Personality-Traits and Self-Esteem as Predictors of Anxiety among Women Living with HIV/AIDS.

[1]Hadiza I. Dahiru
*[2]Sani A. S. Omaku
[3]Irene A. Ofili

Authors' Affiliation

[1,2]Department of Psychology, Nassarawa State University, Keffi

[3]Admiralty University of Nigeria, Ibusa-Delta State
*Correspondence:
ahmadusanisuleomaku@nsuk.edu.ng

Abstract

This study examined personality traits and self-esteem as predictors of anxiety among women living with HIV/AIDS. A total of 360 women selected among HIV/AIDS patients (out-patients and in-patients) at University of Nsukka Teaching Hospital (UNTH) Enugu were sampled. Three instruments were used for data collection: Big Five Personality Inventory, Rosenberg self-esteem scale, Hamilton Anxiety Rating Scale (HAM-A). Survey research design was adopted while regression analysis was used to test the hypotheses. Results showed extroversion as a negative predictor of anxiety among women living with HIV/AIDS (β= -.313, P< .001), Agreeableness showed a significant negative predictor of anxiety among women living with HIV/AIDS (β= -.499, P< .001). Conscientiousness did not significantly predict anxiety among women living with HIV/AIDS (β= .155, P< .001). Neuroticism did not significantly predict anxiety among women living with HIV/AIDS (β= .506, P< .001). Openness to experience showed a significant positive prediction of anxiety among women living with HIV/AIDS (β= .522, P< .001).self-esteem also showed a significant negative predictor of anxiety among women living with HIV/AIDS (β= -.267, P< .001). Findings of the study were discussed in relation to literature reviewed and suggestions for further studies were also made. The study revealed that personality traits play significant roles in anxiety among women living with HIV/AIDS

Keywords: *AIDS, anxiety, HIV, personality dimensions, well-being.*

INTRODUCTION

It has been found that HIV positive women are becoming increasingly affected by various illnesses, including Common Mental Disorders (CMDs) such as anxiety and depression (Yousuf, Musa, Isa, & Arifin, 2020). HIV infection is one of the leading causes of morbidity and mortality in Nigeria (Eze, Sulaiman, Mat Daud, & Babadoko, 2023). The disease has overwhelmed the Nigerian health system, increased the cost of achieving developmental goals by decreasing the size of the workforce and increased the number of orphans and vulnerable children due to AIDS (Akahara, Nwolisa, Odinaka, Okolo, 2017).

Anxiety is a psychological and physiological state characterized by physical, emotional, cognitive, and behavioral components. Anxiety means trouble; in either presence or absence of psychological stress, Anxiety can create a feeling of fear, worry, uneasiness, and dread (Afolayan, 2013). It is considered to be a normal response to stress since it may help an individual to cope with the demands of life. Beck (2017) defined anxiety as psychological and physiological state characterized by somatic, emotional, cognitive and behavioural components. In other words, anxiety implies an abnormal and overwhelming sense of apprehension and fear often marked by physiological signs (as sweating, tension and increase pulse), doubt concerning the reality and nature of the threat and self-doubt about ones capacity to cope with challenges but when it is excess, it leads to anxiety disorders in which according to diagnostic and statistical manual for mental disorders (APA,2013) there are symptoms peculiar to anxiety such as nausea, dizziness, palpitation, shaking and difficulty breathing etc.

The Big Five Model, also known as the Five-Factor Model, is the most widely accepted personality theory held by psychologists today. The theory states that personality can be boiled down to five core factors (Lim, 2020).

1. Neuroticism as an aspect of personality predicts exposure to interpersonal stress, and tendencies to appraise events as highly threatening and coping resources as low (Grant & Langan-Fox, 2017).
2. Conscientiousness predicts low stress exposure (Lee-Baggley, 2015), probably because conscientious persons plan for predictable stressors and avoid impulsive actions that can lead to financial, health or interpersonal problems.
3. Agreeableness is linked to low interpersonal conflict and thus less social stress (Asendorpf, 2018).
4. Extroversion, conscientiousness and openness all relate to perceiving events as challenges rather than threats and to positive appraisals of coping resources (Penley & Tomaka, 2012).

Based on the above enumerations, it could be deduced that different postulations have been made based on personality factors as predictors of anxiety. Some of the above postulations are foreign based and may not be able to provide concrete or reliable solution to the factors in anxiety among women in Nigeria. In a bid to fill this perceived research gap, this study will examine self-esteem and the Big-five personality (extroversion, neuroticism, agreeableness, conscientiousness and openness) and how they evoke or influence anxiety among women living with HIV and AIDS.

