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Original Research Article

Relationship between personality traits and reproductive choices among women attending the psychiatric clinic of a Nigerian Teaching Hospital

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ABSTRACT

Background: The study aimed to assess the relationship between personality traits and reproductive choices among women attending the psychiatric clinic at a Nigerian Teaching Hospital.

Methods: The original study used a quasi-experimental pre-test post-test-controlled design though this article presents a cross sectional view of results. Two hundred females were recruited into the study. An interviewer-administered questionnaire was applied to the respondents which elicited information on background characteristics, baseline contraceptive indicators and personality traits. Data were analyzed using both descriptive and inferential methods.

Results: The personality factors found to affect contraceptive use included high scores on Conscientiousness, Extraversion and Neuroticism, though only extraversion maintained this relationship on regression analysis. The personality factors found to affect pregnancy plan included high scores on Conscientiousness.

Conclusions: This study showed a distinct relationship between specific personality traits and contraceptive use with neuroticism exhibiting a negative influence on use while conscientiousness exhibited a positive influence.

Keywords: Contraception, women, Mental health, Personality factors

INTRODUCTION

There are wide variations in the factors that influence the decision of women to adopt or not to adopt the available family planning methods. Some women have erroneous beliefs about their risk of becoming pregnant while others have apprehensions about the health consequences and side effects of available contraceptive methods. In developing countries especially, resistance from the spouse and/or family members may discourage the woman from using contraceptives.^{1,2} In many developing countries, lack of access to the wide array of modern contraceptive methods limits women's choices. When many methods are made available, women usually report

higher quality services and higher use of contraceptive.³ In a study in Nigeria, husbands approval was scored high as a determining factor in the utilization of contraceptives.⁴ Studies have shown that though many sexually active women with severe mental illnesses do not want to become pregnant, they do not use birth control.⁵ In quite a number of studies, personality has shown associations with fertility preferences though some studies still disagree on direction of association. Personality refers to the characteristic pattern of thinking, feeling and acting. It is the consistent and distinctive ways that ideas, feelings and actions are organised. Personality is an important predictor of behavioural and health outcomes.⁶ The major theories in the study of

personality include dispositional (trait) perspective, psychodynamic, humanistic, biological, behaviourist and social learning perspective. The five-factor model developed from the trait theories. It organises all personality traits along a continuum of five factors: openness, extraversion, conscientiousness, agreeableness, and neuroticism.^{7,8} The five factor personality traits show consistency in interviews, self-descriptions, and observations, as well as across a wide range of participants of different ages and from different cultures. There is evidence from research that there is a genetic basis for the five personality factors.^{9,10}

Openness to experience can be described as a person's tendency to seek new experiences due to being creative, imaginative, unconventional, and emotionally sensitive.⁶ Open individuals are curious about both inner and outer worlds and their lives are experientially richer.¹¹

Conscientiousness refers to an innate ability to control behavioural and cognitive impulses "that facilitates task- and goal-directed behaviour, such as thinking before acting, delaying gratification, following norms and rules, and planning, organizing, and prioritizing tasks".¹² On the negative side, high Conscientiousness may lead to annoying fastidiousness, compulsive neatness or workaholic behaviour. Low Conscientiousness scores may not necessarily lack moral principles, but they are less exacting in applying them.¹¹

Extraversion reflects a person's tendency to be outgoing, expressive, active, energetic, assertive, cheerful, sociable, and in search of stimulation.⁶ Extraversion is characterised by positive feelings and experiences and is therefore seen as a positive effect.¹³

Agreeableness can be defined as a person's pro-social and communal orientation and includes a person's tendency to be altruistic, trustworthy, cooperative, considerate, empathic, polite, and modest.^{6,12} Neuroticism indicates the general tendency to experience negative emotions such as anxiety, nervousness, sadness, and depression.^{6,12}

