on anxiety and psychological well-being of pregnant women in the third trimester in Ibadan.

### **Statement of the Problem**

In some cultures, birth is conducted in secrecy and some according to Philips and Anazalone's (1978) studies, birth is a social event, with open attendance by all friends and family. Similarly, pregnancy may be seen as a normal uneventful preparatory phase to the desired change in status connoting achievement, conversely, it may be viewed as mysterious, crisis-ridden, and the harbinger of possible disaster. Again, it may be looked upon as atonement for simply being a lowly female (Brown, 1976). Pregnancy can be said to be a coin of two faces, connoting both positive and negative or either positive or negative views depending on the culture and belief system of the people. Therefore, different individuals' disposition or personality make-up predisposes an individual to react to issues the way they do. Similarly, poverty, illiteracy, and low status of specific groups (women, minorities, and ethnic groups) in the society have been identified as contributing factors to the high mortality and morbidity in developing countries (Khan & Bhutta, 2001).

Psychological screening with the use of questionnaire and other tools are available for early detection and starting prompt treatment (Matthey, Ross-Hamid, 2011), early identification is very necessary for starting the treatment (Lu, Kotelchuck, & Calhane, 2006) support to facilitate a woman's transition to motherhood ( Jomeen, 2004). Hence the necessity of this study.

### **Research Questions**

The following research questions shall be answered:

1. Do differences exist between the anxiety state of younger and older pregnant women?
2. Does the psychological well-being of younger and older pregnant women differ?

3. Will differences exist in the incidence of anxiety among the three income levels of pregnant women?
4. Do relationships exist between the psychological well-being of pregnant women and their income?
5. Will the psychological well-being of pregnant women with poor medico-obstetric history and those without medico-obstetric history differ?

### **The objective of the study**

The objective of this study is to identify the role of –Age, income levels and obstetric history, on anxiety and psychological well-being of pregnant women at the third trimester.

### **Significance of the Study**

There is need to assess pregnant women psychologically in the antenatal educational classes, to identify those anxiety responses, because it is likely that, they are not under the same level of anxiety. It is rare, if not absent in our Nigerian clinic and hospitals to consider the psychological effects of pregnancy on expectant women. This study will contribute its quota to the knowledge of anxiety on pregnancy, the consequences of age, obstetrical history, and income levels through the third trimester on pregnant women with particulate reference to the Nigerian women.

The study will tend to find reasons to urge the attention of obstetricians, medical students and midwives to pay attention to psychological aspects of pregnancy during the antenatal period. Similarly, the study is of practical and theoretical relevance in the area of medical psychology, the psychology of women and obstetrics. It has implications for the planning of obstetric services and mental health by the Nigerian Ministry of Health.

### **Hypotheses**

1. Older pregnant women would experience lesser anxiety than younger women.
2. The psychological well-being of older pregnant women will be higher than the scores of younger pregnant women.
3. The lower-income earners amongst pregnant women will be more anxious than women in the higher income level.
4. The higher income earners amongst pregnant women will be more psychologically stable than pregnant women of lower-income earners.
5. The psychological well-being of pregnant women with poor medico-obstetric history will be lesser than those without medico-obstetric history.

## **Review of Relevant Literature**

### **Social and family support on the outcomes of pregnancy**

Social support is a complex and multifaceted concept referring to the voluntary action from one person toward another, which leads to a positive response (Hupcey, 1998) and this voluntary action comes from different sources, such as family, friends, community or spouse (Harley & Eskenazi, 2006) and it appears in various forms of physical and emotional (sympathy, love, care), verbal, financial aid or assistance to the patient's self-assessment (Logsdon & Koniak-Griffin, 2005).

Sometimes ethnic differences have been found to relate with the social support provided for mothers. For example, it has been found that U.S. white women receive more social and network support than African American and Latin American women, or Latin American women receive more of their social support from their husbands and mothers, while African Americans are more likely to receive support from relatives (Sagrestano, Feldman, Rini, Woo, & Dunkel-Schetter, 1999). So lack of attention to the supportive role of husband will lead to increased pregnancy complications (Alio, Kornosky, Mbah, Marty, & Salihu, 2010; Misra, Caldwell, Young Jr, & Abelson, 2010) so the quality of care and social support for pregnant women determines the quality of pregnancy, delivery and maternal and infants health (Ney, Fung, Wickett, & Beaman-Dodd, 1994). It was observed that social support after

childbirth is important for both teen mothers and adult mothers to have, as it has been found to reduce the risk of experiencing PPD

( Postpartum depression). Educating mothers on PPD soon after birth should be taken into account, as it acts as a protective factor (Kim, Connolly & Tamim, 2014).