Statement of the problem

Anxiety is very common among women (Aydemir, & Onan, 2020). However, research attention in the area of reproductive mental health has mainly focused on postpartum depression in past decades (Aydemir & Onan, 2020) Given adverse outcomes of anxiety, the present study points to the need for greater research and clinical attention to anxiety given that antenatal anxiety is a prevalent problem that has serious impacts on mental well-being. . (Rice & Talge, 2017; Field & Pluess, 2020)The most commonly known mental health problems in women associated with reproduction include mood changes during sexually transmitted diseases, menstruation and menopause, range of postpartum problems from transient postpartum blues to postpartum depression and postpartum psychosis while less is known about anxiety (WHO, 2011 & Gomel, 2017). As there is less known on anxiety affecting women, especially women living with HIV and AIDS, this study is aimed at filling this research gap because anxiety could cause changes in immunologic functioning and increased vulnerability to immune-modulated preeclampsia, obstructed labour due to inadequate pelvis, preterm labour and eclampsia (Paarberg, 2015). The experience of high levels of anxiety leads to an increase in stress hormones which increases uterine blood flow as well as induction of preterm

labour (Johnson, 2013). Anxiety leads to adverse perinatal outcomes because women who experience anxiety are likely to engage in unhealthy behaviours (Paarberg, 2015; Istvan, 2016). Based on this the researchers wants to find out the probable relationship between personality traits and self-esteem on anxiety among women living with HIV and AIDS and as well as fill the gap in knowledge by conducting this study on women living with HIV and AIDS attending antenatal clinic at University of Nigeria Teaching Hospital Enugu. Hence, the study would provide answers to the following problems:

Would Big-five personality traits (Openness to experience, Conscientiousness, Extroversion, Agreeableness and Neuroticism) independently and jointly significantly predict anxiety among women living with HIV and AIDS?

Would self-esteem significantly predict anxiety among women living with HIV and AIDS?

Purpose of the study

The general purpose of this study is to determine how self-esteem and personality traits can predict anxiety among pregnant women at Living Word Hospital Aba, Abia State. Specifically, this study was aimed at determining;

1. If the mentioned personality traits: extroversion, agreeableness, conscientiousness, neuroticism and openness will significantly predict anxiety among women living with HIV and AIDS.
2. If self-esteem will significantly predict anxiety among women living with HIV and AIDS.

Beck (2015) cognitive model of anxiety, makes several basic assumptions about anxiety, its evocation, mediation and significance (Beck, 2015; Wells, 2017). These assumptions are crucial to understanding the phenomenon and nature of anxiety from a cognitive perspective. Beck (2015) proposes that anxiety is a product of biased information processing of stimuli that occur either within or outside the person as threatening, which results in the systematic distortion of the person's thinking and construction of his or her experiences, as evidenced in thinking errors called cognitive distortions (Yurica and DiTomasso 2015). Underlying these cognitive errors are more lasting dysfunctional beliefs or cognitive content, contained within cognitive structures known as schema. More specifically, the cognitive model of anxiety "stipulates that danger-oriented beliefs (embedded in cognitive schema) predispose individuals to narrow their attention to threat, engage in dysfunctional safety behaviours and make catastrophic interpretations of ambiguous stimuli" (Beck, 2015). This threat-based bias, seen in anxiety, is found in all aspects of information processing, including an individual's perception of a stimulus, his or her interpretation of it and even the recall of the stimulus and related information (Beck, 2015). According to the cognitive model of anxiety (Beck, 2015), five possible factors may predispose or make an individual vulnerable and thus more prone to anxiety: 1) genetic heritability; 2) physical disease states; 3) psychological trauma; 4) absence of coping mechanisms; and 5) dysfunctional thoughts, beliefs, assumptions and cognitive processing. As a result of individual differences, anxiety may result from a unique combination of predisposing and precipitating variables (Beck, 2015).

Five-factor model of personality

The initial model was proposed by Ernest Tupes and Raymond Christal in 1961 but failed to reach an academic audience until the 1980s. In 1990, Digman advanced his five-factor model of personality, which Lewis Goldberg extended to the highest level of organization.

It is a model of an individual's personality that divides it into five traits. The theory identifies five factors/components:

- extraversion (outgoing/energetic vs. solitary/reserved)

- neuroticism (sensitive/nervous vs. resilient/confident)

- agreeableness (friendly/compassionate vs. challenging/callous)

- conscientiousness (efficient/organized vs. extravagant/careless)

- openness to experience (inventive/curious vs. consistent/cautious)

This model has its origins in a decades-long factor-analytic research tradition. It has not been without critics (e.g., Block 1995), partly because until relatively recently it has had little to say about how the traits function

or how they map onto any picture of human nature. This has changed to a considerable extent over the past decade and a half. Not only has more information been collected on how traits operate but several of the traits have also been linked to the models of functioning described above.