Extraversion has been associated with higher probability of parenthood and having subsequent children among both males and females in Senegalese, Dutch, Finnish, and American samples.¹⁴⁻¹⁷ Neuroticism on the other hand has been associated with lower probability of parenthood and fewer number of children in Finnish, American, and German samples.^{14,15,18}

Individuals with low agreeableness and low conscientiousness are more likely to engage in risky sexual behaviours including multiple sexual partners, lack of contraception and casual sex with strangers which might in turn increase the probability of unplanned pregnancies.¹⁹⁻²¹ High extraversion and sensation seeking tendencies have also been associated with sexual risk behaviour.²⁰ The results for neuroticism have been inconsistent.²⁰ Conscientiousness is more strongly related

to reproductive outcomes in women than in men. In the study by Berg et al, it was associated with lower probability of non-planned pregnancies and total number of children in women.²²

Mental disorders represent a huge psychological, social and economic burden to society and also heighten the risk of physical illnesses. According to Gureje and colleagues, the prevalence of mental illness in Nigeria is about 20%.^{23,24}

Mental illnesses do not affect both sexes equally, some mental disorders are more common in women and some others have slightly different symptoms in women while others still occur only among women. A lot of factors contribute to the development of mental illnesses in women and some of them are peculiar to them alone. Stress due to multiple roles in the home and at work and the increased likelihood of women to be poor, vulnerable to violence and abuse all play roles in the development of mental illnesses.^{25,26}

Women who are mentally ill and women who abuse psychoactive substances might not be able to give consent to sexual activity and are less likely to use contraception according to standards that would make them effective and also have a higher possibility of sexual exploitation.²⁷ Thus, it is imperative to pay attention to factors associated with the contraceptive behaviour of women living with mental illness including personality factors.

METHODS

Participants and procedure

The original study used a quasi-experimental pre-test post-test-controlled design, but this article reports on the personality factors associated with contraceptive decisions (contraceptive use and pregnancy planning) for females attending the psychiatric outpatient clinics at a Nigerian Tertiary hospital. The study population consisted of female patients in the reproductive age group (15-49yrs), attending the psychiatric outpatient clinic of the Obafemi Awolowo University Teaching Hospital Complex.

The minimum sample size was determined using the formula for calculating sample size for the comparison of two independent proportions. Proportion of all women currently using any contraceptive method in Nigeria was used at 16% (28).

To accommodate for a projected 10% attrition between respondents seen at base line and post-intervention, the calculated sample size of 89 per group was increased by 10% to 98 respondents per group. This gave an overall sample size of 98 respondents which was rounded up to 100 respondents per group, making 200 respondents for the study.

Ethical approval was obtained from the Obafemi Awolowo University Teaching Hospitals Complex Ethical Review Committee. Informed consent was obtained from the participants after showing full understanding of the study.

Participants were also assured that their non-participation in or withdrawal from the study would not affect the quality of the treatment they receive. Confidentiality of information obtained from the respondents was ensured as access to respondents' information was restricted to researchers.

Materials

The instruments for this study included a modified version of the Nigeria Demographic and Health Survey instrument and the big five personality inventory (BFI). Broadly, the study instrument consisted of 4 sections:

- Section A consisted of questions to elicit information regarding age, present house address, occupation and other socio-demographic characteristics.
- Section B captured the reproductive health information.
- Section C evaluated their health seeking behaviour.
- Section D is the Big Five Personality Inventory (BFI)

The research inventory was transliterated into Yoruba language which is the main language in the area where the hospital is domiciled and its catchment areas. The transliteration was done by qualified linguists.

The transliterated document was then translated back into English by two other linguists who were not part of the original translation. Both versions of the transliterated instrument were compared for discrepancies. Copies of the questionnaire were administered (to intervention and control groups) by trained research assistants who received a two-day training on counselling methods and interviewing techniques by counsellors from the FP clinic and the principal investigator.