The main report on attitudes of expectant Nigeria women towards pregnancy was from the research of Ebigbo, Ihezue, and Chukudebelu (1991). Pregnant women attending the antenatal clinics of the University of Nigeria Teaching Hospital, Enugu, the participants were from various socio-economic groups. This study, however, relates more closely to the Igbo ethnic group predominating in the area where the study was conducted. They argued that women were able to endure the mental strain of subsequent pregnancies because of the close relationship with their mothers.

The study found that the absence of social support from the mothers or surrogate mothers led to anxiety neurosis in the form of parasthetic complaints (Ebigbo, Ihezue, and Chukudebelu 1991), hence they postulate that in the Nigerian setting, the close relationship of pregnant women to their mothers is a positive influence because it helps them to perceive themselves as resembling their mothers, this allowed them to show a more positive attitude toward pregnancy.

### **Effects of Age and Obstetric History on Pregnancy**

Delbaere, Verstraelen, Goetgeluk, Martens, De Backer, (2007), the study on health behaviour and outcomes in sequential pregnancies of black and white adolescents. The purpose of this study was to compare pregnancy outcomes, socio-demographic factors, and health-related behaviours in first and second pregnancies of a large sample of teenagers in a longitudinal study. Pregnancy outcomes considered were fetal growth retardation, mean birth weight, preterm delivery and perinatal mortality. Teenaged girls are at higher risk than adult women for delivering growth-retarded or preterm infants. Several studies have demonstrated higher rates of prematurity, low birth weight, and perinatal morbidity and mortality in infants of adolescents compared with infants of older women, McCormick, (1984); Graham, (1981); & Stickle, (1981). There is a strong indication that increasing maternal age is an independent risk factor for various perinatal and obstetric outcomes. The rates of preterm delivery, NICU transfer, GDM, placenta previa, induction failure, and primary cesarean section were progressively increased with increasing maternal age groups (Yu-Jin, Hyun-Mee, Jae-Hyug, Ji-Hyae, Ji-Eun, Moon-Young, Jin-Hoon, 2014)

Age may also affect the frequency of pregnancy and more specifically the intervals between successive pregnancies. Ebigbo, (1980) found that as women become older, the number of pregnancies increased with shorter intervals between pregnancies. This finding implies the mental health of the pregnant women in that she may not have sufficient time to look after herself during pregnancy and the previous children.

### **Economic status on pregnancy**

Socioeconomic status (SES) is one of the most important factors associated with medical outcomes. When SES is low, medical care is inadequate and this has been attributed to adverse outcomes (Lee, Lee, Lim, Kim, & Bae, 2016; Leppälähti, Gissler, Mentula, Heikinheimo, 2013). In pregnant women, low SES can increase the risk of adverse pregnancy outcomes. Previous studies have revealed that low SES is associated with pregnancy complications such as abortion, preterm delivery, preeclampsia, eclampsia, and gestational diabetes (Bo, Menato, Bardelli, Lezo, & Signorile, 2002; Silva, Coolman, Steegers, Jaddoe, & Moll, 2008). Inadequate prenatal care is associated with poor obstetric outcomes, including preterm delivery, preeclampsia, and stillbirth ( Lee, Lee, Lim, Kim, & Bae, 2016; Gilbert, Casapía, Joseph, Ryan, & Gyorkos, 2010), and women with low SES are less likely to receive prenatal care (Lee, Lee, Lim, Kim, & Bae, 2016; Paredes, Hidalgo, Chedraui, Palma, Eugenio, 2005). Individuals with lower Socioeconomic status (SES) tend to receive prenatal care less frequently and are at higher risk for obstetric complications (kim, Lee, Bae, Kim, Lim, Yoon, Lee, (2018).

### **Consequences of medico- obstetric problems on anxiety in pregnancy**

Anxiety as a learned response, this theory in its peculiar way supports the effect of the medico-obstetric variable on anxiety. Pritchard (1985), included hypertension amongst the major causes of death in the United States, with the awareness of such finding, the cause of hypertension among pregnant women will no doubt arouse anxiety. Hypertension in this sense has become a fear-producing stimulus, and following, the learning theory, a fear-producing stimulus will be associated with anxiety. This applies also to other medico-obstetric variables such as perinatal death (stillbirths and infant death); obstetric operations and diabetes mellitus (Osinowo (1990), Azizi, Sadeghi, and Molaeinzhad (2014); James, Bushnell, Jamison, Myers (2005); Kuklina & Callaghan (2011). The study by Girija, Melba, & Karkada, (2015) revealed a varied and high prevalence rate of moderate to severe degree of general anxiety (STAI) during the first and third trimester.