The first of the five is extraversion. As is true of several traits, extraversion has different emphasis in different measures. Sometimes it is based on assertiveness, sometimes on spontaneity and energy. Sometimes it is based on dominance, confidence, agency (the ability to perceive and to change the environment of the agent) and affiliation (Depue & Collins, 2019). Extraversion is often thought of as an implying sociability (Ashton eh al. 2012). Some see a sense of agency and a sense of sociability as two facets of extraversion (Depue & Morrone-Strupinsky, 2015). Others argue sociability is a by-product of other features of extraversion (Lucas et al. 2010). A connection has also been established between extraversion and the approach temperament; some now view extra version as reflecting relative sensitivity of a general approach system (Depue & Collins, 2019; Caspi & Shiner, 2016; Caspi et al. 2015; Elliot & Thrash, 2012; Evans & Rothbart, 2017).

The second factor, neuroticism, concerns the ease and frequency with which a person becomes upset and distressed. Moodiness, anxiety, and depression reflect higher neuroticism. Measures often include items or facets pertaining to hostility and other negative feelings, but they are dominated by vulnerability to experiences of anxiety and general distress.

The next factor is agreeableness. Agreeable people are friendly and helpful (John & Srivastava 2019), empathic (Graziano, et al. 2017), and able to inhibit their negative feelings (Graziano & Eisenber, 2019). Agreeable people get less angry over others' transgressions than do less agreeable people (Meier et al. 2016). At the opposite pole is an oppositional or antagonistic quality. People low in agreeableness use displays of power to deal with social conflict (Graziano et al. 2016). Agreeableness as a dimension is often characterised as being broadly concerned with the maintaining of relationships (Jensen-Campbell & Graziano, 2011).

The most commonly used label for the next factor is conscientiousness. Although this label does not fully reflect the qualities of planning, persistence and purposeful striving toward goals that are part of it (Digman & Inouye, 2016), other suggested name may include constraint and responsibility, reflecting qualities of impulse control and reliability. Specific qualities included in this trait vary considerably across measures (Roberts, 2015). Agreeableness and conscientiousness appear to share an important property. Both suggest breadth of perspective. Many manifestations of conscientiousness imply broad time perspective: taking future contingencies into account while agreeableness implies a broad social perspective: taking the needs of others into account. It has been suggested that both of these traits have origins in the effortful control of temperament (Ahadi & Rothbart, 2014; Caspi & Shiner, 2016; Jensen-Campbell, et al. 2012).

The fifth factor, most often called openness to experience (Costa & McCrae, 2015), is the one about which there is most disagreement on content. Some measures (and theories) imbue this factor with greater overtones of intelligence, terming it intellect (Peabody & Goldberg, 2019). It involves curiosity, flexibility, imaginativeness, and willingness to immerse oneself in atypical experiences (McCrae, 2016). Psychoanalytic theories explain human behavior in terms of the interaction of various components of personality. Sigmund Freud was the founder of this school of thought. Freud drew on the physics of his day (thermodynamics) to coin the term psychodynamics. Based on the idea of converting heat into mechanical energy, he proposed psychic energy could be converted into behavior. Freud's theory places central importance on dynamic, unconscious psychological conflicts.

Biological theory of Self-esteem (Gazzaniga & Heatherton, 2013)

Gazzaniga & Heatherton, (2013) explored the possibility that self-esteem is also determined by biology. Twin studies have suggested that self-esteem is moderately heritable, with estimates ranging from 30% to 50% (Kindler, Gardner, & Prescott, 2018). They argued that self-esteem is rooted in the serotonergenic neurotransmitter system. They noted that drug treatments which increases the activity of serotonin increases self-confidence and self-esteem. In a study by Roy, Neal and Kendler (2015) in which they used Caucasian women sample from the Virginia Twin Register; 363 pairs of monozygotic (MZ) and 238 pairs of dizygotic (DZ) twins which were available from the first wave of the study, and 430 pairs of MZ and 308 pairs of DZ

twins from the second wave of the study. They assessed their self-esteem with Rosenberg's self-esteem scale and the result indicated that self-esteem is moderately a heritable trait (heritability-52%) in repeated measurement mode, environmental influences are also very important. The biological theory ignored the influence of social factors and environment in shaping the behaviour of people who may have a biological risk of psychopathology.