Big Five Personality Inventory (BFI)

This personality trait assessment scale was developed by John and Srivastava based on the five-factor model of personality assessment.²⁹ It is a multi-item inventory of 44 traits commonly used to describe an individual in everyday language. The scale is divided into five dimensions typically referred to as Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness to Experience or Intellect.

The 44-item version of the Big Five Inventory (BFI) is scored on a four-point scale ranging from Strongly Disagree (which is denoted by a score of one) to Strongly Agree (denoted by a score of five). John and colleagues reported an overall Cronbach alpha of 0.80 and a three-month test retest reliability of 0.85.³⁰

The BFI has been validated in Nigeria by Umeh (31) with a mean convergent validity coefficient of 0.75 and 0.85 when correlated with Big Five Inventory (32) and Big Five Inventory respectively.³¹⁻³³ In Nigeria, Onyishi, et al. reported a Cronbach's alpha of 0.83.^{33,34} In scoring the BFI, all negatively-keyed items were reverse-scored:

- Extraversion: 6, 21, 31
- Agreeableness: 2, 12, 27, 37
- Conscientiousness: 8, 18, 23, 43
- Neuroticism: 9, 24, 34
- Openness: 35, 41

To recode the items, the scores for all reverse-scored items were subtracted from 6. That is, a score of 1 becomes 5, 2 becomes 4, 3 remains 3, 4 becomes 2, and 5 becomes 1. Then a scale score was created by averaging the following items for each domain (where R indicates using the reverse-scored item).

- Extraversion: 1, 6R 11, 16, 21R, 26, 31R, 36
- Agreeableness: 2R, 7, 12R, 17, 22, 27R, 32, 37R, 42
- Conscientiousness: 3, 8R, 13, 18R, 23R, 28, 33, 38, 43R
- Neuroticism: 4, 9R, 14, 19, 24R, 29, 34R, 39
- Openness: 5, 10, 15, 20, 25, 30, 35R, 40, 41R, 44

Analysis

Of the 200 respondents, the data from the 167 participants (83.5%) who answered the item of the questionnaire requesting for information about unplanned pregnancy were included in the final analysis. Data was analysed using the Statistical Package for Social Sciences (SPSS, Chicago, IL) version 22. The data were summarized using descriptive statistics such as proportion, frequency, and mean. The Chi square and Student t tests were used to explore associations between variables. Binary logistic regression was used to determine the predictors with unplanned pregnancy and the use of contraceptives being the dependent variable. A p value of 0.05 was considered statistically significant in all cases.

RESULTS

Sociodemographic and mental health characteristics of the participants

The respondents' ages ranged between 20 and 49 years with a mean of 38.0 (7.1) years and majority (71.9%) were married in a monogamous family setting (61.7%). They were mostly (95.8%) of Yoruba tribe and about three-fifth (58.1%) were artisan/trader. Only 64 of the respondents (38.3%) successfully completed their tertiary education. Regarding their mental health characteristics, most of the respondents (70.7%) were diagnosed with schizophrenia. About one-third (34.8%) indicated they had suicidal thoughts and 16 respondents (9.6%) expressed previous suicidal attempts (Table 1).

Reproductive characteristics, contraceptive use and personality traits of the respondents

Regarding their reproductive characteristics, about 70 % of the respondents indicated they had their first sex, first marriage and first birth between 20-29 years. The mean

ages (SD) of first sex, first marriage and first birth were 22.5 (4.4), 25.1 (4.8) and 25.9 (5.4) respectively. More than half of the respondents (56.6%) had between 2 and 4 pregnancies, with the mean number of pregnancies being 3.2 (1.8).

Table 1: Sociodemographic characteristics and mental health characteristics in association with unplanned pregnancy.