## Method

**Participants:** A total of 92 participants in the third trimester of pregnancy (about 7-9 months) were drawn from a population of pregnant women currently attending antenatal clinics in Ibadan. The participants were sampled through cluster sampling method. Three hospitals were randomly chosen from the three locations of Ibadan- from Ibadan West, Oluyoro Catholic hospital was selected and 29.17% was drawn from this hospital. From Ibadan Central, 18.06% of the participants were drawn from Adeoye hospital and maternity and Ibadan South, 52.77% was drawn from Jericho nursing home. The population of the participants represents the willingness of the participants to be involved in the study and also those that met with the criteria for participation. Participation was made voluntary and they were able to read, understand and write in the English language. They were also married, with the age range of 19-42 years, mean age- 29.61 years and a standard deviation of 4.42.

**Instruments:** The scales that were used for this study were developed in the Likert format. For example, each item being attached with options of answers to choose from –Never, Rarely, Occasionally, sometimes, most time, and All-time etc. The instrument was divided into four areas vis-à-vis- Demographic variables-This addressed the issues of age, occupation, income, number of children; medical history.

Section A: State Anxiety Inventory (STAI) developed by Spielberger, Gorsuch and Lushen (1970). This scale serves to measure the anxiety aroused by the pregnancy. The scale has a Likert format- "Not at all"- "Most of the time", 20 items, constitute 10 positive and 10 negative questions. The higher the scores the more anxious the respondent it has the Cronbach alpha coefficients  $r = 0.60$ .

Section B: General psychological well-being Questionnaire, by Goldberg, (1978), There are 25 items in this questionnaire, which measures the psychological well-being of the respondent. It has the Likert format – "Less than usual - "Much more than usual". The higher the score the more psychological unstable. The questions are one way directional. It has a Cronbach alpha coefficient  $r = 0.81$ .

**PROCEDURE:** The data were collected using the scales mentioned above. The researcher sought and obtained permission from the institutions concerned, and also liaised with the medical directors or matrons or nurses who were in charge of the antenatal clinics. Through the case notes and oral questioning, the patient that fell within the researcher's specification earlier mentioned was selected to participate. The volunteers were asked by the researcher who personally administered the questionnaire to fill them and submit to him before leaving the clinic for the day.

**DESIGN/STATISTICAL ANALYSIS:** The study employed one-way factorial design. The independent variables are –age, income, and obstetric history. The dependent variables include the indications of the scales on the levels of anxiety and psychological well-being. One-way analysis of variance (ANOVA) and independent t-test were applied for the analysis. The income level was introduced at three levels- low, medium and high; age was introduced at two levels- 30 years and below (younger), and 31 years and above were considered among the older category.

## RESULTS

Hypothesis one: Independent t-test was used to analyse hypothesis one which stated that the anxiety state of older pregnant women will be lesser than that of younger pregnant women. The Hypothesis was confirmed ( $t = 3.68$ ,  $df = 90$ ;  $P < .05$ ), as shown in Table 1.

Hypothesis two: Independent t-test was used to analyse hypothesis two which stated that the psychological well-being of older pregnant women will be higher than younger pregnant women. The hypothesis was confirmed ( $t = 2.06$ ;  $df = 74$ ;  $P < .05$ ), as shown in table 2.

Hypothesis three: One-way ANOVA was used to analyse hypothesis three which stated that the lower-income earners amongst pregnant women will be more anxious than pregnant women in the higher income level. The hypothesis was confirmed ( $F\text{-test} = 4.951$ ;  $df = 91$ ;  $P < .0091$ ), as shown in table 3.

Hypothesis four: One-way ANOVA was used to analyse hypothesis four which stated that the higher income earners amongst pregnant women will be more psychological stable than pregnant women of lower-income earners. The hypothesis was confirmed ( $F\text{-test} = 5.867$ ,  $df = 75$ ,  $P < .0043$ ), as shown in table 4.

Hypothesis five: Independent t-test as used to analyse hypothesis five which stated that, the psychological well-being of pregnant women with poor medico- obstetric history will be lesser than those without medico-obstetric history. The hypothesis was confirmed. ( $t = 2.636$ ,  $df = 80$ ;  $p < .05$ ), as shown in Table 5.

## DISCUSSION

In this study, the five hypotheses tested were significant and hence accepted.