Theoretical framework

Theory of Self Image and Positive Regard (Rogers,1980)

Rogers (1902-1987) developed his theory from his work in clinical practice with the emotionally troubled people. Rogers argued that all human beings have two basic needs; the need for self-actualisation and the need for positive regard. The need for self-actualisation can be seen as an active striving for personal development and manifest itself in perfecting physical skills, realising one's potential and or educating oneself. Rogers (1980) posits that all people are born with the actualising tendency. The least level entails basic needs for physical requirements such as food, water, shelter and comfort. And at the highest level, it involves the need for self-fulfilment and independence. Rogers went on to say that human nature is fundamentally good and people have a natural drive towards self-actualisation, which means the achievement of their full potentials. Such is also evident in Maslow's theory of hierarchical needs. According to Rogers (1980), the drive to boost self-esteem is one of the basic things behind human struggle, which results in different behaviours. Under the stress from family and society, people can develop rigid and distorted ideas of the self and can lose touch with their own needs and values, develop unhealthy behaviours and emotional distress.

This theory explains why some people develop poor self-esteem. Failure to receive unconditional love from the family and society at large, prevents such people from achieving positive self-regard and actualisation later in life due to poor self-esteem developed and as a consequence of the failure, they may feel unfulfilled in life. Problems attributed to low self-esteem can be as a result of interpersonal rejection that further causes difficulties in relating to others and maladaptive behaviours becomes the resultant effect (Leary, 2019). Self-deception many undermine people's motivation to change in ways that enhance their relational value (Enukorah, 2010).

A summary of the theories reviewed above shows that, psychodynamic theory of Freud suggests anxiety develops when people cannot find ways to express their impulses and fear the expression of these their impulses. And that children whose parents are not sufficiently warm and nurturing develop images of the self as vulnerable and images of others as hostile, which results in chronic anxiety.

On personality theories, according to Bouchard (2014; Plomin, Loehlin & Chippuer, 2010) environment has only a minor influence o. Personality of an individual. For instance, in twin studies whether they are reared together or apart will be alike in all facets of their personality regardless of environmental influences (Row, 2014). Though we cannot totally ignore the environmental factors as shapers of personality (Plomin, 2018). Inheritance may account for at most 50% of personality (Brodg & Stel Mack, 2017; Buss, 2018). According to the trait approach personality theory, personality is made up of broad traits. Trait personality researchers like Gordon Allport's 4000 personality traits concluded that our behaviour is rooted in biological events, the activities of the neurone is at the basis of all thought, feeling and behaviour. This means that genetics largely determine our personality. Many researchers felt that some theories were too complex and others too limited in scope. As a result the big five factor theory emerged to describe the basic traits that serve as the building blocks of personality. It began with research of Fiske O.W (1949) and later expanded upon by other researchers including Norman and Smith (1967), Goldberg (1981) and McCrea & Costa (1987). They demonstrated the genetic influence on personality factors of openness to experience, conscientiousness, agreeableness, extraversion and neuroticism which are labelled OCEAN. In addition Buss (2015) suggested that these traits represents the most important qualities that shape out social landscape.

Moreover self-esteem was seen as a link to different behavioural and psychological problems. In the mid-1960s, Morris Rosenberg opined that self-esteem is a personal worth or worthiness. As a social psychological construct it is attractive because researchers have conceptualised it as an influential predictor of relevant outcomes, such as academic achievement, coping and anxiety (Marsh, 2010). Many early

theorists suggested that self-esteem is a basic human need or motivation, for instance, Maslow (1987) in his hierarchy of needs described two different forms of esteem (the need for respect from others and the need for self-respect or inner self esteem) and when an individual is unable to have self-actualisation, psychological problems will be the result. Carl Rogers also proposed that the origin of problems for many people is that people despise themselves to be invaluable and unworthy of being loved; thus the importance they gave to unconditional acceptance of love. While biological theory of self-esteem posit that the likelihood of developing low self-esteem is in fact genetic and some neurotransmitters (serotonin) and HPA axis are involved in mediating response to stressful events and dysfunction.

In fact the cognitive behavioural model of anxiety appears to be both a viable and useful vehicle for furthering our understanding of the complex phenomenon of anxiety and the onset, development, exacerbation and treatment of anxiety (Deacon and Abramowitz 2016).

METHODS

Participants

A total of 360 woman living with HIV and AIDS were used as sample for the study. The woman who were between the ages 22years to 38years with a mean age of 25 years and a standard deviation of 4 years were selected among pregnant woman attending antenatal clinic at UNTH Enugu using availability sample techniques. Their educational qualification shows that 180 had only senior school certificate, 58 had only national diploma while 47 had higher national diploma. 65 had Bachelor of Science degree or its equivalent. Only 10 had master's degree certificate. 304 were Christians while 56 were Muslims. Occupational status showed that 145 were traders 55 were artisans' while 160 were Civil servants. The participants were made up of 6.9%Yoruba, Ibos were 80.5%, Hausa 4.7% others 7.7%. Their marital status showed that 274 were married , 25 were not marry, 25were widows, 31were married but separated while only 5 were divorced.