Variables	Total (%) n= 167	Unplanned pregnancy		Statistics		
		Yes (%), n=56	No (%), n=111	χ^2	df	p value
Age group (years)				2.45	2	0.30
20-29	21 (12.6)	10 (17.9)	11 (9.9)			
30-39	68 (40.7)	23 (41.1)	45 (40.5)			
≥ 40	78 (46.7)	23 (41.1)	55 (49.5)			
Marital status				10.60	2	< 0.01
Single	14 (8.4)	10 (17.9)	4 (3.6)			
Married	120 (71.9)	34 (60.7)	86 (77.5)			
Separated/ divorced/widowed	33 (19.8)	12 (21.4)	21 (18.9)			
Religion				4.66		0.07*
Christian	129 (77.2)	47 (83.9)	82 (73.9)			
Islam	37 (22.2)	8 (14.3)	29 (26.1)			
Traditional	1 (0.6)	1 (1.8)	0 (0.0)			
Educational level				2.09	2	0.35
Primary	44 (26.3)	13 (23.2)	31 (27.9)			
Secondary	59 (35.3)	24 (42.9)	35 (31.5)			
Tertiary	64 (38.3)	19 (33.9)	45 (40.5)			
Occupation				1.03	2	0.60
Civil servant	29 (17.4)	8 (14.3)	21 (18.9)			
Artisan/Trader	97 (58.1)	32 (57.1)	65 (58.6)			
Unemployed	41 (24.6)	16 (28.6)	25 (22.5)			
Tribe						0.04*
Yoruba	160 (95.8)	51 (91.1)	109 (98.2)			
Others	7 (4.2)	5 (8.9)	2 (1.8)			
Family type				2.26	1	0.13
Monogamous	103 (61.7)	39 (69.6)	64 (57.7)			
Polygamous	64 (38.3)	17 (30.4)	47 (42.3)			
Diagnosis				0.13	2	0.94
Schizophrenia	118 (70.7)	39 (69.6)	79 (71.2)			
Affective Disorders	33 (19.8)	11 (19.6)	22 (19.8)			
Others	16 (9.6)	6 (10.7)	10 (9.0)			
Suicidal thought				6.79	1	0.01
Yes	57 (34.8)	27 (48.2)	30 (27.8)			
No	107 (65.2)	29 (51.8)	78 (72.2)			
Suicidal attempt				2.10	1	0.15
Yes	16 (9.6)	8 (14.3)	8 (7.3)			
No	150 (90.4)	48 (85.7)	102 (92.7)			

* Fisher's Exact Test

Twenty-nine individuals (18.6%) reported the number of children they have were not planned for while 83 (50.0%) will like to have more children. The prevalence of unplanned pregnancy was 33.5 % (Table 2). One hundred and thirty-four (80.2%) reported they currently had a

sexual partner while 161 (96.4%) indicated lifetime experience of having sexual partners. Although about two third (72.5%) indicated lifetime use of contraceptives, only about one-third (35.9%) reported current use of contraceptives.

A large proportion of the respondents (63.1%) considered the quality of their marital relationship to be good while about one fourth reported an experience of intimate partner violence. Twenty-three (14.0%) reported having sex without consent. Among the five dimensions of

personality measured, agreeableness had the highest mean score (4.13) followed by conscientiousness (4.01), openness (3.20), neuroticism (2.90) and extraversion (2.88) (Table 3).

Table 2: Reproductive characteristics and contraceptive use in association with unplanned pregnancy.