The first hypothesis that stated that the anxiety state of older pregnant women will be less than the younger pregnant women were found to be significant. The second hypothesis was also found to be significant which states that, the psychological well- being of older pregnant women will be higher than younger pregnant women. These meant that the younger pregnant women have less ability to cope with the challenges of pregnancy. For some, this is a period of transition to parenthood, and this is said to be more difficult than either marital or occupational adjustment (Rossi, 1968). Factors contributing to these difficulties include: (a) cultural pressure that lead many young women to still consider motherhood necessary for individual development, (b) the irrevocability of parenthood (c) Inadequate guidelines, preparations, and training for parenthood, (d) the abrupt transition from pregnancy to parenthood that does not allow for a gradual taking on of responsibilities (Benedek, 1959). The older ones with doubt must have gotten more experience hence they are more able to adjust.

Although Graham, (1981); Stickle (1981) was against this expectation, more recent findings by Kanitz (1985); Buecler (1986) and Carla, (1991) strongly uphold this expectation.

The third and fourth hypotheses were also supported, they stated that the low-income earners amongst pregnant women will be more anxious than pregnant women in the high-income level, and the high-income earners amongst pregnant women will be more psychologically stable than pregnant women of low-income earners. This result is commended by the research works of Lee, Lee, Lim, Kim, & Bae, (2016); Leppälähti, Gissler, Mentula, & Heikinheimo, (2013); Bo, Menato, Bardelli, Lezo, & Signorile, (2002); Silva, Coolman, Steegers, Jaddoe, & Moll, (2008).

Without doubt, and having confirmed the fifth hypothesis of the influence of medico-obstetric history on pregnancy, it is clear that pregnant women who have medico-obstetric history have extra worry apart from the worry the pregnancy evokes. The difficulties arising from medico- obstetrics is sufficient to upset the psychological well-being. The findings of the following support the results, Azizi, Sadeghi, and Molaeinzhad (2014); James, Bushnell, Jamison, Myers (2005); and Kuklina & Callaghan (2011).

The clear evidence of inflation in this country, coupled with political instability which has attracted incessant economic disruption over the recent years has brought doubt in the mind of the generality of the population and much more has assumed a threatening dimension on the low-economic

class. Poverty is frequently associated with poor health care services Graham, Fitzmaurice, Bell, Caims (2004); Harrison (1997). The expectant mother from a poor family is usually a poor reproductive risk because of her own life long poor nutrition (Rosenfield, Caroline, Min, Lynn, 2007). The awareness of the low economic pregnant women is sufficient to arouse anxiety and as well as lower their general psychological well-being in comparison with the high economic class.

Considering the economic influence on the outcome of pregnancies, the government should endeavour to subsidize the cost of attending the maternities and the hospitals. Adequate campaign of the disadvantage of a large family should also be emphasized to enable the couples to cater adequately for the few children they have already had.

### **Conclusion**

Personality variable (anxious) is a predictor of stress in this study. Potentially, if personality factor is predictive, this could be assessed in advance, for example at the antenatal outpatient clinic, where special preparation could be made available for those patients identified as being "at risk". It would appear reasonable to follow up pregnant women with higher anxiety score all through pregnancy. In doing this it will be possible to monitor their anxiety level, psychological well-being and offer prompt psychological treatment as an adjunct to other medical services offered during ante-natal care.

### **Recommendation**

Based on this study, to provide comprehensive ante-natal care for pregnant women, her social, physical and psychological well-being must be adequately taken care of by health planners including clinical psychologists.

Goodrich, (1965) suggested that care needs to be taken not to stimulate anxiety by adopting a non-committal attitude and giving too little or no information. Also, those effective communication techniques to help alleviate anxiety for the pregnant woman include discussion, reassurance, explanation, suggestion, re-education, conditioning and psychotherapy and counselling. Pregnant women with previous stillbirth or miscarriage-abortion should be engaged in formal psychotherapy. The application of cognitive behavioural therapy, to take care of the negative thoughts and feelings about being able to cope with pregnancy is important.

The professional workers are encouraged to-

1. Strengthen the mother's ego by accepting her as she is, with her characteristics and idiosyncrasies.
2. Manipulate the emotional environment to provide support for expectant women.
3. Provide anticipation guidance concerning the individual of the expected infant.
4. Provide parents with anticipatory guidance concerning the usual physical and emotional changes of pregnancy, labour, delivery and child development.
5. Encourage her to get adequate rest and sleep.
6. Suggest making friends with other couples who are experienced in child-rearing.