Instruments

Big Five Personality Inventory (BFI) by John & Srivastava (1990).

Big Five Personality Inventory (BFI). The instrument was developed by John, (1990). The Big Five Inventory is a questionnaire with 44 items. The 44 item inventory is one of the six psychological instruments which assess personality from a five dimensional perspective. The 5 dimensions or sub-scales are extraversion, Agreeableness, Conscientiousness, Neuroticism and openness to experience. It has a response format in which the frequency scale range from 1-5 (1) Disagree strongly (2) Disagree a little (3) Neither agree not disagree (4) Agree a little (5) Agree strongly. The scale is used for the study because it assesses personality trait. John, (1990) provided the original psychometric properties for American samples, while Umeh, (2004) provided the properties for Nigerian samples. The norm reported here are the mean score of samples drawn from a population of students of University of Nigeria Enugu Campus. A Cronbach Alpha Co-efficient of .80 and a test re-test reliability of .85 on 3months interval were obtained by John, et al., (1990) In addition a convergent validity coefficients of .75 and   .85 were obtained with a Big Five instrument by costa and McCrea (1992) and Goldberg (1992) respectively. Using Nigerian sample, Umeh (2004) obtained a divergent validity of .05 on Extraversion .13 on Agreeableness, .11 on Conscientiousness .39 on Neuroticism, and .24   on Openness using maladjustment Scale by Kieinmuntz (1961). To further validate and ascertain reliability of the instrument, the researcher also conducted a pilot study using 30 pregnant women among women attending antenatal care at St Theresa's hospital Abakpa Enugu. A concurrent validity of .76 was obtained by correlating it with Eysenck Personality Inventory. And a split-half reliability of .65 P< .01.

Rosenberg self-esteem scale (RSE) (Rosenberg, 1979).

The purpose of the 10 item RSE scale is to measure self-esteem. Originally the measure was designed to measure the self-esteem of high school students. However, since its development, the scale has been used with a variety of groups including adults, with norms available for many of those groups. Scoring involves a method of combined ratings. Low self-esteem responses are "disagree" or "strongly disagree" on items 1, 3, 4, 7, 10, and "strongly agree" or "agree" on items 2, 5, 6, 8, 9. Two or three out of three correct responses to items 3, 7, and 9 are scored as one item. One or two of responses for items 4 and 5 are considered as a single item; items 1,8, and 10 are scored as individual items; and combined responses (one or two out of two) to

items 2 and 6 are considered to be a single item. The scale can also be scored by totaling the individual 4 point items after reverse-scoring the negatively worded items. The RSE demonstrates a Guttman scale coefficient of reproducibility of .92, indicating excellent internal consistency. Test-retest reliability over a period of 2 weeks reveals correlations of .85 and .88, indicating excellent stability. The RSE correlates significantly with other measures of self-esteem, including the Coopersmith Self-Esteem Inventory. In addition, the RSE correlates in the predicted direction with measures of depression and anxiety (Rosenberg, 1979). However, to use the questionnaire for Nigeria sample, a plot study was carried out by the researcher using 30 pregnant women among women attending antenatal care at St Theresa's hospital Abakpa Enugu. A concurrent validity of .87 was obtained by correlating it with Hudson self-esteem Scale and a split-half reliability of .58 P<.01was obtained.

Hamilton Anxiety Rating Scale (HAM-A) Hamilton, (1959)

The HAM-A was one of the first rating scales developed to measure the severity of anxiety symptoms, and is still widely used today in both clinical and research settings. The scale consists of 14 items, each defined by a series of symptoms, and measures both psychic anxiety (mental agitation and psychological distress) and somatic anxiety (physical complaints related to anxiety). Each item is scored on a scale of 0 (not present) to 4(severe), with a total score range of 0–56, where <17 indicates mild severity, 18–24 mild to moderate severity and 25–30 moderate to severe. Clark and Donvan (1994) obtained an interrater reliability and internal consistency of the HARS acceptable in adolescent sample and the results were comparable to results reported for adults. The HARS exhibited good construct validity, showing statistically significant relationships with independent self-report measures of generalized anxiety and other anxiety variables. The factor structure of the HARS also was found to be similar to that found earlier with adults (Clark & Donvan, 1994). To use the questionnaire for Nigeria sample, a pilot study was carried out by the researcher using 30 pregnant women among women attending antenatal care at St Theresa's hospital Abakpa Enugu. A concurrent validity of .77 was obtained by correlating it questionnaire with State and Trait Anxiety Inventory (STAI) (Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983) and a split-half reliability of .58 P<.01 was also obtained.