Variables	Total (%), n= 167	Unplanned pregnancy		Statistics		
		Yes (%), n=56	No (%), n=111	χ^2	df	p value
Age at first sex (years)				7.63	2	0.02
< 20	36 (21.6)	19 (33.9)	17 (15.3)			
20-29	117 (70.1)	33 (58.9)	84 (75.7)			
≥ 30	14 (8.4)	4 (7.1)	10 (9.0)			
Age at first marriage (years)*				3.20	2	0.20
< 20	15 (9.7)	7 (15.2)	8 (7.3)			
20-29	111 (71.6)	33 (71.7)	78 (71.6)			
≥ 30	29 (18.7)	6 (13.0)	23 (21.1)			
Age at first birth (years)				10.29	2	0.01
< 20	11 (7.0)	7 (14.3)	4 (3.7)			
20-29	111 (70.7)	37 (75.5)	74 (68.5)			
≥ 30	35 (22.3)	5 (10.2)	30 (27.8)			
Number of pregnancies				6.97	2	0.03
< 2	33 (19.9)	16 (28.6)	17 (15.5)			
2-4	94 (56.6)	24 (42.9)	70 (63.6)			
> 4	39 (23.5)	16 (28.6)	23 (20.9)			
Children Unplanned for				43.60	1	< 0.01
Yes	29 (18.6)	24 (49.0)	5 (4.7)			
No	127 (81.4)	25 (51.0)	102 (95.3)			
Want more children				3.88	1	0.05
Yes	83 (50.0)	34 (60.7)	49 (44.5)			
No	83 (50.0)	22 (39.3)	61 (55.5)			
Sexual partners (current)				3.38	1	0.07
1	124 (92.5)	39 (86.7)	85 (95.5)			
≥ 2	10 (7.5)	6 (13.3)	4 (4.5)			
Sexual partners (Ever)				6.63	1	0.01
1	87 (54.0)	22 (40.0)	65 (61.3)			
≥ 2	74 (46.0)	33 (60.0)	41 (38.7)			
Lifetime Contraceptive use				0.89	1	0.35
Yes	121 (72.5)	38 (67.9)	83 (74.8)			
No	46 (27.5)	18 (32.1)	28 (25.2)			
Contraceptive use (Current)				0.00	1	0.97
Yes	60 (35.9)	20 (35.7)	40 (36.0)			
No	107 (64.1)	36 (64.3)	71 (64.0)			
Quality of relationship				1.26	1	0.26
Poor	59 (36.9)	22 (43.1)	37 (33.9)			
Good	101 (63.1)	29 (56.9)	72 (66.1)			
Intimate partner violence				9.20	1	< 0.01
Yes	44 (26.5)	23 (41.1)	21 (19.1)			
No	122 (73.5)	33 (58.9)	89 (80.9)			
Sex without consent				3.87	1	0.05
Yes	23 (14.0)	12 (21.4)	11 (10.2)			
No	141 (86.0)	44 (78.6)	97 (89.8)			

* n = 155 (12 missing variables), # n = 157 (10 missing variables)

Factors associated with unplanned pregnancy

The study observed that significantly more single and separated/divorced/widowed respondents than married respondents had unplanned pregnancies ($p < 0.01$). While respondents belonging to other tribes other than Yoruba had significantly more unplanned pregnancies ($p = 0.04$).

Other sociodemographic factors did not have any significant association with unplanned pregnancy (Table 1). The proportion of respondents with unplanned pregnancies who expressed suicidal thoughts were more than those with planned pregnancies. This observation was statistically significant ($p = 0.01$). Other mental health characteristics did not have any significant association with unplanned pregnancy (Table 1).

Table 3: Association between personality traits and unplanned pregnancy.

Variable	Mean	Unplanned pregnancy		Statistics		
		Yes Mean (SD)	No Mean (SD)	t	df	p value
Extraversion	2.88 (0.69)	2.89 (0.67)	2.87 (0.70)	0.14	165	0.89
Openness	3.20 (0.53)	3.18 (0.44)	3.22 (0.57)	- 0.48	165	0.64
Conscientiousness	4.01 (0.60)	3.86 (0.65)	4.09 (0.57)	- 2.41	165	0.02
Agreeableness	4.13 (0.55)	4.04 (0.54)	4.18 (0.56)	- 1.55	165	0.12
Neuroticism	2.90 (0.72)	2.92 (0.63)	2.89 (0.76)	0.274	165	0.78

Table 4: Predictors of Unplanned pregnancy.