Encouraging her to discuss plans and worries with others- family, friends and professionals. Pre-natal education on techniques of relaxation and positive imagery should be mastered by the patient during the prenatal period to most effectively use psychoprophylaxis in the management of labour pain. A program of birth education that includes teaching relaxation skills to the mother and training her to focus on the positive outcome of the delivery is more likely to be successful than one that teaches only breathing techniques (Beck and Siegel, 1980) and Osinowo, (1990). As qualifications of instructor investigate the local childbirth education programs for content and quality of the instructor.

### **Limitations:**

1. The study did not follow the present women to parturition to correlate their pregnancy anxiety with medico- obstetric complications.
2. Their husbands were not studied.

3. Illiterate women were not studied.
4. The location of study is predominantly for a people with the same culture and belief system.

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## Table 1.

Type	N	$\bar{x}$	SD.	df	t	P
Young pregnant women	62	41.84	10.46	90	3.68	<.05
Older pregnant women	30	34.40	7.62			

The summary of the result of hypothesis one.

**Table 2.**

Type	N	$\bar{x}$	SD.	df	t	P
Young pregnant women	49	19.98	8.53	74	2.06	<.05
Older pregnant women	27	15.96	7.66			

The summary of the result of hypothesis two.

**Table 3.**

Source	Df	Sum Square	Mean Square	F-test
Between groups	2	946.017	473.009	4.951
Within groups	89	8502.2	95.53	P<.0091
Total	91	9448.217		

The summary of the result of hypothesis three.

**Table 4.**

Source	Df	Sum Square	Mean Square	F-test
Between groups	2	733.476	366.738	5.867
Within groups	73	4563.313	62.511	P<.0043
Total	75	5296.789		

The summary of the result of hypothesis four.

**Table 5**

Type	N	$\bar{x}$	SD.	Df	t	P
Medico-obstetric Patient	6	39.5	12.16	80	2.636	<.05
Non-Medico Obstetric patient	86	30.8	7.92			

The summary of the result of hypothesis five.

**APPENDIX**

Instruction: Please provide the answers to these questions as it apply to you.

**Demographic Variables**

Level of Education ..... Age.....

Are you diabetic? Yes ( ) No ( )

Are you hypertensive? Yes ( ) No ( )

Have you given birth through Caesarean Section or Forceps delivery? Yes ( ) No ( )

What is your total income per month?

a) ₦10,000 - ₦19,000 ( ) (b) ₦20,000 – ₦49,000 ( ) (c) ₦50,000 and above

**SECTION B: STATE ANXIETY INVENTORY (STAI)**

	Not at all	Occasionally	Moderately so	Most of the time
I feel calm	1	2	3	4
I feel secure	1	2	3	4
I am tense	1	2	3	4
I am regretful	1	2	3	4
I feel at ease	1	2	3	4
I feel upset	1	2	3	4
I am presently worried over possible misfortune	1	2	3	4
I feel rested	1	2	3	4
I feel anxious	1	2	3	4
I feel comfortable	1	2	3	4
I feel self- confident	1	2	3	4
I feel nervous	1	2	3	4
I am jittery	1	2	3	4
I feel “high strung”	1	2	3	4
I am relaxed	1	2	3	4
I feel content	1	2	3	4
I am worried	1	2	3	4
I feel over-excited and “rattled”	1	2	3	4
I feel joyful	1	2	3	4
In feel pleasant	1	2	3	4

**SECTION C: GENERAL PSYCHOLOGICAL WELL-BEING QUESTIONNAIRE**

	Less than usual	Not more than usual	More than usual	Much more than usual
Have you recent been feeling perfectly well?	1	2	3	4
Do you lost sleep over worry?	1	2	3	4
Are you busy and occupied?	1	2	3	4
Do you think yourself worthless?	1	2	3	4
Always in need of tonic?	1	2	3	4
Have difficulty staying asleep?	1	2	3	4
Is life boring?	1	2	3	4
Always run down?	1	2	3	4
Are you constantly under strain?	1	2	3	4
Are you doing thing well?	1	2	3	4
Is life not worth living?	1	2	3	4
Do you feel ill?	1	2	3	4
Are you edgy and bad tempered?	1	2	3	4
Are you satisfied with your task?	1	2	3	4
Do you have pains in the head?	1	2	3	4
Have you been recently scared and panicky?	1	2	3	4
Are you playing useful part?	1	2	3	4
Are your nerves too bad?	1	2	3	4
Do you feel pressure in the head?	1	2	3	4
Is everything on top of you?	1	2	3	4
Do you find it easy in making decision?	1	2	3	4
Do you have hot and cold spells?	1	2	3	4
Are you sometimes nervous and strung up?	1	2	3	4
Do you enjoy normal activities?	1	2	3	4
Would you find it ideal taking your life?	1	2	3	4