Procedure

A total of 415 copies of each of the three questionnaires were distributed to women living with HIV and AIDS attending treatments at UNTH Enugu within a period of 4 months. The treatments days for the hospital are Wednesday and Fridays of every week. The participants were selected with the help of two research assistants who were trained for the purpose of the study. First and foremost researcher obtained permission from the management of the hospital to carry out the study. On each day of the research, the researcher and her assistants would approach the women, introduce themselves and their purpose generate rapport and confidentially. After which they administer the questionnaires. However there was no time limit to respond to the items but they we're asked to respond and return the questionnaires before going home. Those who could not finish were asked to return it to continue when next they come. In addition, those who could not understand some items in the questionnaires got it explained by the researcher or any of the research assistant. The participants were selected using available sample techniques as only those who were available and willing were used. Finally out of 415 copies of the questionnaire that were administered only 394 were returned while 360 that were correctly filled were used to test the hypotheses.

Design/statistics

The researcher adopted a survey research design because participant were observed and measured with manipulation. Hence multiple linear regression was used to analyze the data.

RESULTS

Table 1: Summary table of descriptive statistics on personality-traits and self-esteem as predictors of anxiety among women living with HIV and AIDS.

Descriptive Statistics

	Mean	Std. Deviation	N
Anxiety	20.7944	8.01440	360
Extroversion	27.9028	9.30205	360
Agreeableness	30.0417	8.37897	360
Consciousness	30.6139	8.14584	360
Neuroticism	31.5139	10.59562	360
Opennness	31.4000	6.32112	360
Self Esteem	21.1667	5.96181	360

Table 1 shows the mean, standard deviation and the number of participants used in the study. As observed from the table above, pregnant women with neuroticism personality trait obtained the highest mean of 31.5 on anxiety followed by openness personality with a mean of 31.4.Conscientiousness personality scored 30.6 followed by agreeableness with a mean of 30. Extroverts had the least mean of 27.9. On self-esteem the participants had a mean score of 21.1 while the overall mean score on anxiety is 20.8.

Table 2: Inter-correlational (correlation matrix) table on personality-traits and self-esteem as predictors of anxiety among women living with HIV and AIDS.

N=360, **=p<.01, *=p<.05

S/N	Variables	1	2	3	4	5	6	7
1	Anxiety	1						
2	Extroversion	-.73**	1					
3	Agreeableness	-.66**	.76**	1				
4	Conscientiousness	-.66**	-.74**	.95**	1			
5	Neuroticism	.70**	-.49**	-.28**	-.30**	1		
6	Openness	.64**	-.71**	.91**	.91**	-.24**	1	
7	Self-esteem	-.53**	.47**	.81**	.83**	-.13**	.84**	1

The correlation table revealed a significant negative correlation between extrovert and anxiety ($r = -.73$, P< .01), between extrovert and agreeableness ($r = .74$, P< .01), extrovert and conscientiousness ($r = .74$ P< .01), extrovert and neuroticism ($r = -.49$ P < .01), extrovert and Openness ($r = .71$, P< .01) extrovert and self-esteem ($r = .47$, P .01). Agreeableness also showed a significant negative relation with anxiety ($r = -.66$, P< .01), agreeableness with conscientiousness ($r = .95$, P< .01), agreeableness and neuroticism ($r = -.28$, P < .01), agreeableness and openness ($r = .91$, P < .01), agreeableness and self-esteem ($r = .81$, P < .01). Conscientiousness also showed a significant negative relationship with anxiety ($r = -.66$, P < .01), conscientiousness and neuroticism ($r = -.30$, P < .01), conscientiousness and openness ($r = .91$, P < .01), conscientiousness and self-esteem ($r = .83$, P< .01). Contrary to the above findings, neuroticism had a significant positive relationship with anxiety ($r = .70$, P , .01), but had a significant negative relationship with openness and self-esteem (-.24, P < .01) and ($r = -.13$, P < .01) respectively. Same as neuroticism, Openness to experience also correlated positively with anxiety ($r = .64$, P < .01) as well as self-esteem (r

= .84, P < .01). Finally, self-esteem also had a significant negative relationship with anxiety (r = -.53, P <.01).

Table 3: Model summary table on personality-traits and self-esteem as predictors of anxiety among women living with HIV and AIDS.

| Model | R | R square | Adjusted R square | Std. error | Change statistics | | | | |
					R square change	F change	df1	df2	Sig
1	.877a	.768	.765	3.88924	.768	195.24	6	353	.000

The results of the regression analysis as presented in table three shows that the predictor variables Personality trait and self-esteem account for 76% (R^2 change) variance in anxiety which is significant (F change (6,353)= .195.24, P < .001).

Table 4: Summary table of Regression analysis on personality-traits and self-esteem parity as predictors of anxiety pregnant women living with HIV and AIDS.