Variable	AOR	95% CI	P value
Marital status			
Single	Reference		
Married	0.25	0.03-2.31	0.22
Separated/ divorced	0.33	0.03-3.65	0.37
Widowed	0.21	0.01-5.83	0.36
Tribe			
Others	Reference		
Yoruba	0.00	0.00	0.99
Number of pregnancies			
< 2	Reference		
2-4	0.78	0.15-4.19	0.77
> 4	0.78	0.12-4.91	0.79
Children unplanned for			
No	Reference		
Yes	30.33	0.80-115.1	<0.01
Sexual partners (ever)			
1	Reference		
≥2	3.36	1.07-10.50	0.04
Intimate partner violence			
No	Reference		
Yes	2.24	0.76-6.61	0.14
Age at first sex (years)			
< 20	Reference		
20-29	0.41	0.11-1.56	0.19
≥ 30	0.35	0.17-7.13	0.49
Age at first birth (years)			
<20	Reference		
20-29	0.83	0.09-7.83	0.87
≥30	0.25	0.02-3.70	0.31
Conscientiousness	0.92	0.84-1.02	0.11

AOR: Adjusted Odds Ratio 95 % CI: 95% Confidence Interval

The age at first sex ($p = 0.02$), age at first birth ($p = 0.01$), lifetime history of sexual partners ($p = 0.01$), number of pregnancy ($p = 0.03$), children unplanned for ($p < 0.01$) and intimate partner violence ($p < 0.01$) had statistically significant associations with unplanned pregnancy (Table 2). Compared to other age group categories, respondents who were younger than 20 years when they had their first sex had more unplanned pregnancies.

While those younger than 30 years when they had the first child delivery reported more unplanned pregnancies than those aged 30 years or higher.

Respondents who reported they had been pregnant between 2-4 times had better pregnancy plans than those with only one previous pregnancy and those who had been pregnant more than 4 times. Furthermore, more respondents who planned the number of their children made pregnancy plans than those who didn't make any plans while those that have had more than one sexual partner in their lifetime reported more unplanned pregnancies than those with only one sex partner. Also, respondents who had experienced intimate partner violence had more unplanned pregnancies when compared to those who had not. Of the personality traits, only conscientiousness had a significant ($p = 0.02$) association with unplanned pregnancy. Respondents with unplanned pregnancy reported lower mean scores on conscientiousness when compared to those who planned their pregnancies (Table 3).

Predictors of unplanned pregnancy

Authors performed binary logistic regression with unplanned pregnancy as the dependent variable (Table 4). This was to identify independent predictors of unplanned pregnancy; thus, all the variables who had statistically

significant associations with unplanned pregnancy were included in the model as independent variables.

The Omnibus Test of Model Coefficient (df) was $\chi^2=75.94$ (14) $p < 0.01$ while the model accounted for 40.3% to 56.5 % of the variability in unplanned pregnancy (Cox and Snell R square=0.403 and Nagelkerke R square=0.565). Of all the factors evaluated, not planning for children and lifetime sex partners retained their associations with unplanned pregnancy (Table 4).

Respondents who did not plan for their children were 30.3 times more likely to have unplanned pregnancy when compared to those who had a plan for their children (95% CI=0.80-115.16, $p < 0.01$).

Similarly, those who had more than one sexual partner in their lifetime were 3.4 times more likely to have unplanned pregnancy than those with only one partner (95% CI=1.07 -10.50, $p=0.04$).

Personality traits associated with contraceptive use

Table 5 shows the comparison of mean scores on personality between those using contraceptives and those not using. Mean extraversion score for those using contraceptive was significantly higher than those who reported they were not using contraceptives ($p < 0.01$) while individuals using contraceptives were significantly more conscientious than those not using ($p = 0.01$). Respondents who were not using contraceptives had significantly higher score on neuroticism than those who were using ($p < 0.01$). Other traits did not have any significant association with use of contraceptives.

Personality predictors of contraceptive use

This relationship was somewhat modified on multivariate analysis using binary logistic regression as only the personality dimension of extraversion showed an association with contraceptive use. Respondents with high extraversion scores were 2 times more likely to use contraceptives ($p=0.007$) (Table 5).