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
	B	Std. Error	Beta		
(Constant)	26.888	1.480		18.170	.000
EXTROVERSION	-.270	.043	-.313	-6.301	.000
AGREEABLENESS	-.094	.086	-.499	-1.090	.037
CONSCIENCIOUSNESS	.152	.087	.155	1.744	.082
NEUROTICISM	.383	.023	.506	16.748	.000
OPENNESS	-.155	.092	.522	18.678	.004
SEIFESTEEM	-.359	.076	-.267	-4.694	.000

Dependent Variable: Anxiety

Table 4 (coefficient table) reveals that in the regression equation Personality trait extroversion, shows a negative predictor of anxiety among women living with HIV and AIDS (β= -.313, P< .001), Agreeableness also showed a significant negative predictor of anxiety among women living with HIV and AIDS (β= -.499, P< .001). Conscientiousness did not show a significant predictor of anxiety among women living with HIV and AIDS (β= .155, P< .001). Neuroticism showed a significant positive predictor of anxiety among women living with HIV and AIDS (β= .506, P< .001). Openness to experience showed a significant positive predictor of anxiety among women living with HIV and AIDS (β= .522, P< .001).self-esteem also showed a significant negative predictor of anxiety among women living with HIV and AIDS (β= -.267, P< .001).

DISCUSSION

Based on the outcome of the findings of this study, the first hypothesis stated that personality trait will not significantly predict anxiety among the women living with HIV and AIDS is hereby rejected. This means that personality trait significantly predicted anxiety among women living with HIV and AIDS. In other words the personality trait of a woman living with HIV and AIDS plays a significant role in manifestation of anxiety. As observed from the findings, women living with HIV and AIDS who were extroverts were not the same with those with neuroticism personality trait with reference to manifestation of anxiety symptoms, same thing applicable to other personality traits. As observed from the study, there is a significant negative

relationship between extrovert personality trait and anxiety among the women living with HIV and AIDS. This shows that extrovert personality trait is increasing among women living with HIV and AIDS, their level of anxiety is decreasing vice versa. This outcome may not be far fetched to that assumption that problem shared is problem half solved. Because an extrovert seeks fulfillment from sources outside the self, the individual have shared his/her problem.

When one shares a problem, the person will likely receive solutions which will eventually reduce tension and anxiety. This may be attributed to the reason behind this outcome of negative relationship between extrovert and anxiety among women living with HIV and AIDS in time with this outcome, Uliaszek et al (2010) also reported negative relationship between extravert and stress anxiety testing 603 adolescents furthermore, Jycha and Isometek (2006), also observed a significant positive relationship between extroverts and symptoms of anxiety in general population. Also in consonance with this result is the work of Gainey et al (2014) who reported an inverse relationship between extroversion and anxiety sensitivity.

On agreeableness, the regression analysis revealed a significant negative relationship between agreeableness and manifestation of anxiety symptoms among women living with HIV and AIDS. In other words, women living with HIV and AIDS with more agreeable personality trait manifested lower anxiety compared to those with low agreeable personality trait. With a good understanding of agreeableness personality ie individuals who adjust their behaviour to suit other people who could be regarded as polite ones. The tendency of such individuals manifesting high anxiety symptoms maybe rare. This is because they always avoid things that will disturb them or create tension for them. This shows that a woman who irrespective of her conditions adjust to accommodate others will likely experience lower tension than her colleague who does not.

They tend to worry less because they easily let go off issues. In line with this finding, Kaplan et al (2013) reported a negative relationship between agreeableness and anxiety symptoms in addition, Nikcevic et al, (2021) observed a significant negative relationship between agreeableness and anxiety symptoms during the COVID-19 pandemic lockdown era.

On conscientiousness personality, the result of this study revealed no significant relationship between conscientious personality trait and anxiety. In other words, women living with HIV and AIDS who have conscientious personality trait may or may not manifest high symptoms of anxiety. The finding showed that Conscientiousness is not a factor in anxiety among pregnant women. This may be attributed to the fact that conscientiousness is neither there nor here.

Contrary to other personality traits the neuroticism personality showed a positive relationship with symptoms of anxiety as observed in this study. According to the findings of the study, there is a significant positive relationship between neuroticism and symptoms of anxiety. In other words, as neuroticism is increasing, symptoms of anxiety will be increasing among women living with HIV and AIDS. The reason for this outcome may be attributed to the fact that neurotic personality individuals have the tendency to experience and express feelings. They are likely to have negative feelings such as anxiety, anger or depression. They are likely to interpret ordinary symptoms as threatening and minor frustration as hopeless difficult. The atonally state of course may have be too surprise that individuals with their characteristics express high symptoms of anxiety. A terminally sick woman who always have negatively feelings and always interpret ordinary situations as threatening will increase the level of tension in herself which eventually increase anxiety. This outcome is in consonance with the finding of earlier researchers. For instance, Uliaszet et al (2010) reported a positive relationship between Neuroticism and symptoms of anxiety.