Table 5: Association between personality traits and contraceptive use.

Variable	Contraceptive use		Statistics			Multiple Logistic Regression	
	Yes	No	t	df	p value	AOR	95% CI
	Mean (SD)	Mean (SD)					
Extraversion	3.10 (0.60)	2.75 (0.70)	3.28	165	<0.01	2.01	1.20-3.37
Openness	3.30 (0.54)	3.15 (0.52)	1.74	165	0.08		
Conscientiousness	4.17 (0.57)	3.92 (0.61)	2.54	165	0.01	1.47	0.78-2.75
Agreeableness	4.18 (0.57)	4.10 (0.54)	0.86	165	0.39		
Neuroticism	2.70 (0.70)	3.02 (0.70)	- 2.83	165	<0.01	0.65	0.38-1.12

AOR: Adjusted Odds Ratio; 95% CI: 95% Confidence Interval

DISCUSSION

One hundred and sixty-seven women with various mental health challenges attending the Ife and Ilesa psychiatric units of Obafemi Awolowo University Teaching Hospital Complex participated in this survey.

Personality factors and unplanned pregnancy

This study found that the personality dimension of conscientiousness was associated with planning of pregnancy as women with higher scores on conscientiousness planned their pregnancies better. Berg and colleagues in their study found that conscientiousness was more strongly related to reproductive outcomes in women than in men.

It was associated with lower probability of pregnancies and total number of children in women, as has been shown in some other studies.^{15,22,35} They posited that the reduction in fertility rates in women was mainly caused

by the lower number of nonplanned rather than planned pregnancies. In line with the findings of this study, Berg and colleagues argued that traits correlating with lower probability of non-planned pregnancies or births (emotional stability, conscientiousness and openness to experience in women) may correlate with the utilization of modern family planning methods. Sinha and Mishra, in their study of personality factors underlying attitude towards family planning found that high extroverts were more positive in their attitudes towards family planning.

However, neuroticism was unrelated to attitude towards family planning. These findings are similar with the findings in this study.^{22,36}

Personality factors and contraceptive use

The mean scores on the five dimensions of personality measured are comparable with results obtained from another study in Nigeria, though respondents in this study had marginally higher scores on agreeableness (4.1

compared with 3.3) and conscientiousness (4.0 compared with 3.2).³⁷ The openness scores were same for both samples (3.5) while extraversion and neuroticism scores were lower (2.9 compared with 3.2 and 2.8 compared with 3.1 respectively). Those who used contraceptives had higher scores on extraversion and conscientiousness while those who did not use contraceptives had higher scores on neuroticism. This trend is expected when one looks at the Facet (and correlated trait adjective) for the different dimensions. People with high extraversion scores tend to be sociable, assertive, energetic, adventurous, full of warmth and positive emotions while people with high conscientiousness scores tend to be efficient, organized, dutiful, thorough and self-disciplined.

On the other hand, people with high neuroticism scores tend to be anxious, irritable, depressed, self-conscious, impulsive and lack self-confidence.³⁸ In concordance with the preceding discourse, Geissler in a study among 306 women and 304 men found that successful family planning was characterized by stable personality characteristics of minimal anxiety, steady concept of social responsibility, less depressive tendencies, more feminine women, less masculine men and higher intelligence in men. Berg and colleagues in their study among a British cohort found that extraversion was associated with having planned pregnancies only in men.^{22,39}

Limitations of the study include the fact that it was carried out in one state among a small population of women living with mental illness and cannot be generalized to all Nigerian women. The diagnosis also relied on the existing diagnosis, but this usually follows standard of ICD in everyday practice and is not expected to be any less reliable. Also, the study is cross sectional in nature and can only give a snap shot view of the variables studied.

CONCLUSION

This study showed a distinct relationship between specific personality traits and contraceptive use with neuroticism exhibiting a negative influence on use while conscientiousness exhibited a positive influence.

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