Jylha and Isometsa (2006) also reported a positive relationship between Neuroticism and symptoms of both anxiety and depression in a general population. Kaplan et al (2015) observed positive relationship between Neuroticism and social anxiety. Recently, Nikcevic (2021) observed a positive correlation between Neuroticism and generalized anxiety among the general population during the COVID 19 pandemic era. In another related study, magyar (2017) reported a positive association between Neuroticism and migraine type headaches in subjects with lifetime depression.

Furthermore, a significant positive relationship was found between openness to experience and symptoms of anxiety among women living with HIV and AIDS. The outcome of this study showed that such woman with openness to experience personality trait also experience high level of anxiety symptoms. In other words, as

such personality is increasing, symptoms of anxiety is also increasing. Open individuals are intellectually curious, appreciative of art and sensitive to beauty. They seek new experience and intellectual pursuits.

However, one may expect a negative correlation between openness to experience and symptoms of anxiety but the outcome of this study said otherwise. But deep exploration of the features of openness to experience shows that such characteristics may trigger tension and anxiety. For instance intellectual inquisitiveness creates tension and eventually anxiety. Borrowing a leaf from existential therapy model, the more we increase our choice, and desire, the more we increase our anxiety. This is a typical characteristic of an openness to experience individuals.

On the contrary, Nikcevic, et al (2021) reported negative association between openness to experience and symptoms of anxiety during the COVID 19 pandemic. This outcome which is opposite of the finding of this study maybe attributed to lack of movement during the COVID 19 lockdown. One may argue that during that period, there was serious decrease in intellectual curiosity due to lockdown. To substantiate this, Kaplan et al (2015) reported a positive relationship between openness and social anxiety.

Furthermore, the researcher's second hypothesis which stated that there will be no significant relation between self-esteem and anxiety among women living with HIV and AIDS was also rejected. In other words, a significant relationship was found between self-esteem and symptoms of anxiety among such women. According to the result, self-esteem has a significant negative relationship with symptoms of anxiety among woman living with HIV and AIDS. The finding showed as self-esteem is increasing, symptoms of anxiety is reducing among the women. With the understanding of self-esteem, entails how much one appreciate him/herself or the overall subject sense of personal work or value, one may not be surprise to see people who appreciate and attach much value experiencing low anxiety symptoms compared to those who place much value or worth to themselves this because lack of self-value, worth or appreciation could lead one to worry and tension and eventually lead to manifestation of anxiety. To support the outcome of their study, previous researchers shared similar opinion at rejects instance, bodies (2020) who observed a strong negative relationship between low self-confidence and postpartum depression. In addition to that, Nguyen et al (2019) reported a positive relationship between low-self-esteem and anxiety among secondary school students this school that negative relation observed between low self-esteem and anxiety.

Implications of the study.

The outcome of this study has obvious implications. Firstly the study has revealed the roles of our personality traits in manifestation of symptoms of anxiety especially among women living with HIV and AIDS. In other words, to control the level of anxiety among pregnant women, this study revealed that their personality should be checked as it plays a significant role in their anxiety level.

Secondly the outcome of their study has revealed that our personality traits plays a significant role in manifestation of anxiety symptoms, therefore it in pertinent for individual to assess their personality trait especially women living with HIV and AIDS to avoid high level anxiety which may exchange their unborn child

Another implications of their study in that the study has indirectly suggested that psychologists should be included in the antenatal team at least for the purpose of checking anxiety level of the women living with HIV and AIDS and also help to tech and counsel them on healthy personality

Furthermore the study has also revealed the importance of high self-esteem on mental health as observed in women living with HIV and AIDS with high self-esteem level to have low anxiety compared with their colleagues with low self-esteem.

Suggestions for future studies

Suggestions for the further study. Based on the outcome this study the researchers suggest that further researchers should carry no other studies on the role of personality traits play in other mental health issues such as depression and stress among other participants. Also they should look at the role of socio-demographic variables and other factors on personality trait in manifestation of anxiety symptoms especially among pregnant women.

Conclusion

Based on the outcome of this byte following conclusion are hereby made. Personality traits in a predictor of anxiety among women living with HIV and AIDS with extroversion agreeableness having a negative relationship while conscientiousness has no relationship with anxiety. On the other hand, both openness to experience and has positive relationship with anxiety among women living with HIV and AIDS. Finally self-esteem also is a predictor of anxiety among pregnant women with high self-esteem correlating negatively and low self-esteem correlating positive with anxiety.

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